Bay Area Air District

Board of Directors MEETING June 3, 2026

MEETING LOCATION(S) FOR IN-PERSON ATTENDANCE BY BOARD MEMBERS AND MEMBERS OF THE PUBLIC

Bay Area Metro Center
1st Floor Board Room
375 Beale Street
San Francisco, CA 94105

THE FOLLOWING STREAMING OPTIONS WILL ALSO BE PROVIDED

These streaming options are provided for convenience only. In the event that streaming connections malfunction for any reason, the Board of Directors reserves the right to conduct the meeting without remote webcast and/or Zoom access.

The public may observe this meeting through the webcast by clicking the link available on the air district's agenda webpage at
https://www.baaqmd.gov/bodagendas

Members of the public may participate remotely via Zoom at
https://bayareametro.zoom.us/j/81529701006
or may join Zoom by phone by dialing (669) 900-6833 or (408) 638-0968.
The Webinar ID for this meeting is:
815 2970 1006

PUBLIC COMMENT ON AGENDA ITEMS

The public may comment on each item on the agenda as the item is taken up. Members of the public who wish to speak on a matter on the agenda will have two minutes each to address the Board on that agenda item, unless a different time limit is established by the Chair. No speaker who has already spoken on an item will be entitled to speak to that item again.

Written public comments can be emailed to comments@baaqmd.gov or through the Air District's website via the "Submit a Comment" feature for this meeting. Written public comments emailed by 10:00 a.m. on the business day prior to this meeting will be provided to the Board members in advance of the meeting. Written public comments emailed after that deadline will be provided to the Board members following the meeting's adjournment. Unless directed by the Chair, written public comments will not be read aloud during the meeting.

The Board welcomes comments, including criticism, about the policies, procedures, programs, or services of the Air District, or of the acts or omissions of the Board. Speakers shall not use threatening, profane, or abusive language which disrupts, disturbs, or otherwise impedes the orderly conduct of a Board meeting. The Air District is committed to maintaining a workplace free of unlawful harassment and is mindful that Air District staff regularly attend Board meetings. Discriminatory statements or conduct that would potentially violate the Fair Employment and Housing Act – i.e., statements or conduct that is hostile, intimidating, oppressive, or abusive – is *per se* disruptive to a meeting and will not be tolerated.

BOARD OF DIRECTORS
MEETING AGENDA

WEDNESDAY, JUNE 3, 2026
10:00 AM

Chairperson, Lynda Hopkins

1. **Call to Order - Roll Call**

   The Board Chair shall call the meeting to order and the Clerk of the Boards shall take roll of the Board members.

2. **Pledge of Allegiance**

3. **Special Orders of the Day**

CLOSED SESSION

NOTE FOR MEMBERS OF THE PUBLIC INTERESTED IN ATTENDING OPEN SESSION ITEMS: OPEN SESSION WILL NOT RESUME BEFORE 11:00 A.M.

4. Public Employee Evaluation Pursuant to Government Code Section 54957(b)(1)

   Title: Executive Officer/APCO

5. Conference with Legal Counsel re Existing Litigation Pursuant to Government Code Sections 54956.9(a) and (d)(1)

   Pursuant to Government Code Sections 54956.9(a) and (d)(1), the Board of Directors will meet in closed session with legal counsel to discuss the following cases:

   Lewis Letang v. Bay Area Air Quality Management District, Northern District of California Case No. 24-cv-01316-RFL;

   Rochele Henderson v. Bay Area Air Quality Management District, Northern District of California Case No. 24-cv-01460-RFL;

   Veronica Eady v. Bay Area Air Quality Management District, Northern District of California Case No. 24-cv-07000-RFL; and

   Vanessa Johnson v. Bay Area Air Quality Management District, Northern District of California Case No. 24-cv-06276-RFL.

6. Conference with Labor Negotiators Pursuant to Government Code Section 54957.6

Agency Designated Representatives:
Laura A. Izon, Atkinson, Andelson, Loya, Ruud & Romo
Hyacinth Hinojosa, Deputy Executive Officer of Finance and Administration
Lisa Baker, Director of Human Resources

Employee Organization: BAAQMD Employees Association

OPEN SESSION - OPEN SESSION WILL NOT RESUME BEFORE 11:00 A.M.

OPENING ITEM(S)

CONSENT CALENDAR (Items 7 - 21)

The Consent Calendar consists of routine items that may be approved together as a group by one action of the Board. Any Board member or member of the public may request that an item be removed and considered separately.

7. Approval of the Draft Minutes of the Board of Directors Budget Hearing of April 29, 2026

The Board of Directors will consider approving the Draft Minutes of the Board of Directors Budget Hearing of April 29, 2026.

8. Approval of the Draft Minutes of the Board of Directors Meeting of April 29, 2026

The Board of Directors will consider approving the Draft Minutes of the Board of Directors Meeting of April 29, 2026.

9. Approval of the Draft Minutes of the Board of Directors Meetings of May 6, 2026, and May 13, 2026

The Board of Directors will consider approving the Draft Minutes of the Board of Directors Meetings of May 6, 2026, and May 13, 2026.

10. Board Communications Received from May 6, 2026 through June 2, 2026

A copy of communications directed to the Board of Directors received by the Air District from May 6, 2026 through June 2, 2026, if any, will be distributed to the Board Members by way of email.

11. Notices of Violations Issued and Settlements in Excess of $10,000 in the Month of April 2026

In accordance with Board Resolution No. 2012-08, staff will provide the Board of Directors with a list of all Notices of Violations issued, and all settlements for amounts in excess of $10,000, during the month of April 2026.

12. Personnel Out-of-State Business Travel Report for April 2026

In accordance with Section 1.1.3 of the Air District's Employee Travel and Business Expense Policy, the Board of Directors will be notified of Air District personnel who have traveled on out-of-state business.

13. Report of County Populations

In accordance with Section 2.11 of the Administrative Code, the Clerk of the Boards will provide a report of the populations for each county within the Air District's jurisdiction (and for Solano and Sonoma counties, for the portion of those counties within the Air District's jurisdiction), based on the most recent final estimates released on May 1, 2026, by the Demographic Research Unit of the California Department of Finance.

14. Authorization to Amend Represented Classifications

The Board of Directors will consider authorizing amendments to represented job classifications resulting from an Air District-wide, comprehensive classification study. The proposed amendments include adoption of new classifications and revision of existing classifications.

15. Authorization to Execute Contract with Robert Half for Temporary Staffing

The Board of Directors will consider authorizing the Executive Officer/APCO to execute a contract with Robert Half for a three-year term, in an amount not to exceed $1,500,000, for temporary staff augmentation to support the Air District's Strategic Plan.

16. Authorization to Execute Contract with Johns Hopkins University to Enhance Cumulative Health Impact Assessment

The Board of Directors will consider authorizing the Executive Officer/APCO to execute a contract with Johns Hopkins University, in the amount of $250,000, to develop a methodological application of the Multi-Effects Toxicity Database for air toxics risk assessment to enhance understanding and practices for cumulative health impact assessment.

17. Authorization to Accept Community Air Protection Program Implementation Funds for Fiscal Year 2025-2026

The Board of Directors will consider adopting a resolution authorizing the Executive Officer/APCO to accept Fiscal Year Ending 2026 Community Air Protection Program implementation funds and to execute all necessary agreements with the California Air Resources Board to accept the funding and implement the program.

18. Consideration of State Legislation

The Board of Directors will consider adopting positions on pending state legislative bills where appropriate, including, but not limited to the following bills as recommended by the Policy, Grants, and Technology Committee at its meeting on May 20, 2026.

SUPPORT	***OPPOSE UNLESS AMENDED***
Senate Bill 899 (Grove)	*Assembly Bill 2635 (C. Rodriguez)*

19. Report of the Community Equity, Health, and Justice Committee Meeting of May 13, 2026

The Board of Directors will receive a report of the Community Equity, Health, and Justice Committee Meeting of May 13, 2026.

For the full Committee agenda packet and materials, click on the link below:
www.baaqmd.gov/bodagendas

20. Report of the Policy, Grants, and Technology Committee Meeting of May 20, 2026

The Board of Directors will receive a report of the Policy, Grants, and Technology Committee Meeting of May 20, 2026.

For the full Committee agenda packet and materials, click on the link below:
www.baaqmd.gov/bodagendas

21. Report of the Community Advisory Council Meeting of May 21, 2026

The Board of Directors will receive a report of the Community Advisory Council meeting of May 21, 2026.

For the full Council agenda packet and materials, click on the link below: www.baaqmd.gov/en/about-the-air-district/community-advisory-council/agendasreports

PUBLIC HEARING(S)

22. Assembly Bill 2561 Vacancy Reporting

The Board of Directors will hold a public hearing to discuss the status of vacancies and recruitment and retention efforts. California Assembly Bill 2561 amends the Meyers-Milias-Brown Act and requires public agencies to present the status of vacancies and recruitment and retention efforts at a public hearing at least once per fiscal year prior to the adoption of the final budget and entitles the recognized employee organization(s) to present at the hearing. This item will be presented by Clif Brady and Judy Yu, Managers in the Human Resources Division.

23. Adoption of Proposed Budget for Fiscal Year 2026-2027 and Amendments to Air District Regulation 3: Fees

The Board of Directors will hold a public hearing to consider the following:

1. *Fiscal Year 2026-2027 Budget:*

   The Board will consider adopting a resolution to approve the proposed Fiscal Year 2026–2027 Budget, which includes recommended staffing levels, the salary schedule and benefits, and other related budget actions. Staff will also share the Air District's progress in implementing the 2024-2029 Strategic Plan, including overall progress and notable implementation highlights. This item will be presented by Hyacinth Hinojosa, Deputy Executive Officer of Finance and Administration, and Stephanie Osaze, Director of Finance. The Finance and Administration Committee recommended approval of the proposed budget on March 18, 2026, and the Board held an initial public hearing to discuss the proposed Budget and to provide the public with an opportunity to comment on April 29, 2026.

2. *Amendments to Air District Regulation 3: Fees:*

The Board will also consider adopting a resolution to amend Air District Regulation 3: Fees, including revisions impacting fee schedules A, B, C, D, E, F, G-1 through G-5, H, I, K, M, P, R, S, V and W and other related changes, with the proposed changes to take effect on July 1, 2026. These amendments are intended to recover the costs of regulatory program activities in line with the Air District's Cost Recovery and Containment Policy. This item will be presented by Fred Tanaka, Senior Manager, and Mark Gage, Principal Air Quality Engineer of the Engineering Division. The Finance and Administration Committee recommended approval of these proposed fee amendments on April 15, 2026, and the Board held an initial public hearing to discuss the proposed amendments and to provide the public with an opportunity to comment on April 29, 2026.

24. Adoption of Proposed Amendments to Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18) and Proposed Updates to the Rule 11-18 Implementation Procedures

The Board of Directors will consider adopting a resolution to amend Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18); make findings of necessity, authority, clarity, consistency, non-duplication, and reference for the Rule 11-18 amendments; update the Rule 11-18 Implementation Procedures; adopt an Addendum to the previously certified Environmental Impact Report for Rule 11-18 pursuant to the California Environmental Quality Act; and adopt a Mitigation Monitoring and Reporting Program for Rule 11-18 pursuant to the California Environmental Quality Act. This item will be presented by Katie Gong, Senior Air Quality Engineer in the Regulatory Development Division.

25. Toxic Air Contaminant Control Program Annual Report - 2026

The Board of Directors will hold a public hearing to present the Air District's Toxic Air Contaminant Control Program Annual Report for 2026, and discuss its content and significance. The report fulfills the reporting requirements under the California Assembly Bill 2588 Air Toxics Hot Spots Program. The presentation will highlight new toxic air contaminant initiatives described in the report. This item will be presented by Simrun Dhoot, Supervising Air Quality Engineer in the Engineering Division, and Kate Hoag, Ph.D, Manager in the Meteorology and Measurement Division.

ACTION ITEM(S)

26. Adoption of Proposed Policy Updates to Implement Recent Brown Act Changes and Improve Language Access and Public Accessibility

The Board of Directors will discuss Air District activities to comply with Senate Bill 707, which added requirements to the Ralph M. Brown Open Meetings Act regarding expanded public accessibility for Board meetings. The Board will consider 1) adopting a proposed Broadcast Technology Disruption Policy and 2) amending the Remote Teleconferencing Meeting Policy to implement mandates in Senate Bill 707 and make other language access and public accessibility improvements. This item will be presented by Kimberly Leefatt, Civil Rights Officer, and Alexander Crockett, General Counsel.

OTHER BUSINESS

27. Public Comment on Non-Agenda Matters

Pursuant to Government Code Section 54954.3, members of the public who wish to speak on matters not on the agenda will be given an opportunity to address the Board of Directors. Members of the public will have two minutes each to address the Board, unless a different time limit is established by the Chair. The Board welcomes comments, including criticism, about the policies, procedures, programs, or services of the Air District, or of the acts or omissions of the Board. Speakers shall not use threatening, profane, or abusive language which disrupts, disturbs, or otherwise impedes the orderly conduct of a Board meeting. The Air District is committed to maintaining a workplace free of unlawful harassment and is mindful that Air District staff regularly attend Board meetings. Discriminatory statements or conduct that would potentially violate the Fair Employment and Housing Act – i.e., statements or conduct that is hostile, intimidating, oppressive, or abusive – is per se disruptive to a meeting and will not be tolerated.

28. Board Member Comments

Any member of the Board, or its staff, on their own initiative or in response to questions posed by the public, may: ask a question for clarification, make a brief announcement or report on their own activities, provide a reference to staff regarding factual information, request staff to report back at a subsequent meeting concerning any matter or take action to direct staff to place a matter of business on a future agenda. (Gov't Code § 54954.2)

29. Report of the Executive Officer/APCO

30. Chairperson's Report

31. Time and Place of Next Meeting

Wednesday, July 1, 2026, at 10:00 a.m. The meeting will be held in-person at the Bay Area Metro Center and at satellite locations as may be specified on the meeting agenda using a remote teleconferencing link. Members of the Board of Directors and the public may attend at any of those in-person locations, and members of the public may also attend virtually via webcast.

32. Adjournment

The Board meeting shall be adjourned by the Board Chair.

CONTACT:
MANAGER, EXECUTIVE OPERATIONS **(415) 749-4941**
375 BEALE STREET, SAN FRANCISCO, CA 94105 **FAX: (415) 928-8560**
vjohnson@baaqmd.gov **Air District homepage:**
www.baaqmd.gov

- Any writing relating to an open session item on this Agenda that is distributed to all, or a majority of all, members of the body less than 72 hours before the meeting shall be made available at the Air District's offices at 375 Beale Street, Suite 600, San Francisco, CA 94105, at the time such writing is made available to all, or a majority of all, members of that body.

Accessibility and Non-Discrimination Policy

The Bay Area Air Quality Management District (Air District) does not discriminate on the basis of race, national origin, ethnic group identification, ancestry, religion, age, sex, sexual orientation, gender identity, gender expression, color, genetic information, medical condition, or mental or physical disability, or any other attribute or belief protected by law.

It is the Air District's policy to provide fair and equal access to the benefits of a program or activity administered by Air District. The Air District will not tolerate discrimination against any person(s) seeking to participate in, or receive the benefits of, any program or activity offered or conducted by the Air District. Members of the public who believe they or others were unlawfully denied full and equal access to an Air District program or activity may file a discrimination complaint under this policy. This non-discrimination policy also applies to other people or entities affiliated with Air District, including contractors or grantees that the Air District utilizes to provide benefits and services to members of the public.

Auxiliary aids and services including, for example, qualified interpreters and/or listening devices, to individuals who are deaf or hard of hearing, and to other individuals as necessary to ensure effective communication or an equal opportunity to participate fully in the benefits, activities, programs, and services will be provided by the Air District in a timely manner and in such a way as to protect the privacy and independence of the individual. Please contact the Non-Discrimination Coordinator identified below at least three days in advance of a meeting so that arrangements can be made accordingly.

If you believe discrimination has occurred with respect to an Air District program or activity, you may contact the Non-Discrimination Coordinator identified below or visit our website at www.baaqmd.gov/accessibility to learn how and where to file a complaint of discrimination.

Questions regarding this Policy should be directed to the Air District's Non-Discrimination Coordinator, Kimberly Leefatt, Civil Rights Officer at 415-749-4610 or by email at non-discriminationcoordinator@baaqmd.gov.

BAY AREA AIR DISTRICT
375 BEALE STREET, SAN FRANCISCO, CA 94105
FOR QUESTIONS PLEASE CALL (415) 749-4941

EXECUTIVE OFFICE:
MONTHLY CALENDAR OF AIR DISTRICT MEETINGS

JUNE 2026

TYPE OF MEETING	DAY	DATE	TIME	ROOM
Board of Directors Meeting	Wednesday	3	10:00 a.m.	1st Floor Board Room
Board of Directors Stationary Source Committee	Wednesday	10	10:00 a.m.	1st Floor, Yerba Buena Room
Board of Directors Community Equity, Health, and Justice Committee -CANCELLED	Wednesday	10	1:00 p.m.	1st Floor, Yerba Buena Room
Advisory Council Meeting	Monday	15	9:00 a.m.	1st Floor Board Room
Board of Directors Policy, Grants and Technology Committee	Wednesday	17	10:00 a.m.	1st Floor Board Room
Board of Directors Finance and Administration Committee	Wednesday	17	1:00 p.m.	1st Floor Board Room

JULY 2026

TYPE OF MEETING	DAY	DATE	TIME	ROOM
Board of Directors Meeting	Wednesday	1	10:00 a.m.	1st Floor Board Room
Board of Directors Stationary Source Committee	Wednesday	8	10:00 a.m.	1st Floor, Yerba Buena Room
Board of Directors Community Equity, Health, and Justice Committee	Wednesday	8	1:00 p.m.	1st Floor, Yerba Buena Room
Board of Directors Policy, Grants and Technology Committee	Wednesday	15	10:00 a.m.	1st Floor Board Room
Board of Directors Finance and Administration Committee	Wednesday	15	1:00 p.m.	1st Floor Board Room
Community Advisory Council Meeting	Thursday	16	6:00 pm.	1st Floor, Yerba Buena Room

5/27/26 – 11:08 a.m. RP G/Board/Executive Office/Moncal

BAY AREA AIR DISTRICT
Memorandum

To: Chairperson Lynda Hopkins and Members of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: June 3, 2026

Re: Approval of the Draft Minutes of the Board of Directors Budget Hearing of April 29, 2026

RECOMMENDED ACTION

Approve the Draft Minutes of the Board of Directors Budget Hearing of April 29, 2026

BACKGROUND

None.

DISCUSSION

Attached for your review and approval are the Draft Minutes of the Board of Directors Budget Hearing of April 29, 2026

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Marcy Hiratzka
Reviewed by: Vanessa Johnson

ATTACHMENT(S):

1. Draft Minutes of the Board of Directors Budget Hearing of April 29, 2026

Bay Area Air District
375 Beale Street, Suite 600
San Francisco, CA 94105
(415) 749-5073

Board of Directors Budget Hearing Meeting
Wednesday, April 29, 2026

DRAFT MINUTES

This meeting was webcast, and a video recording is available on the website of the Bay Area Air District at
www.baaqmd.gov/bodagendas

CALL TO ORDER

1. **Opening Comments:** Board of Directors (Board) Chairperson, Lynda Hopkins, called the meeting to order at 10:00 a.m.

   Roll Call:

   Present, In-Person (Bay Area Metro Center, 375 Beale Street, 1st Floor Board Room, San Francisco, CA, 94105): Chairperson Lynda Hopkins; and Directors Monica Brown, Ken Carlson, Chris Clark, Brian Colbert, Joelle Gallagher, Juan González III, David Haubert, Tyrone Jue, Bilal Mahmood, Gabe Quinto, Mark Salinas, Linda Sell, Lena Tam, and Steve Young.

   Present, In-Person Satellite Location (Office of Santa Clara County, 70 W. Hedding St, 10th Floor Conference Room, San Jose, CA 95110): Director Otto Lee.

   Present, In-Person Satellite Location (San Mateo County Board of Supervisors' Office, 5th Floor, 500 County Center, Redwood City, CA 94063): Director Ray Mueller.

   Present, In-Person Satellite Location (Office of Contra Costa County Supervisor John Gioia, Conference Room, 11780 San Pablo Ave., Suite D, El Cerrito, CA 94530): Director John Gioia.

   Present, In-Person Satellite Location (City of San Bruno, 567 El Camino Real, Room 138, San Bruno, CA 94066): Director Rico E. Medina.

   Absent: Vice Chairperson Vicki Veenker; and Directors Dionne Adams, Brian Barnacle, Noelia Corzo, and Shamann Walton.

2. **PLEDGE OF ALLEGIANCE**

PUBLIC HEARING

3. PROPOSED AIR DISTRICT BUDGET FOR FISCAL YEAR (FY) 2026-2027

The Board of Directors conducted a public hearing to review and receive public comment on the Fiscal Year 2026-2027 Proposed Budget.

Hyacinth Hinojosa, Deputy Executive Officer of Finance and Administration, and Stephanie Osaze, Director of Finance, gave the staff presentation Proposed Fiscal Year 2026-2027 Budget, including: outline; background; budget and fee regulation schedule; budget highlights; FY 2026-2027 All Funds Budget by revenue and expense type; grant distributions; FY 2026-2027 General Fund Budget by type; financial forecast; Budget summary – ongoing and new investments, other considerations, and sources and uses; General Fund reserves trend; General Fund reserve proposed designations and uses; medical retiree plan funding status/policy; pension plan funding status/policy; FY 2026-2027 Budget by service area; staffing overview; organizational efficiency add/delete positions; and recommended action.

NOTED PRESENT: Director Mahmood was noted present at 10:05 a.m. and Director Jue was noted present at 10:14 a.m.

Chair Hopkins opened the Public Hearing.

Public Comments

No requests received.

Board Comments

The Board and staff discussed status of the Air District's efforts to reduce its permit backlog; the request for year-on-year trends; whether the Air District's Engineering Division currently has sufficient staffing capacity to support its workload; the desire to see the Air District reach 100% funding for pension/Other Post Employment Benefits; why the Air District's reserves decreased in 2026, and whether that trend will stabilize; what sources the Air District's projected revenue predominantly comes from; how refinery shutdowns may affect projected Air District revenues, and whether the Air District should evaluate the need for a contingency plan to address potential revenue losses resulting from refinery closures; the status on Valero's Benicia refinery closure and the facility's current Air District permit as they shut down, and whether the facility will become a marine terminal; whether Greenhouse Gas Reduction Fund reductions may impact the Air District's budget; and the suggestion that, by 2027, the Air District calculates the projected annual permit revenue attributable to its ten highest revenue-generating permitted facilities and use that estimate as part of its risk management and budget planning process (if actual revenues trend below the projected amount, the Air District should adjust its budget accordingly to mitigate fiscal risk).

Chair Hopkins closed the Public Hearing.

Board Action

The Board of Directors did not take action on the Proposed Budget at this hearing. The Board of Directors will consider adopting the Proposed Budget at the second public hearing, which is scheduled for June 3, 2026.

OTHER BUSINESS

4. PUBLIC COMMENT ON NON-AGENDA MATTERS

No requests received.

5. BOARD MEMBER COMMENTS

None.

6. TIME AND PLACE OF NEXT MEETING

The next meeting will be held immediately following this one, on April 29, 2026, at 11:00 a.m. or as soon thereafter as the meeting is able to begin. The meeting will be held in-person at the Bay Area Metro Center and at satellite locations as may be specified on the meeting agenda using a remote teleconferencing link. Members of the Board of Directors and the public may attend at any of those in-person locations, and members of the public may also attend virtually via webcast.

The following meeting is scheduled for May 6, 2026, at 10:00 a.m. The meeting will be held in-person at the Bay Area Metro Center and at satellite locations as may be specified on the meeting agenda using a remote teleconferencing link. Members of the Board of Directors and the public may attend at any of those in-person locations, and members of the public may also attend virtually via webcast.

The next Budget Hearing will be held on June 3, 2026, at 10:00 a.m. Members of the Board of Directors must attend in person at the Bay Area Metro Center; members of the public will be able to attend in person or virtually via webcast.

7. ADJOURNMENT

The meeting was adjourned at 11:02 a.m.

Marcy Hiratzka
Clerk of the Boards

BAY AREA AIR DISTRICT
Memorandum

To: Chairperson Lynda Hopkins and Members of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: June 3, 2026

Re: Approval of the Draft Minutes of the Board of Directors Meeting of April 29, 2026

RECOMMENDED ACTION

Approve the Draft Minutes of the Board of Directors Meeting of April 29, 2026

BACKGROUND

None.

DISCUSSION

Attached for your review and approval are the Draft Minutes of the Board of Directors Meeting of April 29, 2026

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Marcy Hiratzka
Reviewed by: Vanessa Johnson

ATTACHMENT(S):

1. Draft Minutes of the Board of Directors Meeting of April 29, 2026

Bay Area Air District
375 Beale Street, Suite 600
San Francisco, CA 94105
(415) 749-5073

Board of Directors Meeting
Wednesday, April 29, 2026

DRAFT MINUTES

This meeting was webcast, and a video recording is available on the website of the Bay Area Air District at
www.baaqmd.gov/bodagendas

CALL TO ORDER

1. **Opening Comments:** Board of Directors (Board) Chairperson, Lynda Hopkins, called the meeting to order at 11:06 a.m.

   Roll Call:

   Present, In-Person (Bay Area Metro Center, 375 Beale Street, 1st Floor Board Room, San Francisco, CA, 94105): Chairperson Lynda Hopkins; and Directors Monica Brown, Ken Carlson, Chris Clark, Brian Colbert, Joelle Gallagher, Juan González III, David Haubert, Tyrone Jue, Bilal Mahmood, Gabe Quinto, Mark Salinas, Linda Sell, Lena Tam, and Steve Young.

   Present, In-Person Satellite Location (Office of Santa Clara County, 70 W. Hedding St, 10th Floor Conference Room, San Jose, CA 95110): Director Otto Lee.

   Present, In-Person Satellite Location (San Mateo County Board of Supervisors' Office, 5th Floor, 500 County Center, Redwood City, CA 94063): Director Ray Mueller.

   Present, In-Person Satellite Location (Office of Contra Costa County Supervisor John Gioia, Conference Room, 11780 San Pablo Ave., Suite D, El Cerrito, CA 94530): Director John Gioia.

   Present, In-Person Satellite Location (City of San Bruno, 567 El Camino Real, Room 138, San Bruno, CA 94066): Director Rico E. Medina.

   Absent: Vice Chairperson Vicki Veenker; and Directors Dionne Adams, Brian Barnacle, Noelia Corzo, and Shamann Walton.

2. **PLEDGE OF ALLEGIANCE**

PUBLIC HEARING

3. PROPOSED AMENDMENTS TO AIR DISTRICT REGULATION 3: FEES

The Board of Directors conducted a public hearing to consider and receive testimony on Proposed Amendments to the Air District's fee regulation, Regulation 3, impacting fee schedules A, B, C, D, E, F, G-1 through G-5, H, I, K, P, R, S, V, and W, along with other related changes.

Fred Tanaka, Engineering Manager, and Mark Gage, Principal Air Quality Engineer, gave the staff presentation *Proposed Amendments to Air District Regulation 3: Fees,* including: recommended action; outline; cost recovery background: limitations, trends, trends example; cost recovery strategies; cost recovery background; fee reductions; fee removals; proposed fee regulation amendments; other proposed changes – general, new fee, reclassification; impact on large facilities – permit renewal; impact on small facilities – permit renewal; fee reduction summary; efficiencies and cost containment efforts; budget & fee regulation schedule; summary of public comments; and recommended action.

Chair Hopkins opened the Public Hearing.

Public Comments

Public comments were given by Peter Okurowski, California Council for Environmental and Economic Balance.

Board Comments

The Board and staff discussed how the Air District’s fees compare to those of other air districts in California; situations in which the Air District’s permitting requirements differ from those of the South Coast Air Quality Management District; what drives the increased cost of regulated operations in overburdened communities; whether Slide 21 (Impact on Large Facilities – Annual Permit Renewal) capture anticipated changes to existing equipment or operations; the request for a historical overview of the Air District’s costs and revenues over time; predicted versus actual fee increases; the suggestion of restructuring Schedule K (solid waste disposal sites) to achieve greater cost recovery on a progressive basis; which metrics the Air District uses to measure permitting times and where money is being spent; how the Air District calculated threshold increases for each fee schedule; the suggestion that two categories be added to Slide 21 (Annual Permit Fee Increase/Decrease): the number of permits processed that year and number of backlogged permits that year; whether the Air District predicts that the Valero refinery in Benicia would pay its Air District fees if the facility is shutting down its operations; whether Air District inspectors will continue to visit the aforementioned refinery as it shuts down; the rationale for raising fees without a corresponding increase in costs; the anticipated impacts of delaying fee increases until 2027; the request that “green projects be accelerated through the Air District’s permitting process” be added to Slides 24 and 25 (efficiencies and cost containment efforts); whether enforcement costs recoverable in cases involving deceptive conduct by a permitted facility; and whether the Air District staff bills their time to specific permit numbers.

Chair Hopkins closed the Public Hearing.

Board Action

The Board of Directors did not take action on the Proposed Amendments at this hearing. The Board of Directors will consider adopting the Proposed Amendments at the second public hearing, which is scheduled for June 3, 2026.

OTHER BUSINESS

4. PUBLIC COMMENT ON NON-AGENDA MATTERS

Public comments were given by Rochele Henderson.

5. BOARD MEMBER COMMENTS

Director Young asked whether the $3.25 million dollars that the Air District fined the Valero Benicia refinery (in April 2026) will be added to the available funds for Round 1 of the Local Community Benefits Fund allocated to Benicia and surrounding communities, versus for Round 2.

Director González encouraged Board members to report Air District posts on various social media platforms.

Director Salinas reported that on April 25, 2026, the City of Hayward held its Citywide Clean-Up and Community Fair, and he thanked the Air District for having a presence at the event.

Director Quinto reported that he attended SF Climate Week, which was held from April 18-26, 2026.

Director Sell thanked the Air District for sponsoring Stanford University's Sustainable Data Centers Symposium.

6. REPORT OF THE EXECUTIVE OFFICER / Air Pollution Control Officer (APCO)

Dr. Philip M. Fine, Executive Officer / APCO, waived this report.

7. CHAIRPERSON'S REPORT

Chair Hopkins announced that on April 14, 2026, the Santa Clara County Board of Supervisors appointed Mountain View Vice Mayor, Chris Clark, to the Air District's Board of Directors for a four-year term, from April 20, 2026 to April 20, 2030. This appointment fills the seat formerly held by Margaret Abe-Koga, whose appointment to the Air District concluded on April 20, 2026, due to term limits.

8. TIME AND PLACE OF NEXT MEETING

Wednesday, May 6, 2026, at 10:00 a.m. The meeting will be held in-person at the Bay Area Metro Center and at satellite locations as may be specified on the meeting agenda using a remote teleconferencing link. Members of the Board of Directors and the public may attend at any of those in-person locations, and members of the public may also attend virtually via webcast.

9. ADJOURNMENT

The meeting was adjourned at 12:49 p.m.

Marcy Hiratzka
Clerk of the Boards

BAY AREA AIR DISTRICT
Memorandum

To: Chairperson Lynda Hopkins and Members of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: June 3, 2026

Re: Approval of the Draft Minutes of the Board of Directors Meetings of May 6, 2026, and May 13, 2026

RECOMMENDED ACTION

Approve the attached Draft Minutes of the Board of Directors Meetings of May 6, 2026, and May 13, 2026.

BACKGROUND

None.

DISCUSSION

Attached for your review and approval are the Draft Minutes of the Board of Directors Meetings of May 6, 2026, and May 13, 2026.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Marcy Hiratzka
Reviewed by: Vanessa Johnson

ATTACHMENT(S):

1. Draft Minutes of the Board of Directors Meeting of May 6, 2026
2. Draft Minutes of the Board of Directors Meeting of May 13, 2026

Bay Area Air District
375 Beale Street, Suite 600
San Francisco, CA 94105
(415) 749-5073

Board of Directors Meeting
Wednesday, May 6, 2026

DRAFT MINUTES

This meeting was webcast, and a video recording is available on the website of the Bay Area Air District at
www.baaqmd.gov/bodagendas

CALL TO ORDER

1. **Opening Comments:** Board of Directors (Board) Chairperson, Lynda Hopkins, called the meeting to order at 10:10 a.m.

   Roll Call:

   Present, In-Person (Bay Area Metro Center, 375 Beale Street, 1st Floor Board Room, San Francisco, CA, 94105): Chairperson Lynda Hopkins; Vice Chairperson Vicki Veenker; and Directors Dionne Adams, Chris Clark, Joelle Gallagher, Juan González III, Tyrone Jue, Gabe Quinto, Mark Salinas, Linda Sell, Lena Tam, and Steve Young.

   Present, In-Person Satellite Location: (San Mateo County Supervisor Ray Mueller, 270 Capistrano Rd., Unit 6, Half Moon Bay, CA 940190: Director Ray Mueller.

   Present, In-Person Satellite Location: (Solano County Administration Building, 675 N. Texas St. Room A168, Fairfield, CA 94533): Director Monica Brown.

   Present, In-Person Satellite Location: (San Mateo County Transit District, 2nd Floor Auditorium, 1250 San Carlos Ave., San Carlos, CA 94070): Directors Noelia Corzo and Rico E. Medina.

   Present, In-Person Satellite Location: (Alameda County Supervisor David Haubert, 246 Argonne Way, Long Beach, CA 90803): Director David Haubert

   Absent: Directors Brian Barnacle, Ken Carlson, Brian Colbert, John Gioia, Otto Lee, Bilal Mahmood, and Shamann Walton.

2. **PLEDGE OF ALLEGIANCE**

   NOTED PRESENT: Directors Adams and Clark were noted present at 10:15 a.m.

CLOSED SESSION (ITEMS 3 – 8) (10:15 a.m.)

Public Comments

No requests received.

3. **CONFERENCE WITH LEGAL COUNSEL RE EXISTING LITIGATION PURSUANT TO GOVERNMENT CODE SECTIONS 54956.9(a) AND (d)(1)**

Pursuant to Government Code Sections 54956.9(a) and (d)(1), the Board of Directors met in Closed Session with Legal Counsel to discuss the following cases:

Stephen (Rex) Sanders v. Bay Area Air Quality Management District, Northern District of California Case No. 23-cv-04416-RFL;

Terri Levels v. Bay Area Air Quality Management District, Northern District of California Case No. 23-cv-04432-RFL;

Lewis Letang v. Bay Area Air Quality Management District, Northern District of California Case No. 24-cv-01316-RFL;

Rochele Henderson v. Bay Area Air Quality Management District, Northern District of California Case No. 24-cv-01460-RFL;

Veronica Eady v. Bay Area Air Quality Management District, Northern District of California Case No. 24-cv-07000-RFL; and

Vanessa Johnson v. Bay Area Air Quality Management District, Northern District of California Case No. 24-cv-06276-RFL.

Reportable Action: Alexander Crockett, General Counsel announced that there was nothing to report.

4. **CONFERENCE WITH LEGAL COUNSEL RE ANTICIPATED LITIGATION PURSUANT TO GOVERNMENT CODE SECTIONS 54956.9(a), (d)(2), AND (e)(3)**

Pursuant to Government Code Sections 54956.9(a), (d)(2) and (e)(3), the Board of Directors met in Closed Session with Legal Counsel to discuss a significant exposure to litigation regarding the government code claim of Tinisha Youngs received by the Air District on March 23, 2026.

Reportable Action: Mr. Crockett announced that there was nothing to report.

5. **PUBLIC EMPLOYEE EVALUATION PURSUANT TO GOVERNMENT CODE SECTION 54957(b)(1)**

Title: Executive Officer/Air Pollution Control Officer (APCO)

Reportable Action: Chair Hopkins announced that there was nothing to report.

6. **PUBLIC EMPLOYEE EVALUATION PURSUANT TO GOVERNMENT CODE SECTION 54957(b)(1)**

Title: General Counsel

Reportable Action: Chair Hopkins announced that there was nothing to report.

7. **CONFERENCE WITH LABOR NEGOTIATORS PURSUANT TO GOVERNMENT CODE SECTION 54957.6**

Agency Designated Representatives:
Laura A. Izon, Atkinson, Andelson, Loya, Ruud & Romo
Hyacinth Hinojosa, Deputy Executive Officer of Finance and Administration
Lisa Baker, Director of Human Resources

Employee Organization: BAAQMD Employees Association

Reportable Action: Mr. Crockett announced that there was nothing to report

8. **CONFERENCE WITH LABOR NEGOTIATORS PURSUANT TO GOVERNMENT CODE SECTION 54957.6**

Agency Designated Representatives:
Laura A. Izon, Atkinson, Andelson, Loya, Ruud & Romo
Hyacinth Hinojosa, Deputy Executive Officer of Finance and Administration
Lisa Baker, Director of Human Resources

Employee Organization: Attorney Management Unit (EA-AMU)

Reportable Action: Mr. Crockett announced that there was nothing to report

At this time, Mr. Crockett gave a verbal Closed Session Report on Prior Closed Session Votes from the Board's previous meetings:

- *Claim of Ronald Rice for damages resulting from a motor vehicle collision. At the March 4, 2026, Board meeting, on Agenda Item 3, the Board voted to authorize settlement on the Claim of Ronald Rice. Voting in favor were Directors Gonzalez, Young, Walton, Abe-Koga, Jue, Gioia, Colbert, Quinto, Tam, Adams, Haubert, Lee, Carlson, Corzo, Meuller, Barnacle, Medina, Mahmood, and Sell; and Vice-Chair Veenker and Chair Hopkins. There were no votes against and no abstentions.*
- *Authorization to join the lawsuit against the United States challenging EPA's recission of the Clean Air Act endangerment finding. At the April 1, 2026, Board meeting, on Agenda Item 3, the Board voted to authorize the Air District to initiate this litigation. Voting in favor were Directors Gonzalez, Gallager, Young, Walton, Jue, Gioia, Quinto, Tam, Adams, Haubert, Carlson, Mueller, Barnacle, Medina, Salinas, and Sell; and*

Vice-Chair Veenker and Chair Hopkins. There were no votes against and no abstentions.

OPEN SESSION (11:11 a.m.)

9. **SPECIAL ORDERS OF THE DAY**

Chair Hopkins welcomed the following new employees: Craig Dittman, Senior Air Quality Specialist in the Regulatory Development Division; Daniel Amparo, Air Quality Specialist I in the Compliance and Enforcement Division; and Breana Lee's promotion to Air Quality Engineer I in the Engineering Division.

CONSENT CALENDAR (ITEMS 10 – 26)

Chair Hopkins announced the following, regarding Item 14 (Approval of an Amendment to the Employment Agreement for General Counsel):

The Board of Directors completed their discussion. Section 54953(c)(3) of the Ralph M. Brown Act requires the amount of the amended compensation to be stated orally before final action on this item. The Board, in Closed Session, considered a performance evaluation of our General Counsel, Alexander Crockett, and the current employment agreement allows the Board to consider a salary increase of up to five percent, in connection with this evaluation. The five percent would amount to a new salary of $416,720.96 per year, effective May 23, 2026, with all provisions of the employment agreement remaining the same.

Chair Hopkins then announced the following, regarding Item 15 (Approval of an Amendment to the Employment Agreement for Executive Officer/APCO):

The Board of Directors had a discussion. Section 54953(c)(3) of the Ralph M. Brown Act requires the amount of the amended compensation to be stated orally before final action on this item. The Board, in Closed Session, considered a technical amendment to increase the Air District's employer matching contribution: the Executive Officer's 457 deferred compensation retirement plan, from $15,500, as approved in December 2025, to $16,250 in 2026, due to Internal Revenue Service inflation adjustments, on a yearly basis.

Chair Hopkins then announced the following:

I will be seeking a motion on this Consent Calendar, with those items, as read into the record. Additionally, I would like to pull Item 20 (Consideration of State Legislation), and this is why: At the April 15, 2026, Policy, Grants, and Technology Committee (PGTC) meeting, Committee members voted to send staff recommendations on several bills, including an oppose recommendation for Senate Bill (SB) 1075 (Reyes) to today's meeting of the Board for approval. Due to the potential length of the Board meeting, the item was placed on the consent calendar, which is not our standard practice. Subsequent to the PGTC meeting, SB 1075 received significant amendments, and staff have changed their recommendation to "oppose unless amended." Because of that, I'd like to pull this item for a very brief discussion of SB 1075 and staff's revised recommendation, or any questions from the Board. I also understand that there was an additional conversation, and that there was just barely quorum at the PGTC

meeting, and there were some recommendations that were advanced, with a bit of an asterisk, from the PGTC. So if anyone also wishes to comment on those questions, or raise those issues, they may do so after the Consent Calendar.

10. Approval of the Draft Minutes of the Board of Directors Meeting of April 1, 2026
11. Board Communications Received from April 1, 2026, through May 5, 2026
12. Notices of Violations Issued and Settlements in Excess of $10,000 in the Month of March 2026
13. Personnel Out-of-State Business Travel Report for March 2026
14. Approval of an Amendment to the Employment Agreement for General Counsel
15. Approval of an Amendment to the Employment Agreement for Executive Officer/APCO
16. Authorization to Amend Contract with Acterra for Bayview Hunters Point/Southeast San Francisco Assembly Bill 617 Community Steering Committee Support
17. Authorization to Amend Contract with Renne Public Law Group for Legal Services Related to Labor and Employment Issues
18. Authorization to Execute a Sponsorship Contract with the San Francisco Pride Parade
19. Transportation Fund for Clean Air 40% Fund Allocation and Expenditure Plans for Fiscal Year Ending 2027
20. Consideration of State Legislation
21. Report of the Advisory Council Meeting of March 16, 2026
22. Report of the Community Advisory Council Meeting of March 19, 2026
23. Report of the Stationary Source Committee Meeting of April 8, 2026
24. Report of the Community Equity, Health, and Justice Committee Meeting of April 8, 2026
25. Report of the Finance and Administration Committee Meeting of April 15, 2026
26. Report of the Policy, Grants, and Technology Committee Meeting of April 15, 2026

Public Comments

Public comments on Items 14 (Approval of an Amendment to the Employment Agreement for General Counsel) and 15 (Approval of an Amendment to the Employment Agreement for Executive Officer/APCO) were given by Dawn S; Alice; Joanne McPhee; Stephen Theyard; and Ellen.

Public comments on Item 18 (Authorization to Execute a Sponsorship Contract with the San Francisco Pride Parade) were given by Alice; anonymous speaker; and Rick S.

Board Comments

The Board and staff discussed the Board's decision to increase General Counsel's compensation and to sponsor the San Francisco Pride Parade, and a request for an overview of how the Air District is funded/gets its revenue.

Board Action

Director González made a motion, seconded by Vice Chair Veenker, to approve Consent Calendar Items 10 through 19, and 21 through 26; and the motion **carried** by the following vote of the Board:

AYES: Adams, Brown, Clark, Gallagher, González, Haubert, Hopkins, Jue, Medina, Mueller, Quinto, Salinas, Sell, Tam, Veenker, Young.
ABSTAIN: None.
NOES: None.
ABSENT: Barnacle, Carlson, Colbert, Corzo, Gioia, Lee, Mahmood, Walton.

At this point, Alan Abbs, Legislative Officer, gave the following update on Item 20 (Consideration of State Legislation):

I asked the Chair to consider removing this particular item, related to SB 1075. It's been a very fast-moving bill. It was introduced very late in the process. When the PGTC first heard about this bill, it had only been in print for about a week. The PGTC recommended opposing the bill as it was currently written, and then subsequent to that recommendation, the bill went to two of the Senate's committees (Environmental Quality and Local Government). These had significant amendments made to the bill, some of which were amendments that our staff had suggested in a meeting with the author's office. So there is a current version of the bill, which is a lot different from the original bill, but still has couple of problems. So I've changed the recommendation that I'd like the Board to consider, to that of an "oppose unless amended" position. The amendments would be along the lines of making sure that, going forward, communities have the ability to call an end to their participation in the program; not just whether it relates to meeting the Federal Clean Air Act attainment requirements and giving opportunities for other communities to enter the program if there's a space available. Then there are a couple of other modifications that we'd like to see, related to the land use element and how a local planning agency would take into consideration CERP recommendations that were developed by the community steering committees. So I think this bill is still viable but we have some changes we'd like to see to make it better.

Director González made a motion, seconded by Director Tam, to approve Consent Calendar Item 20; and the motion **carried** by the following vote of the Board:

AYES: Adams, Brown, Clark, Corzo, Gallagher, González, Haubert, Hopkins, Jue, Medina, Mueller, Quinto, Salinas, Sell, Tam, Veenker, Young.
ABSTAIN: None.
NOES: None.
ABSENT: Barnacle, Carlson, Colbert, Gioia, Lee, Mahmood, Walton.

DISCUSSION ITEM

27. **RULE 9-6 REGULATORY OVERVIEW AND DISCUSSION OF FLEXIBILITY AND AFFORDABILITY AMENDMENTS FOR ZERO NOX WATER HEATERS**

Greg Nudd, Deputy Executive Officer of Policy, gave the staff presentation *Rule 9-6: Flexibility and Affordability Amendments for Zero NOx Water Heaters,* including: outline; recommended action; abbreviations; PART I: Why Did the Air District's Board of Directors Adopt Zero NOx Standards for Furnaces and Water Heaters – NOx emissions from buildings, major health benefits from Rule 9-4 and 9-6, zero NOx water heater technology is widely available, zero NOx standards – 2023 amendments, Implementation Working Group Phase 1 Small Water Heaters, Board and committee timeline, release of the regulatory overview; PART II: Why Do

Rule 9-6 Zero NOx Standards for Water Heaters Need Flexibilities – space constraints, electrical constraints, costs associated with implementation, cost distribution of replacement projects, incentive availability; PART III: What are the Proposed Flexibility Exemptions – objectives of exemptions, categories for Rule 9-6 compliance, total estimated exemptions project cost impacts, public health impacts, low-income qualified property owner, project specific exemptions require contractor, one-time exemption per project address, processing fee for exemptions, delay to October 1, 2027 effective date; PART IV: Common Questions and Concerns – stoves or whole home electrification, socioeconomic impacts, high exposure to property owners, panel and service upsizing, housing costs and displacement impacts, equity concerns with low-income exemption, electric grid readiness and reliability, major health benefits from Rule 9-4 and 9-6; and PART V: Next Steps and Discussion – public awareness campaign overview and timeline, immediate next steps, and summary of key recommendations.

Public Comments

Public comments were given by Rod Sinks; Hon. Betsy Nash, Menlo Park; Hon. Fred Simon, San Leandro; Sara Seager; Julia Zeitlin, Palo Alto resident; Alice Snyder; Charlotte Taylor; Kanami Taniguchi; Antoine Tollu; Christine Selig, PODER SF, Avni Jamdar, Emerald Cities Collaborative; Glen Garfunkel, San Jose resident; Casper Leong, San Francisco resident; Fernando Gaytan, Earthjustice; Rev. Gregory Stevens, California Interfaith Power & Light; Sven Thesen, National Charging Access Coalition; Nancy Tierney, Pacifica resident; Ze-Kun Li, Silicon Valley Youth Climate Action; Nick Afable, Electrify My Home; Gina Zari, Santa Clara County Association of Realtors; Heather Brownfield, Enterprise Community Partners; Anna Maria Russo, San Jose resident; Eric Morrill, All Electric California, Enrique Navarro, Santa Clara County Association of Realtors; Jane; Greg Peralta, Santa Clara County Association of Realtors; Meina Young, Business and Housing Network; Jessica Tovar, Local Clean Energy Alliance; Dr. Jean Woo, San Francisco Bay Physicians for Social Responsibility; Kathy Battat; Dr. Bret Andrews, San Francisco Bay Physicians for Social Responsibility; Patrick Messac; Dr. Margie Chen, San Francisco Bay Physicians for Social Responsibility; David Moller, Marin Electrification Council; Mary Dateo, Mountain View resident; Dr. Gottlieb; Karl Lee, Realtor; Dr. Arthur McCallum; Gene Hunt, Santa Clara County Association of Realtors; Zachary Frial, San Francisco resident; Shirley; Teresa Dulalas, South of Market Community Action Network (SOMCAN); Colleen Corrigan, San Francisco Bay Area Planning and Urban Research Association (SPUR); Wendy Chou, Acterra; Leah Catanzarite, Pacific Gas & Electric; Malcom Caplan, Fremont resident; John McKenna; Michael Gordon, Santa Clara Association of Realtors; Jasmine Lozano, 1-888-Heat-Pumps; Sara Greenwald, 350 San Francisco; Angela Evans, Menlo Spark; Lisa Jackson, 350 Contra Costa Action; Sam Fishman, SPUR; Bill Olsen; Brian Schmidt, Menlo Spark; Shana, Albany resident; Olga Mandrussow; Johnny Kocher, Oakland resident; Melissa Yu , Sierra Club; Jed Holtzman; Tony Sirna, Evergreen Action; Gerard Manning, Burlingame resident; Sarah Ranney, Sierra Club; Mark Forbes San Carlos resident; Drew Sage; Dohee Kim, Local Clean Energy Alliance of the Bay Area; Yvonne Eashman, Environmental Justice League (EJL); Mark Williams, EJL; Yvonne Williams, Contra Costa County resident; David Stark, Bay East Association of Realtors; Hope Fasching; Kathy Kerridge, Benicia resident; John Scaglione; Brianna McGuire; Bruce Karney; Linh Dan Do; Neil Collins; Mani Bekele, Silicon Valley Youth Climate Action; Ruthie Redmond; Emily Thompson; Kristel Wickham; Anil Babbar; Dawn S; Aaron Reaven; Lynn Ng Quezon; Stephen Theyard; Mark Hinkle; Linda Brown; George Scharffenberger;

Randy Breunling, San Jose resident; Debbie Mytels; Dr. Stephen Rosenblum, Palo Alto resident; Rebecca Franke; Mark Grossman; David; Phil Kelly; Alice; Dan Pan; Stanley Tseng; Michael Hilber; Dash Leeds, Sierra Club; Hoai-An; Ted E; Katie Van Dyke; Kelly Hunt; Robert Edwards; Maneck Bhujwala; Elina Razdobarina; Pierre; Meron Lemmi, Rocky Mountain Institute; Susan Stephenson; Jan Warren, Interfaith Climate Action Network of Contra Costa County; Peter; Diane Bailey; Ericka Flores; Linda Hutchins-Knowles; Josh P; Jack Wing; Jody; Jack; Jill Toler; Kristel Rietesel; Jeremy; Ken Szutu; Lisa Charpontier; Bruce Naegel; Lucinda Young; Norm; Marna Schwartz; Tom Kunhardt; Mars Keith, Sierra Club; Hon. Igor Tregub, City of Berkeley; Natalie Geise; Tom Kabat, Menlo Park resident; Mark Palmer; Joel Ervice, Regional Asthma Management and Prevention; Cameron Rogers; BR; Howard Strassner; Rebecca Milliken; Jan Pinza; Mauro Benedetti; Rhovy Lyn Antonio; Kathleen Goforth; Dan; Wynn Tucker; Lisa Badenfort, North Bay Association of Realtors; JD Cao; Stephen Parsons; Sherry Listgarten; and Christina.

Board Comments

The Board and staff discussed whether staff is in alignment with the Stationary Source Committee's recommendations as outlined in the presentation; proposed flexibility exemptions for low-income households; whether this particular discussion was limited to water heaters only; concerns about staff's estimated exemptions (38% of water heater installations are estimated to qualify for exemptions); concerns regarding eligible contractor availability, monitoring installation, and enforcing compliance; the anticipated level of involvement of cities and counties (whether they will have to issue building permits for the replacement projects); the manner in which applicants that claim to be low-income qualified property owners would be required to demonstrate that their annual mortgage and property taxes ≥28% of gross income; the date by which the Air District anticipates it will have completed an updated socioeconomic impacts report, and whether the revised analysis would be applied to the Rule 9-6 amendments; the fact that some cities are approving all-electric new developments, and what share of total developments that represents; how the prequalification process (for income-based hardships, technical and infrastructure constraints, and specific equipment types) would be structured; whether a survey or poll of the public's awareness of Rule 9-6 has been conducted; whether onus for low-income exemptions are placed on the property owner or contractor; the duration of time that the rulemaking process for Rule 9-4 and 9-6 lasted, prior to their adoption in 2023; why the South Coast Air Quality Management District's Governing Board rejected Proposed Rules 1111 and 1121, which would have required manufacturers to gradually phase out the sale of traditional gas-powered water heaters and furnaces; whether this would be the first time that the Air District would impose regulations on equipment in homes (versus manufacturers) with an associated cost burden; the request for clarification of the definition of "federal poverty"; and what measures the Air District would implement to protect applicants' personal and financial information, such as mortgage payment records and income documentation.

Board Action

No action taken.

At 4:05 p.m., during Item 27, a quorum of Board members (in any location) was lost, and the meeting was forced to adjourn. Item 27 was continued to May 13, 2026, at 10:00

a.m., at which time, the Board of Directors would discuss potential flexibility and affordability amendments to Rule 9-6 for small water heaters and provide direction to staff. Public comment has closed for this item on May 6, 2026. The continuation of this item on May 13, 2026 will be to complete the Board's discussion of the item only. Items 28 through 31 of the Board's May 6, 2026 meeting agenda did not occur.

OTHER BUSINESS

28. **PUBLIC COMMENT ON NON-AGENDA MATTERS**

29. **BOARD MEMBER COMMENTS**

30. **REPORT OF THE EXECUTIVE OFFICER / APCO**

31. **CHAIRPERSON'S REPORT**

32. **TIME AND PLACE OF NEXT MEETING**

Wednesday, June 3, 2026, at 10:00 a.m. The meeting will be held in-person at the Bay Area Metro Center. Members of the Board of Directors must attend in person at the Bay Area Metro Center; members of the public will be able to attend in person or virtually via webcast.

33. **ADJOURNMENT**

The meeting was adjourned at 4:05 p.m.

Marcy Hiratzka
Clerk of the Boards

Bay Area Air District
375 Beale Street, Suite 600
San Francisco, CA 94105
(415) 749-5073

Board of Directors Meeting
Wednesday, May 13, 2026

DRAFT MINUTES

This meeting was webcast, and a video recording is available on the website of the Bay Area Air District at
www.baaqmd.gov/bodagendas

CALL TO ORDER

1. **Opening Comments:** Board of Directors (Board) Chairperson, Lynda Hopkins, called the meeting to order at 10:00 a.m.

   Roll Call:

   Present, In-Person (Bay Area Metro Center, 375 Beale Street, Yerba Buena Room, San Francisco, CA, 94105): Chairperson Lynda Hopkins; Vice Chairperson Vicki Veenker; and Directors Ken Carlson, Chris Clark, Noelia Corzo, Tyrone Jue, Mark Salinas, Linda Sell, and Steve Young.

   Present, In-Person Satellite Location: (Solano County Administration Building, 675 N. Texas St. Room A168, Fairfield, CA 94533): Director Monica Brown.

   Present, In-Person Satellite Location: (Office of Santa Clara County, 70 W. Hedding St, 1st Floor Conference Room, San Jose, CA 95110): Director Otto Lee.

   Present, In-Person Satellite Location: (Napa County Administration Building, 1195 Third Street, Suite 310, County Executive's Office, Napa, CA 94559): Director Joelle Gallagher.

   Present, In-Person Satellite Location: (San Mateo County Board of Supervisors' Office, 5th Floor, 500 County Center, Redwood City, CA 94063): Director Ray Mueller.

   Present, In-Person Satellite Location: (City of San Bruno, 567 El Camino Real, Room 138, San Bruno, CA 94066): Director Rico E. Medina.

   Present, In-Person Satellite Location: (Office of Contra Costa County Supervisor John Gioia, Conference Room, 11780 San Pablo Ave., Suite D, El Cerrito, CA 94530): Directors John Gioia and Gabe Quinto.

Present, In-Person Satellite Location: (Office of Alameda County Supervisor David Haubert, Scott Haggerty House, 4501 Pleasanton Avenue, Pleasanton, CA 94566): Director David Haubert.

Present, In-Person Satellite Location: (Pittsburg City Hall, 65 Civic Ave., Room, 301A, Pittsburg, CA 94565): Director Dionne Adams.

Present, In-Person Satellite Location: (Alameda County Board of Supervisors District 3, 101 Callan Ave., Suite 103, San Leandro, CA 94577): Director Lena Tam.

Absent: Directors Brian Barnacle, Brian Colbert, Juan González III, Bilal Mahmood, and Shamann Walton.

2. **PLEDGE OF ALLEGIANCE**

DISCUSSION ITEM

3. **RULE 9-6 REGULATORY OVERVIEW AND DISCUSSION OF FLEXIBILITY AND AFFORDABILITY AMENDMENTS FOR ZERO NOX WATER HEATERS (CONTINUED ITEM 27 FROM MAY 6, 2026 MEETING)**

This item was continued from the May 6, 2026, meeting (agenda Item 27). Public comment was completed for this item at the May 6 meeting. The continuation of this item (from the May 6 Board meeting) was for the purpose of completing the Board's discussion of the item only. The Board of Directors discussed potential flexibility and affordability amendments to Rule 9-6 for small water heaters. The Regulatory Overview for Rule 9-6, released publicly on April 13, was intended to provide additional context on Air District staff's process to date and current recommendations.

NOTED PRESENT: Vice Chair Veenker was noted at 10:03 a.m.; Director Salinas was noted at 10:11 a.m.; Director Clark was noted present at 10:17 a.m.; and Director Corzo was noted at 10:30 a.m.

Greg Nudd, Deputy Executive Officer for Policy, gave the staff presentation *Rule 9-6: Flexibility and Affordability Amendments for Zero NOx Water Heaters,* including: summary of key recommendations; and low-income definitions.

Board Comments

The Board and staff discussed whether the staff recommendation of providing a nine-month delay to develop exemption process and conduct outreach applies to new or existing construction; what the new implementation date would be for Rule 9-6 if the Board approved a nine-month delay to the implementation schedule; how many Community Choice Aggregation (CCA) organizations in the Bay Area offer rebate programs that are applicable to Rules 9-6 and 9-4; the belief that now is not the appropriate time to impose an additional mandate with significant associated costs, given current affordability challenges; the belief that advocating for lower costs in other areas, while simultaneously imposing additional cost burdens through the Air District, sends mixed messages to the public; the belief that gas-

emitting appliances in the home may represent a relatively smaller concern than other pollution sources; concerns regarding power outages impacting the reliability of electric appliances; concerns that access to rebates may vary by location, potentially creating disparities among communities; the belief that assessing household-level cost burdens may fall outside the Air District's core expertise and jurisdiction; concerns regarding impacts that may result due to issues with appliance space and technology constraints; concerns about having to do without hot water while waiting for replacement units; the belief that many are not aware of the Air District's gas appliance rules, and the desire for the members of the Air District's Community Advisory Council and Assembly Bill 617 Community Steering Communities to educate their communities about these gas appliance rules; the suggestion of making these appliance changes a voluntary program, rather than mandated rules; concerns that the current low-income exemptions may need greater flexibility, including a more graduated structure that provides increased support for lower-income households; the belief that project exemptions should not be contingent upon the ability to hire a contractor, and that clear criteria are needed to define the scope and limits of such exemptions; home electrification projects completed in the Cities of Palo Alto and San Francisco's (which resulted in no observed impacts on the electrical grid), and the observation that what worked in one case may not be applicable across all situations; the way in which the Air District would connect households that do not meet the requirements for exemptions with rebate and other support programs; the suggestion of postponing the implementation of Rule 9-6 until January 2029, to combine the implementation start dates of Rules 9-6 and 9-4, or at least postponing Rule 9-6's implementation (various increments of delay time were suggested); the belief that an increased understanding of the health benefits could make electric appliances more appealing to many households; the belief that tenant health considerations are not always uniformly prioritized across all property owners; the belief that it falls to the current generation to confront and remedy unintended impacts of past actions, regardless of the political challenges involved; whether multi-family units apply for exemptions individually or as one building; the belief that the current rule raises equity concerns, particularly if the resulting cost burden is felt most acutely by low-income families; whether the Air District may use its funds on changing behavior rather than requiring changes that not everyone can afford; concerns about the misinformation about the Air District's gas appliance rules and zero NOx appliance technology; the belief that zero NOx technology is being driven/shaped by discussion of rules like this; the suggestion of adding a new recommendation of a model permit streamlining ordinance to be used by jurisdictions; the request for an updated socioeconomic impacts report; the request that staff clarify the definitions of the terms "emergency," "temporary," and "high heat demand"; the request that these rulemakings provide language access for Limited English Proficient individuals; the request that staff conducts a scientific, randomized sampling study of problematic housing stock (in the nine Bay Area counties) and identify their associated costs and impacts; whether this would be the first time that the Air District would impose regulations on equipment in homes with an associated cost burden; and concerns regarding the anticipated cost burden impacts on the middle-income class.

The Chair noted that there was a majority support from the Board members present to move forward with bringing staff recommendations back to the Board for consideration in October 2026. Ten Board members supported moving ahead with staff's recommendations as presented, along with additional direction that was provided. Eight Board members supported a pause or a voluntary program instead of staff recommendations. The Chair added that, between May and October 2026, there may be a future Stationary Source Committee meeting

pertaining to the gas appliance rules, focusing on a model ordinance, a possible report on community engagement, and potential subsidies, but not on the rulemaking process itself.

OTHER BUSINESS

4. PUBLIC COMMENT ON NON-AGENDA MATTERS

Public comments were given by Fernando Gaytan, Earthjustice; and Dawn, Campbell resident.

At 12:17 p.m., during Item 4, a quorum of Board members (in any location) was lost, and the meeting was forced to adjourn. Items 5 through 7 did not occur.

5. BOARD MEMBER COMMENTS

6. REPORT OF THE EXECUTIVE OFFICER / AIR POLLUTION CONTROL OFFICER (APCO)

7. CHAIRPERSON'S REPORT

8. TIME AND PLACE OF NEXT MEETING

Wednesday, June 3, 2026, at 10:00 a.m. The meeting will be held in-person at the Bay Area Metro Center. Members of the Board of Directors must attend in person at the Bay Area Metro Center; members of the public will be able to attend in person or virtually via webcast.

9. ADJOURNMENT

The meeting was adjourned at 12:17 p.m.

Marcy Hiratzka
Clerk of the Boards

BAY AREA AIR DISTRICT
Memorandum

To: Chairperson Lynda Hopkins and Members of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: June 3, 2026

Re: Board Communications Received from May 6, 2026 through June 2, 2026

RECOMMENDED ACTION

None; the Board will discuss this item, but no action is requested at this time.

BACKGROUND

None.

DISCUSSION

Copies of communications directed to the Board of Directors received by the Air District from May 6, 2026 through June 2, 2026, if any, will be distributed to the Board Members by way of email.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Randyl Pamphlet
Reviewed by: Vanessa Johnson

ATTACHMENT(S):

None

BAY AREA AIR DISTRICT
Memorandum

To: Chairperson Lynda Hopkins and Members of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: June 3, 2026

Re: Notices of Violations Issued and Settlements in Excess of $10,000 in the Month of April 2026

RECOMMENDED ACTION

None; informational item only, no action is requested at this time.

BACKGROUND

None.

DISCUSSION

In accordance with Resolution No. 2012-08, attached to this Memorandum is a listing of all Notices of Violations issued, and all settlements for amounts in excess of $10,000 during the calendar months prior to this report.

BUDGET CONSIDERATION/FINANCIAL IMPACT

The penalties collected are recorded in the Air District's General Fund. A portion of the penalty funds may be expended in accordance with the Community Benefits Penalty Funds Policy adopted by the Board of Directors on May 1, 2024.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Alexander G. Crockett

ATTACHMENT(S):

1. Notices of Violations Issued and Settlements in Excess of $10,000 - April 2026

NOTICES OF VIOLATION ISSUED

The following Notice(s) of Violation(s) were issued in April 2026:

Alameda

Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comment
Applied Thin-Film Products	B0617	Fremont	A65065A	4/29/26	8-16-303.3	Solvent Cleaning Operations Violation
Applied Thin-Film Products	B0617	Fremont	A65065B	4/29/26	8-16-303.4	Solvent Cleaning Operations Violation
East Bay Regional Communications System Authority	E1556	Dublin	A65172A	4/6/26	2-1-302	No Permit to Operate
Energy Recovery, Inc.	B9782	San Leandro	A63720A	4/14/26	1-301	Public Nuisance Violation
Energy Recovery, Inc.	B9782	San Leandro	A66206A	4/13/26	2-1-307	Permit Requirement/Condition Violation
Energy Recovery, Inc.	B9782	San Leandro	A66207A	4/13/26	2-1-307	Permit Requirement/Condition Violation
Energy Recovery, Inc.	B9782	San Leandro	A66208A	4/13/26	1-441	Denied Access to Information Violation
Foothill National	S789778	Castro Valley	A64600A	4/9/26	8-7-408	Gasoline Dispensing Facility Violation
Industrial Gas	D2001	Hayward	A64599A	4/6/26	8-7-408	Gasoline Dispensing Facility Violation
Jawad Sulton	S788616	Pleasanton	A66209A	4/21/26	5-301	Open Burn Violation
Lam Research Corporation - Fremont Campus	A3152	Fremont	A65058A	4/24/26	2-1-307	Permit Requirement/Condition Violation
Lam Research Corporation - Fremont Campus	A3152	Fremont	A65059A	4/24/26	2-1-307	Permit Requirement/Condition Violation
Lam Research Corporation - Fremont Campus	A3152	Fremont	A65060A	4/24/26	2-1-307	Permit Requirement/Condition Violation

Lam Research Corporation - Fremont Campus	A3152	Fremont	A65061A	4/24/26	2-1-307	Permit Requirement/Condition Violation
Lam Research Corporation - Fremont Campus	A3152	Fremont	A65062A	4/24/26	2-1-307	Permit Requirement/Condition Violation
S E Combined Services of California	E0905	Oakland	A65176A	4/29/26	2-1-307	Permit Requirement/Condition Violation
Splash Brothers Carwash & Gas	D0060	San Leandro	A64602A	4/29/26	8-7-408	Gasoline Dispensing Facility Violation
Stanford Health Care Tri-Valley	A3335	Livermore	A66203A	4/6/26	2-1-307	Permit Requirement/Condition Violation
Stanford Health Care Tri-Valley	S787941	Livermore	A66205A	4/6/26	2-1-301	No Authority to Construct and No Permit to Operate
Stanford Health Care Tri-Valley	S787941	Livermore	A66205B	4/6/26	2-1-302	No Authority to Construct and No Permit to Operate
Tesla, Inc.	A1438	Fremont	A65054A	4/6/26	2-6-307	Title V Requirement/Permit Condition Violation
Tesla, Inc.	A1438	Fremont	A65055A	4/8/26	2-6-307	Title V Requirement/Permit Condition Violation
Tesla, Inc.	A1438	Fremont	A65056A	4/14/26	2-6-307	Title V Requirement/Permit Condition Violation
Tesla, Inc.	A1438	Fremont	A65057A	4/14/26	2-6-307	Title V Requirement/Permit Condition Violation
Tesla, Inc.	A1438	Fremont	A65063A	4/24/26	2-6-307	Title V Requirement/Permit Condition Violation
Tesla, Inc.	A1438	Fremont	A65064A	4/29/26	2-6-307	Title V Requirement/Permit Condition Violation
ValleyCare Mob Livermore	B5305	Livermore	A66204A	4/6/26	2-1-302	No Permit to Operate
Vasco Road Landfill	A5095	Livermore	A63483A	4/27/26	2-6-307	Title V Requirement/Permit Condition Violation
Whipple Road Union 76	C9328	Hayward	A65728A	4/30/26	8-7-408	Gasoline Dispensing Facility Violation

Contra Costa

Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comment
Brovelli Construction Inc	S788815	Orinda	A63635A	4/24/26	11-2-401.5	Asbestos Violation
Chevron Products Company	A0010	Richmond	A62972A	4/9/26	2-6-307	Title V Requirement/Permit Condition Violation
Chevron Products Company	A0010	Richmond	A65441A	4/16/26	2-1-307	Permit Requirement/Condition Violation
Chevron Products Company	A0010	Richmond	A65442A	4/16/26	2-1-307	Permit Requirement/Condition Violation
Chevron Products Company	A0010	Richmond	A65443A	4/16/26	2-1-307	Permit Requirement/Condition Violation
Chevron Products Company	A0010	Richmond	A65444A	4/16/26	2-1-307	Permit Requirement/Condition Violation
Chevron Products Company	A0010	Richmond	A65445A	4/16/26	2-1-307	Permit Requirement/Condition Violation
EcoTerra	S750233	Richmond	A65703A	4/28/26	2-1-301	No Authority to Construct and No Permit to Operate
EcoTerra	S750233	Richmond	A65703B	4/28/26	2-1-302	No Authority to Construct and No Permit to Operate
Mariposa Energy, LLC	B9730	Byron	A63623A	4/9/26	2-6-307	Title V Requirement/Permit Condition Violation
Martinez Refining Company LLC	A0011	Martinez	A65108A	4/20/26	2-6-307	Title V Requirement/Permit Condition Violation
Martinez Refining Company LLC	A0011	Martinez	A65109A	4/20/26	12-12-301	Flares at Refineries Violation
Martinez Refining Company LLC	A0011	Martinez	A65111A	4/15/26	9-1-307	SO2 Emissions Violation
Martinez Refining Company LLC	A0011	Martinez	A65112A	4/15/26	10	Code of Federal Regulation Violation
Martinez Refining Company LLC	A0011	Martinez	A65988A	4/15/26	10	Code of Federal Regulation Violation

Martinez Refining Company LLC	A0011	Martinez	A65990A	4/8/26	10	Code of Federal Regulation Violation
Martinez Refining Company LLC	A0011	Martinez	A65991A	4/8/26	10	Code of Federal Regulation Violation
Martinez Refining Company LLC	A0011	Martinez	A65992A	4/13/26	10	Code of Federal Regulation Violation
Martinez Refining Company LLC	A0011	Martinez	A65993A	4/14/26	8-8-315	Wastewater Collection and Separation Systems Violation
Martinez Refining Company LLC	A0011	Martinez	A65994A	4/14/26	8-5-303.2	Storage Tank Violation
Martinez Refining Company LLC	A0011	Martinez	A65995A	4/14/26	8-8-315	Wastewater Collection and Separation Systems Violation
Martinez Refining Company LLC	A0011	Martinez	A65996A	4/14/26	8-8-315	Wastewater Collection and Separation Systems Violation
Martinez Refining Company LLC	A0011	Martinez	A65997A	4/14/26	8-5-303.2	Storage Tank Violation
Martinez Refining Company LLC	A0011	Martinez	A65998A	4/28/26	10	Code of Federal Regulation Violation
Martinez Refining Company LLC	A0011	Martinez	A65999A	4/28/26	10	Code of Federal Regulation Violation
Martinez Refining Company LLC	A0011	Martinez	A66000A	4/28/26	10	Code of Federal Regulation Violation
Martinez Refining Company LLC	A0011	Martinez	A66001A	4/28/26	10	Code of Federal Regulation Violation
MECS INC.	A0014	Martinez	A65295A	4/7/26	2-1-307	Permit Requirement/Condition Violation
MECS INC.	A0014	Martinez	A65296A	4/7/26	2-1-307	Permit Requirement/Condition Violation
Number One Concrete Ready Mix Inc.	E5309	Pittsburg	A63622A	4/7/26	2-1-301	No Authority to Construct and No Permit to Operate
Number One Concrete Ready Mix Inc.	E5309	Pittsburg	A63622B	4/7/26	2-1-302	No Authority to Construct and No Permit to Operate

Phillips 66 Company - San Francisco Refinery	A0016	Rodeo	A62206A	4/6/26	6-1-301	Visible Emissions Violation
Phillips 66 Company - San Francisco Refinery	A0016	Rodeo	A62206B	4/6/26	10	Code of Federal Regulation Violation
Phillips 66 Company - San Francisco Refinery	A0016	Rodeo	A64384A	4/2/26	6-1-301	Visible Emissions Violation
Phillips 66 Company - San Francisco Refinery	A0016	Rodeo	A64644A	4/21/26	9-2-301	Hydrogen Sulfide Violation
Phillips 66 Company - San Francisco Refinery	A0016	Rodeo	A65681A	4/16/26	2-1-307	Permit Requirement/Condition Violation
Phillips 66 Company - San Francisco Refinery	A0016	Rodeo	A65682A	4/27/26	2-1-307	Permit Requirement/Condition Violation
Tesoro Refining & Marketing Company, LLC	B2758	Martinez	A65297A	4/16/26	10	Code of Federal Regulation Violation
Tesoro Refining & Marketing Company, LLC	B2758	Martinez	A65298A	4/16/26	8-8-315	Wastewater Collection and Separation Systems Violation

Marin

Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comment
Raja Cromwell Inc.	C7290	Novato	A64995A	4/21/26	8-7-408	Gasoline Dispensing Facility Violation

Napa

Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comment
California Highway Patrol	C0626	Napa	A65356A	4/9/26	8-7-408	Gasoline Dispensing Facility Violation

California Highway Patrol - Beth Depaola	C0064	Napa	A65355A	4/9/26	8-7-301.13	Gasoline Dispensing Facility Violation
California Highway Patrol - Beth Depaola	C0064	Napa	A65355B	4/9/26	8-7-408	Gasoline Dispensing Facility Violation
Sa Ngasilpa #257384	C9767	San Rafael	A64994A	4/20/26	8-7-408	Gasoline Dispensing Facility Violation
Sonoma Beacon	C8795	Sonoma	A65614A	4/14/26	8-7-408	Gasoline Dispensing Facility Violation

San Francisco

Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comment
Central Gas	C2222	San Francisco	A63684A	4/27/26	11-2-401.3	Asbestos Violation
Mission Home Remodeling	S788899	San Francisco	A63683A	4/27/26	11-2-303.8	Asbestos Violation
Peter Liu Construction Inc.	S788860	San Francisco	A64997A	4/24/26	11-2-303.8	Asbestos Violation
Ritual Coffee Roasters	E0081	San Francisco	A64038A	4/29/26	2-1-301	No Authority to Construct and No Permit to Operate
Ritual Coffee Roasters	E0081	San Francisco	A64038B	4/29/26	2-1-302	No Authority to Construct and No Permit to Operate
San Francisco Municipal Transportation Agency	S787926	San Francisco	A64030A	4/6/26	2-1-302	No Permit to Operate
United Airlines, Inc.	A0051	San Francisco	A64035A	4/1/26	2-6-307	Title V Requirement/Permit Condition Violation

San Mateo

Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comment
Fuel 24:7 @ Westborough	D0513	South San Francisco	A63681A	4/22/26	8-7-408	Gasoline Dispensing Facility Violation
Fuel 24:7 @ Westborough	D0513	South San Francisco	A63681B	4/22/26	8-7-301.5	Gasoline Dispensing Facility Violation

George & Bob's Service	C7964	Menlo Park	A65589A	4/6/26	2-1-302	No Permit to Operate
George & Bob's Service	C7964	Menlo Park	A65589B	4/6/26	2-1-307	Permit Requirement/Condition Violation

Santa Clara

Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comment
76 Gas Station	C9924	San Jose	A59442A	4/9/26	2-1-307	Permit Requirement/Condition Violation
Capitol Chevron	D0367	San Jose	A66181A	4/15/26	8-7-302.3	Gasoline Dispensing Facility Violation
City of Gilroy	B7080	Gilroy	A65408A	4/3/26	2-1-302	No Permit to Operate
City of Gilroy	B8550	Gilroy	A65409A	4/3/26	2-1-302	No Permit to Operate
Great Gas Mountain View LLC	S789071	Los Gatos	A65590A	4/8/26	2-1-307	Permit Requirement/Condition Violation
Guadalupe Rubbish Disposal	A3294	San Jose	A65414A	4/21/26	8-34-301.1	Landfill Violation
NEX SJ LLC	A8556	San Jose	A64471A	4/30/26	9-7-307	Boiler Emissions Violation
NEX SJ LLC	A8556	San Jose	A64472A	4/30/26	9-7-307	Boiler Emissions Violation
Recology Pacheco Pass	A6370	Gilroy	A64242A	4/3/26	2-1-307	Permit Requirement/Condition Violation
Recology Pacheco Pass	A6370	Gilroy	A64242B	4/3/26	8-34-301.1	Landfill Violation
Sami and Sons Construction	S788147	Milpitas	A64914A	4/10/26	11-2-401.5	Asbestos Violation
Speedway No. 6693	C9802	San Jose	A59443A	4/9/26	8-7-302.3	Gasoline Dispensing Facility Violation
Sunnyvale Chevron	D0373	Sunnyvale	A59441A	4/6/26	8-7-301.6	Gasoline Dispensing Facility Violation

World Oil Marketing Company Station 101	C0381	San Jose	A66182A	4/15/26	2-1-307	Permit Requirement/Condition Violation
Wyant & Smith Crematory	B2867	Sunnyvale	A65558A	4/22/26	2-1-307	Permit Requirement/Condition Violation

Solano

Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comment
Kwik Bond Polymers	S781219	Benicia	A65878A	4/1/26	2-1-301	No Authority to Construct and No Permit to Operate
Kwik Bond Polymers	S781219	Benicia	A65878B	4/1/26	2-1-302	No Authority to Construct and No Permit to Operate
Valero Refining Company - California	B2626	Benicia	A64500A	4/6/26	1-301	Public Nuisance Violation
Valero Refining Company - California	B2626	Benicia	A65315A	4/30/26	2-6-307	Title V Requirement/Permit Condition Violation
Valero Refining Company - California	B2626	Benicia	A65879A	4/23/26	8-8-315	Wastewater Collection and Separation Systems Violation
Valero Refining Company - California	B2626	Benicia	A65879B	4/23/26	8-8-402	Wastewater Collection and Separation Systems Violation

Sonoma

Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comment
Cary Bertolone	S788229	Fulton	A64337A	4/9/26	5-301	Open Burn Violation

Company Address Outside of the Bay Area

Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comment
Anabi Oil Corporation	S788356	Upland	A64934A	4/15/26	2-1-302	No Permit to Operate

CGRS, Inc.	S788016	Sacramento	A65653A	4/7/26	11-2-401.3	Asbestos Violation

SETTLEMENTS FOR $10,000 OR MORE REACHED

There were 7 settlements for $10,000 or more completed in April 2026.

1) On April 16, 2026, the Air District reached a settlement with Turk Island Company for $33,000, regarding the allegations contained in the following 1 Notice of Violation:

NOV #	Issuance Date	Occurrence Date	Regulation	Comments from Enforcement
A61881A	9/14/23	10/3/22	2-1-307	Permit Requirement/Condition Violation
A61881B	9/14/23	10/3/22	1-523.1	Parametric Monitor Violation
A61881C	9/14/23	10/3/22	1-523.3	Parametric Monitor Violation

2) On April 16, 2026, the Air District reached a settlement with Turk Island Company for $47,000, regarding the allegations contained in the following 7 Notices of Violations:

NOV #	Issuance Date	Occurrence Date	Regulation	Comments from Enforcement
A60204A	4/13/21	1/1/17	2-1-307	Permit Requirement/Condition Violation
A60204B	4/13/21	1/1/17	8-34-301.1	Landfill Violation
A60204C	4/13/21	1/1/17	1-523.3	Parametric Monitor Violation
A60206A	4/19/21	3/29/21	8-34-301.2	Landfill Violation
A60227A	1/27/22	1/13/21	8-34-301.1	Landfill Violation
A60227B	1/27/22	1/13/21	1-523.3	Parametric Monitor Violation
A61607A	5/18/23	5/3/22	8-34-301	Landfill Violation
A61607B	5/18/23	5/3/22	8-34-303	Landfill Violation
A61615A	10/13/22	10/11/22	6-1-301	Visible Emissions Violation
A61888A	11/20/23	11/29/23	8-34-301.2	Landfill Violation
A61888B	11/20/23	11/29/23	2-1-307	Permit Requirement/Condition Violation
A64353A	1/28/25	12/14/24	2-1-307	Permit Requirement/Condition Violation

A64353B	1/28/25	12/14/24	8-34-301.1	Landfill Violation

3) On April 22, 2026, the Air District reached a settlement with Meta Platforms Company for $80,000, regarding the allegations contained in the following 1 Notice of Violation:

NOV #	Issuance Date	Occurrence Date	Regulation	Comments from Enforcement
A61776A	5/2/23	1/1/21	2-1-301	No Authority to Construct and No Permit to Operate
A61776B	5/2/23	1/1/21	2-1-302	No Authority to Construct and No Permit to Operate

4) On April 23, 2026, the Air District reached a settlement with Santa Rosa Water for $16,000, regarding the allegations contained in the following 1 Notice of Violation:

NOV #	Issuance Date	Occurrence Date	Regulation	Comments from Enforcement
A61567A	10/17/22	6/21/22	2-6-307	Title V Requirement/Permit Condition Violation

5) On April 24, 2026, the Air District reached a settlement with City and County of San Francisco for $24,500, regarding the allegations contained in the following 1 Notice of Violation:

NOV #	Issuance Date	Occurrence Date	Regulation	Comments from Enforcement
A62880A	8/23/23	6/29/22	2-6-307	Title V Requirement/Permit Condition Violation

6) On April 24, 2026, the Air District reached a settlement with City and County of San Francisco for $24,500, regarding the allegations contained in the following 2 Notices of Violations:

NOV #	Issuance Date	Occurrence Date	Regulation	Comments from Enforcement
A62879A	8/23/23	1/30/20	2-1-301	No Authority to Construct and No Permit to Operate
A62879B	8/23/23	1/30/20	2-1-302	No Authority to Construct and No Permit to Operate
A62881A	8/23/23	6/20/23	2-1-301	No Authority to Construct and No Permit to Operate
A62881B	8/23/23	6/20/23	2-1-302	No Authority to Construct and No Permit to Operate

7) On April 27, 2026, the Air District reached a settlement with Valero Refining Company - California for $3,250,000 regarding the allegations contained in the following 118 Notices of Violations:

NOV #	Issuance Date	Occurrence Date	Regulation	Comments from Enforcement
A57351A	1/22/19	11/27/18	8-5-306.2	Storage Tank Violation
A57352A	1/22/19	2/18/18	8-5-306.2	Storage Tank Violation
A58454A	2/20/19	1/22/19	8-5-306.2	Storage Tank Violation
A58455A	2/27/19	10/20/18	10	Code of Federal Regulation Violation
A58456A	3/7/19	1/22/19	8-5-306.2	Storage Tank Violation
A58457A	3/14/19	3/12/19	6-1-301	Visible Emissions Violation
A58458A	3/13/19	3/13/19	6-1-301	Visible Emissions Violation
A58459A	3/14/19	3/14/19	6-1-301	Visible Emissions Violation
A58460A	3/14/19	3/11/19	1-301	Public Nuisance Violation
A58461A	3/14/19	3/12/19	1-301	Public Nuisance Violation
A58462A	3/14/19	3/13/19	1-301	Public Nuisance Violation
A58464A	3/21/19	3/14/19	1-301	Public Nuisance Violation
A58466A	3/25/19	3/23/19	6-1-301	Visible Emissions Violation
A58467A	3/25/19	3/23/19	1-301	Public Nuisance Violation
A58468A	3/25/19	3/24/19	6-1-301	Visible Emissions Violation
A58469A	3/25/19	3/24/19	1-301	Public Nuisance Violation
A58470A	4/24/19	3/7/19	8-5-306.2	Storage Tank Violation
A58610A	3/12/19	3/11/19	6-1-301	Visible Emissions Violation
A58986A	6/13/19	11/20/17	2-6-307	Title V Requirement/Permit Condition Violation
A58986B	6/13/19	11/20/17	9-1-307	SO2 Emissions Violation
A58987A	8/15/19	5/8/19	2-6-307	Title V Requirement/Permit Condition Violation
A58989A	8/22/19	8/30/17	2-6-307	Title V Requirement/Permit Condition Violation

A58989B	8/22/19	8/30/17	9-1-307	SO2 Emissions Violation
A58989C	8/22/19	8/30/17	1-522:7	Continuous Emissions Monitor Violation
A58990A	10/24/19	9/23/19	8-5-306.2	Storage Tank Violation
A58991A	10/24/19	9/23/19	8-5-306.2	Storage Tank Violation
A58992A	10/24/19	8/4/19	1-523.1	Parametric Monitor Violation
A58993A	10/24/19	6/12/19	8-5-306.2	Storage Tank Violation
A58995A	1/28/20	8/28/19	8-5-322.5	Storage Tank Violation
A58996A	12/5/19	5/6/19	2-6-307	Title V Requirement/Permit Condition Violation
A58997A	12/5/19	11/20/18	2-6-307	Title V Requirement/Permit Condition Violation
A58998A	12/5/19	11/11/18	2-6-307	Title V Requirement/Permit Condition Violation
A58999A	12/5/19	11/11/18	2-6-307	Title V Requirement/Permit Condition Violation
A59000A	1/28/20	9/27/19	8-5-321.3	Storage Tank Violation
A59000B	1/28/20	9/27/19	8-5-322.5	Storage Tank Violation
A59001A	2/7/20	2/5/20	10	Code of Federal Regulation Violation
A59038A	2/19/19	1/1/17	8-7-301.2	Gasoline Dispensing Facility Violation
A59506A	7/13/21	9/21/19	2-6-307	Title V Requirement/Permit Condition Violation
A59507A	7/13/21	9/22/19	2-6-307	Title V Requirement/Permit Condition Violation
A59508A	7/13/21	8/6/20	9-1-307	SO2 Emissions Violation
A59509A	7/13/21	11/14/20	2-6-307	Title V Requirement/Permit Condition Violation
A59511A	10/6/21	6/2/11	2-6-307	Title V Requirement/Permit Condition Violation
A59511B	10/6/21	6/2/11	1-522	Continuous Emissions Monitor Violation
A59515A	3/28/22	12/11/21	1-301	Public Nuisance Violation
A59516A	4/26/22	5/19/19	9-1-307	SO2 Emissions Violation
A59517A	5/31/22	12/5/20	9-1-307	SO2 Emissions Violation
A59517B	5/31/22	12/5/20	10	Code of Federal Regulation Violation
A59518A	5/31/22	12/5/20	6-1-301	Visible Emissions Violation

A59519A	5/31/22	12/5/20	1-301	Public Nuisance Violation
A59522A	6/22/22	6/21/22	8-18-309.3	Equipment Leak Violation
A59522B	6/22/22	6/21/22	10	Code of Federal Regulation Violation
A59523A	6/27/22	2/27/22	9-10-502.1	Refinery NOx or CO Violation
A59525A	7/27/22	10/2/21	2-6-307	Title V Requirement/Permit Condition Violation
A59525B	7/27/22	10/2/21	6-1-310.1	Visible Emissions Violation
A59525C	7/27/22	10/2/21	10	Code of Federal Regulation Violation
A59527A	8/8/22	6/27/22	8-18-309	Equipment Leak Violation
A59527B	8/8/22	6/27/22	CCR Title 17 Section 94016	California Code of Regulation Violation
A59603A	2/20/20	5/8/17	1-522.4	Continuous Emissions Monitor Violation
A59603B	2/20/20	5/8/17	1-522.7	Continuous Emissions Monitor Violation
A59604A	3/16/20	6/2/11	2-6-307	Title V Requirement/Permit Condition Violation
A59605A	3/16/20	11/1/18	2-1-307	Permit Requirement/Condition Violation
A59605B	3/16/20	11/1/18	1-522:7	Continuous Emissions Monitor Violation
A59606A	3/16/20	9/2/19	2-6-307	Title V Requirement/Permit Condition Violation
A59607A	3/16/20	11/1/18	2-6-307	Title V Requirement/Permit Condition Violation
A59607B	3/16/20	11/1/18	1-522.7	Continuous Emissions Monitor Violation
A59607C	3/16/20	11/1/18	10	Code of Federal Regulation Violation
A59608A	6/9/20	2/18/20	1-441	Denied Access to Information Violation
A59610A	8/6/20	7/14/20	8-33-309.5	Gasoline Bulk Terminal Violation
A59612A	11/10/20	3/17/20	8-5-322.5	Storage Tank Violation
A59613A	11/17/20	5/12/20	2-6-307	Title V Requirement/Permit Condition Violation
A59613B	11/17/20		2-1-307	Permit Requirement/Condition Violation
A59614A	11/17/20	12/31/19	1-523.1	Parametric Monitor Violation
A59615A	11/18/20	11/11/20	8-5-306.2	Storage Tank Violation

A59617A	12/3/20	12/3/20	8-5-306:2	Storage Tank Violation
A59618A	12/10/20	3/18/19	2-6-307	Title V Requirement/Permit Condition Violation
A59618B	12/10/20	3/18/19	1-523.3	Parametric Monitor Violation
A59618C	12/10/20	4/19/19	1-523.3	Parametric Monitor Violation
A59619A	1/6/21	5/7/19	2-6-307	Title V Requirement/Permit Condition Violation
A59619B	1/6/21	5/7/19	10	Code of Federal Regulation Violation
A59619C	1/6/21	5/7/19	6-1-310.1	Visible Emissions Violation
A59620A	1/6/21	5/12/19	2-6-307	Title V Requirement/Permit Condition Violation
A59620B	1/6/21	5/12/19	6-1-310.1	Visible Emissions Violation
A59620C	1/6/21	5/12/19	40 CFR 60.102a(2)	Federal Requirement Violation
A59621A	1/6/21	9/20/19	2-6-307	Title V Requirement/Permit Condition Violation
A59621B	1/6/21	9/20/19	6-1-310.1	Visible Emissions Violation
A59621C	1/6/21	9/20/19	10	Code of Federal Regulation Violation
A59624A	4/13/21	3/18/21	6-1-301	Visible Emissions Violation
A59625A	6/2/21	5/2/11	2-6-307	Title V Requirement/Permit Condition Violation
A59625B	6/2/21	6/2/11	1-522	Continuous Emissions Monitor Violation
A59626A	6/17/21	6/8/21	10	Code of Federal Regulation Violation
A59626B	6/17/21	6/8/21	8-18-309.3	Equipment Leak Violation
A60578A	1/18/23	8/22/20	1-523.3	Parametric Monitor Violation
A60578B	1/18/23	8/22/20	2-1-307	Permit Requirement/Condition Violation
A60579A	1/18/23	5/31/21	2-1-307	Permit Requirement/Condition Violation
A60579B	1/18/23	5/31/21	1-523.3	Parametric Monitor Violation
A60580A	1/18/23	5/31/21	2-1-307	Permit Requirement/Condition Violation
A60580B	1/18/23	5/31/21	1-523.3	Parametric Monitor Violation
A60581A	1/18/23	6/18/21	2-1-307	Permit Requirement/Condition Violation

A60581B	1/18/23	6/18/21	1-523:3	Parametric Monitor Violation
A60582A	1/18/23	7/21/21	2-1-307	Permit Requirement/Condition Violation
A60582B	1/18/23	7/21/21	1-523.3	Parametric Monitor Violation
A60583A	1/18/23	10/1/21	2-1-307	Permit Requirement/Condition Violation
A60583B	1/18/23	10/1/21	1-523.3	Parametric Monitor Violation
A60584A	1/18/23	10/11/21	2-1-307	Permit Requirement/Condition Violation
A60584B	1/18/23	10/11/21	1-523.3	Parametric Monitor Violation
A60585A	1/18/23	12/7/21	2-1-307	Permit Requirement/Condition Violation
A60585B	1/18/23	12/7/21	1-523.3	Parametric Monitor Violation
A60586A	1/18/23	12/10/21	2-1-307	Permit Requirement/Condition Violation
A60586B	1/18/23	12/10/21	1-523.3	Parametric Monitor Violation
A60587A	1/18/23	3/10/22	2-1-307	Permit Requirement/Condition Violation
A60587B	1/18/23	3/10/22	1-523.3	Parametric Monitor Violation
A60589A	1/26/23	1/12/23	8-5-306.2	Storage Tank Violation
A60591A	2/8/23	2/8/23	8-5-306.2	Storage Tank Violation
A60592A	2/23/23	8/21/20	CCR Title 17 Section 94016	California Code of Regulation Violation
A60593A	2/23/23	12/5/20	CCR Title 17 Section 94016	California Code of Regulation Violation
A60804A	9/7/22	11/22/21	8-5-322.5	Storage Tank Violation
A60807A	9/27/22	6/15/21	8-5-322.5	Storage Tank Violation
A60808B	9/27/22	8/13/21	10	Code of Federal Regulation Violation
A60809A	10/19/22	1/22/22	8-2-301	Miscellaneous Operations Violation
A60809B	10/19/22	1/22/22	8-18-309	Equipment Leak Violation
A60809C	10/19/22	1/22/22	2-6-307	Title V Requirement/Permit Condition Violation
A60810A	10/28/22	10/4/21	2-6-307	Title V Requirement/Permit Condition Violation

A60813A	11/1/22	3/15/22	2-6-307	Title V Requirement/Permit Condition Violation
A60814A	12/22/22	11/14/22	8-5-306.2	Storage Tank Violation
A60815A	12/22/22	11/10/21	2-6-307	Title V Requirement/Permit Condition Violation
A60816A	12/22/22	8/31/22	2-6-307	Title V Requirement/Permit Condition Violation
A60818A	1/18/23	9/13/19	2-1-307	Permit Requirement/Condition Violation
A60818B	1/18/23	9/13/19	1-523.3	Parametric Monitor Violation
A60819A	1/18/23	9/20/19	2-1-307	Permit Requirement/Condition Violation
A60819B	1/18/23	9/20/19	1-523.3	Parametric Monitor Violation
A60820A	1/18/23	9/21/19	2-1-307	Permit Requirement/Condition Violation
A60820B	1/18/23	9/21/19	1-523.3	Parametric Monitor Violation
A60821A	1/18/23	9/22/19	2-1-307	Permit Requirement/Condition Violation
A60821B	1/18/23	9/22/19	1-523.3	Parametric Monitor Violation
A60822A	1/18/23	10/3/19	2-1-307	Permit Requirement/Condition Violation
A60822B	1/18/23	10/3/19	1-523.3	Parametric Monitor Violation
A60823A	1/18/23	10/15/19	2-1-307	Permit Requirement/Condition Violation
A60823B	1/18/23	10/15/19	1-523.3	Parametric Monitor Violation
A60824A	1/18/23	11/28/19	2-1-307	Permit Requirement/Condition Violation
A60824B	1/18/23	11/28/19	1-523.3	Parametric Monitor Violation
A60825A	1/18/23	2/2/20	2-1-307	Permit Requirement/Condition Violation
A60825B	1/18/23	2/2/20	1-523.3	Parametric Monitor Violation
A60826A	1/18/23	5/21/20	2-1-307	Permit Requirement/Condition Violation
A60826B	1/18/23	5/21/20	1-523.3	Parametric Monitor Violation
A60827A	1/18/23	8/21/20	2-1-307	Permit Requirement/Condition Violation
A60827B	1/18/23	8/21/20	1-523.3	Parametric Monitor Violation
A62178A	3/15/23	7/21/22	10	Code of Federal Regulation Violation
A62179A	3/15/23	12/10/21	10	Code of Federal Regulation Violation

A62180A	3/23/23	3/23/23	8-18-307	Equipment Leak Violation
A62181A	4/5/23	3/30/23	8-18-301	Equipment Leak Violation
A62182A	4/6/23	4/3/23	8-18-301	Equipment Leak Violation
A62183A	4/17/23	3/31/23	8-5-322.5	Storage Tank Violation
A62184A	4/17/23	9/30/21	2-6-307	Title V Requirement/Permit Condition Violation
A62185A	4/20/23	4/19/23	8-18-301	Equipment Leak Violation
A62186A	4/20/23	4/19/23	8-18-309.3	Equipment Leak Violation
A62187A	4/28/23	4/26/23	8-18-309.3	Equipment Leak Violation
A62189A	6/1/23	12/13/22	2-6-307	Title V Requirement/Permit Condition Violation
A62191A	6/26/23	11/4/22	2-6-307	Title V Requirement/Permit Condition Violation
A62192A	6/26/23	11/6/22	10	Code of Federal Regulation Violation
A62192B	6/26/23	11/6/22	9-1-307	SO2 Emissions Violation
A62195A	7/24/23	6/5/23	1-522.4	Continuous Emissions Monitor Violation
A62197A	9/1/23	9/23/22	2-6-307	Title V Requirement/Permit Condition Violation
A62198A	9/1/23	11/7/22	2-6-307	Title V Requirement/Permit Condition Violation
A62199A	10/23/23	10/19/23	12-15-403	Air Monitoring Plan Violation
A62201A	12/20/23	1/15/23	2-6-307	Title V Requirement/Permit Condition Violation
A62202A	12/26/23	2/1/23	2-6-307	Title V Requirement/Permit Condition Violation
A62202B	12/26/23	2/1/23	1-522.7	Continuous Emissions Monitor Violation
A62577A	11/14/24	1/30/23	2-6-307	Title V Requirement/Permit Condition Violation

BAY AREA AIR DISTRICT
Memorandum

To: Chairperson Lynda Hopkins and Members of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: June 3, 2026

Re: Personnel Out-of-State Business Travel Report for April 2026

RECOMMENDED ACTION

No action is requested at this time.

BACKGROUND

Section 1.1.3 of the Air District's Employee Travel and Business Expense Policy (Policy) requires notification to the Board of Directors of Air District personnel who have traveled on out-of-state business. The monthly out-of-state business travel report is presented at a regular Board meeting following travel completion.

DISCUSSION

In accordance with Section 1.1.3 of the Policy, the Board of Directors is hereby notified of Air District personnel who have traveled on out-of-state business. This report covers out-of-state business travel for the month of April 2026.

The following out-of-state business travel activities occurred during the reporting period:

47th Stationary Source Sampling and Analysis for Air Pollutants Conference, Kingsport, Tennessee, March 28 - April 4, 2026 attendees:

- Jerry Bovee, Senior Manager, Source Test Section, Engineering and Compliance
- Leif Halvorson, Senior Air Quality Specialist, Compliance & Enforcement Division
- Ben Sehgal, Manager, Compliance & Enforcement Division

BUDGET CONSIDERATION/FINANCIAL IMPACT

All associated business travel-related costs are covered by the respective division's Fiscal Year Ending 2026 Budget.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Michelle Hutson
Reviewed by: Stephanie Osaze

ATTACHMENT(S):

None

BAY AREA AIR DISTRICT
Memorandum

To: Chairperson Lynda Hopkins and Members of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: June 3, 2026

Re: Report of County Populations

RECOMMENDED ACTION

This is an informational item only. No action is requested.

BACKGROUND

Section 2.11 of the Air District's Administrative Code requires the Clerk of the Boards to report to the Board of Directors each year on the population of each county included, in whole or in part, within the Air District's jurisdiction according to the latest estimates prepared by the Demographic Research Unit of the California Department of Finance. For Solano and Sonoma Counties, the two counties for which only a portion of the county is within the Air District's jurisdiction, the Clerk is required to report the populations of the portions of those counties within the Air District's jurisdiction. The Clerk is required to report the populations promptly after the Demographic Research Unit publishes its estimates.

The Demographic Research Unit's population estimates are used to determine the number of representatives that Bay Area cities and counties can appoint to the Air District's Board of Directors. Pursuant to Health & Safety Code sections 40220.5, 40221 and 40221.5, appointments to the Board of Directors are made by county boards of supervisors and city selection committees based on the Demographic Research Unit population estimates in effect at the time of appointment.

DISCUSSION

The Demographic Research Unit released its most recent estimates on May 1, 2026. Based on the most recent final estimates, the counties' populations are as follows:

County	Population
Alameda	1,667,901
Contra Costa	1,167,506
Marin	253,171
Napa	136,620
San Francisco	844,394
San Mateo	748,412
Santa Clara	1,928,029
Solano*	315,044
Sonoma*	429,039

* Includes only the portion within the jurisdictional boundaries of the Air District.

These most recent final estimates would not change the number of members that can be appointed from each county, with the exception of San Mateo County. San Mateo County’s population has dropped below 750,000, which is the threshold for a county to be able to appoint three members to the Board – two appointed by the board of supervisors and one appointed by the city selection committee. Under Health & Safety Code sections 40221 and 40221.5(a)(2), a county with a population of between 300,000 and 750,000 can appoint only two members – one appointed by the board of supervisors and one appointed by the city selection committee.

Members of the Board are appointed to serve full terms, regardless of population fluctuations, and the Department of Finance’s population estimates apply only at the time of appointment. They do not affect a county’s seats between appointments. These most recent population estimates therefore do not affect the current makeup of the Board of Directors. All members are eligible to serve the remainder of their terms. The population estimates will only become important when current members' terms end, or if they vacate their seats before the end of their terms for any reason. If San Mateo County’s population remains below 750,000 at that time, only two members may be appointed from the county – one by the San Mateo County Board of Supervisors and one by the county's City Selection Committee.

The Demographic Research Unit's full information is available on the Unit's website at www.dof.ca.gov/Forecasting/Demographics/.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Marcy Hiratzka
Reviewed by: Alexander Crockett

ATTACHMENT(S):

None

BAY AREA AIR DISTRICT
Memorandum

To: Chairperson Lynda Hopkins and Members of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: June 3, 2026

Re: Authorization to Amend Represented Classifications

RECOMMENDED ACTION

Authorize amendments to the following represented classification series, as shown in the attached classification documents:

1. Creation of 10 new classifications: Accounting Technician at Salary Range 126, Accounting Supervisor at Salary Range 142, Assistant Atmospheric and Air Quality Modeler at Salary Range 132, Atmospheric and Air Quality Modeler I/II at Salary Range 136/140, Principal Systems Analyst at Salary Range 143, Public Information Technician at Salary Range 126, Senior Atmospheric and Air Quality Modeler at Salary Range 144, Senior Systems Analyst at Salary Range 139, Systems Analyst I/II at Salary Range 131/135, Systems Technician at Salary Range 127; and
2. Revision of 18 existing classifications to align with updated job functions, duties, and responsibilities.

BACKGROUND

A comprehensive review of classification structures was conducted at the Air District. The effort stems from the 2023 Human Resources Audit aimed at modernizing classification standards and aligning roles with operational needs. In 2023, the Air District engaged consulting firm Compensation Connections LLC to perform a comprehensive classification and compensation study. Compensation Connections LLC conducted research and provided findings on the classifications. Key areas addressed include revising minimum qualifications and updating existing classifications, creating new classifications, and removing outdated roles. The project scope and objectives are as follows:

1. Modernization of Classifications: Revise all classifications to include contemporary elements such as supervision details, physical demands, and working conditions

2. Alignment with Organizational Needs: Address outdated or overly broad classifications and create specialized roles where necessary
3. Efficiency Improvements: Consolidate overlapping roles and remove unused or redundant classifications
4. Inclusion of New Workstreams: Develop classifications for emerging and evolving functions

In addition, pursuant to Article VI, Section A of the Memorandum of Understanding (MOU), the Air District and the Employees' Association have completed the meet and confer process on the represented classifications listed below.

DISCUSSION

Based on the findings from the study and agreement with the Employee Association, Air District staff recommend the following:

1. Revision of Classification

   All classifications are updated with modernized and standardized language and a lens to diversity, equity and inclusion, including new sections for supervision details, physical demands, and working conditions. Minimum qualifications are streamlined to reflect essential entry-level requirements, ensuring relevance and reducing unnecessary barriers for candidates. Classifications are revised and updated to better reflect their scope of work.

2. Creation of New Classifications

   New classifications are created to address emerging work areas and introduce new structure in the confidential classifications to better organize and distinguish level of work duties, responsibilities and risk, span of control, and complexity of work.

A summary of the proposed changes to represented classifications is included as follows:

Classification	**Recommendation**
Accountant I/II	Revised
Accounting Technician	New
Accounting Supervisor	New

Air Quality Chemist I/II	Revised
Air Quality Meteorologist I/II	Revised
Assistant Atmospheric and Air Quality Modeler	New
Atmospheric and Air Quality Modeler I/II	New
Environmental Planner I/II	Revised
Principal Accountant	Revised
Principal Air Quality Chemist	Revised
Principal Air Quality Meteorologist	Revised
Principal Air Environmental Planner	Revised
Principal Systems Analyst	New
Public Information Officer I/II	Revised
Public Information Technician	New
Senior Accountant	Revised
Senior Air Quality Chemist	Revised
Senior Air Quality Meteorologist	Revised
Senior Atmospheric and Air Quality Modeler	New
Senior Environmental Planner	Revised

Senior Public Information Officer	Revised
Senior Systems Analyst	New
Supervising Air Quality Meteorologist	Revised
Supervising Environmental Planner	Revised
Supervising Public Information Officer	Revised
Supervising Systems Analyst	Revised
Systems Analyst I/II	New
Systems Technican	New

The classifications will be effective July 1, 2026.

BUDGET CONSIDERATION/FINANCIAL IMPACT

The requested action does not create additional positions. Any salary adjustment is included in the Budget Fiscal Year Ending 2027.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Regina Soo and Judy Yu
Reviewed by: Lisa Baker and Hyacinth Hinojosa

ATTACHMENT(S):

1. Accountant I-II
2. Accounting Technician
3. Accounting Supervisor
4. Air Quality Chemist I-II
5. Air Quality Meteorologist I-II
6. Assistant Atmospheric and Air Quality Modeler
7. Atmospheric and Air Quality Modeler I-II
8. Environmental Planner I-II
9. Principal Accountant
10. Principal Air Quality Chemist
11. Principal Air Quality Meteorologist
12. Principal Environmental Planner
13. Principal Systems Analyst
14. Public Information Officer I-II
15. Public Information Technician
16. Senior Accountant
17. Senior Air Quality Chemist
18. Senior Air Quality Meteorologist
19. Senior Atmospheric and Air Quality Modeler
20. Senior Environmental Planner
21. Senior Public Information Officer
22. Senior Systems Analyst
23. Supervising Air Quality Meteorologist
24. Supervising Environmental Planner
25. Supervising Public Information Officer
26. Supervising Systems Analyst
27. Systems Analyst I-II
28. Systems Technician

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Accountant I/II

Class Codes: 7P001/7P014

Salary Grade: 130/134

Bargaining Unit: Represented, Professional

Established Date: July 1, 2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under general supervision, performs financial and accounting work and provides technical direction to accounting support staff.

DISTINGUISHING CHARACTERISTICS

Accountant I is the entry-level class in the accountant series. Initially under close supervision, incumbents perform a variety of financial and accounting duties while learning the Air District policies and procedures. With experience, the work becomes more diversified, complex, and requires increasing independent judgment. This class is alternately staffed with Accountant II and incumbents may advance to the higher level classification after gaining experience and demonstrating proficiency which meets the qualifications of the higher-level class.

Accountant II is the journey-level class in the accountant series, fully proficient in performing the full scope and diversity of responsibilities. Accountant II level requires knowledge of Governmental Accounting Standards Board (GASB) standards, existing financial and accounting procedures and precedents, as well as the initiative to identify and resolve related issues.

This class is distinguished from Senior Accountant in that the latter performs complex financial and accounting duties and provides lead direction on projects and to staff.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a supervisor or manager. No supervision is exercised over others.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Reviews accounting and financial documents to ensure accuracy of information and calculations and corrects entries in the financial system.

Examines supporting documentation to establish proper authorization and conformance with agreements, contracts, and state and federal regulations.

Maintains control and subsidiary accounting records involving a variety of transactions and accounts.

Prepares trial balances. Upon completion of accounting cycles, coordinates, and calculates periodic closings.

Prepares journal entries and reconciliations of general ledger, subsidiary accounts, grants accounts, and bank statements.

Assists in the preparation, analysis, and budget adjustments for divisions, projects, and Air District funds.

Confers with divisional representatives and provides information regarding access to the budgeting and accounting processes.

Reviews and analyzes grant expenditures to assist divisions to process reimbursement claims and supporting forms required by grantee agency.

Calculates and allocates quarterly interest to various accounts.

Works with appropriate divisions to manage grant accounting for Special Revenue Funds.

Prepares year-end journal entries related to each grant award and tracks remaining balances for in compliance with grant agreement requirements.

Coordinates accounting and internal control activities.

Provides information to outside agencies as requested.

Analyzes programs and legislation to determine fiscal and budgetary impact. Prepares budgetary appropriation transfers and supplemental budgets.

Provides technical support to outside auditors and governmental program auditors.

Interprets and explains policy changes and procedures of the Governmental Accounting Standards Board (GASB) and applicable Air District, local, state and federal laws, rules and regulations.

Participates in the preparation of the annual financial statement report. Prepares required schedules, statements, and footnotes.

Maintains fixed assets records of the Air District.

Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

The items listed below are the minimum requirements for this classification.

Accountant I: Bachelor's degree from an accredited college or university in accounting, finance, business, or a closely related field, and one year of accounting, budgeting, or auditing experience.

Accountant II: In addition to the above, one year of accounting, budgeting, or auditing experience.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

LICENSES AND CERTIFICATIONS:

None.

OTHER REQUIREMENTS

None.

KNOWLEDGE AND SKILLS

The minimum knowledge and skills needed to perform the essential duties of the classification.

Knowledge of:

Principles, practices, and terminology of general, fund, and governmental accounting.

Principles and practices of business data processing, particularly in relation to the processing of accounting information.

DRAFT

Grant management and accounting practices, including fund management and compliance.

Applicable laws regulating public financial operations.

Budgeting principles and terminology.

Basic auditing and reconciliation principles and methods.

Skills in:

Analyzing, balancing, reviewing, interpreting, and reconciling financial reports and transactions.

Verifying the accuracy of financial data and information.

Ensuring proper authorization and documentation for disbursements and other transactions.

Preparing clear, concise, and complete financial reports and statements.

Exercising sound independent judgment within established procedural guidelines.

Making accurate mathematical and statistical calculations.

Maintaining accurate records and files.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

Communicating effectively through excellent verbal, listening, and written communication.

Using computer software applications, including accounting software and spreadsheets.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

Some positions in this classification may require the following:

- Sit or stand for extended periods of time and bend or kneel to access files.
- View computer screens and type for prolonged periods of time.
- Lift and carry files and boxes weighing up to15 pounds.

Working conditions:

- Work is primarily performed in a typical office environment.

DRAFT

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Accounting Technician

Class Codes: 7T036

Salary Grade: 126

Bargaining Unit: Represented, Technical/General

Established Date: July 1, 2026

Revision Date:

CLASSIFICATION SUMMARY

Under close supervision, provides a variety of routine financial, billing, and accounting office support.

DISTINGUISHING CHARACTERISTICS

Accounting Technician is the entry-level accounting support classification. Under close supervision, incumbents learn Air District policies and procedures and perform the routine finance and accounting office support work. As experience is gained, there is greater independence of action within established guidelines.

This class is distinguished from Accountant I/II in that the latter performs professional financial and accounting work.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a supervisor or manager. No supervision is exercised over others.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Performs a variety of clerical and routine technical accounting duties in support of assigned accounting systems, functions, or program areas including accounts

DRAFT

receivables, accounts payable, and maintaining general and subsidiary ledgers and accounts.

Prepares, maintains, and/or verifies a variety of accounting, financial, and statistical records, ledgers, logs, and files. Gathers, assembles, tabulates, enters, checks, verifies, balances, adjusts, records, and files financial data. Codes data according to prescribed accounting procedures, reviews information to ensure accurate reporting, resolves discrepancies, and establishes and maintains various files and records.

Matches and processes invoices, receiving reports and other requests for payment with purchase order or contract documents. Ensures proper authorization and compliance with policies and procedures.

Inputs information to financial systems or manually prepares forms to produce payments. Reconciles and prepares payment requests for expenditures such as utility, rents, employee reimbursements, grants, and contract payments.

Provides information to Air District staff, vendors, or the general public that requires the use of judgment and the interpretation of policies, rules, or procedures.

Processes fines, fees, charges, and other monies. Receives payments and balances monies on a regular basis.

Reviews online customer payments, matches the financial system, and processes and balances accordingly.

Assists with the production of various billings. Receives checks by mail, processes, and balances accordingly, and audits accounts receivable. Assists with processing returned checks and online credit card refunds. Conveys information to appropriate persons to facilitate collection and documents entries to files and ledgers.

Maintains accounting and financial and statistical records and prepares periodic or special reports. Reviews and verifies various information.

Posts information to ledgers, journals, and reports. Totals and balances figures, proofs data, and makes corrections as required.

Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

The items listed below are the minimum requirements for this classification.

DRAFT

Associate's degree in accounting, finance, business, or a closely related field.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

LICENSES AND CERTIFICATIONS:

None.

OTHER REQUIREMENTS

None.

KNOWLEDGE AND SKILLS

The minimum knowledge and skills needed to perform the essential duties of the classification.

Knowledge of:

Basic financial policies and procedures.

Financial document processing, record-keeping, and bookkeeping practices and procedures.

Basic budgeting auditing, and accounting principles and practices.

Basic business data processing principles and the use of computer databases and systems.

Office practices and procedures, including filing.

Preparing basic written analysis and reports.

Business arithmetic, including decimals, and percentages.

Skills in:

Preparing, maintaining, and reconciling various financial, accounting, statistical, and numerical records.

Performing detailed financial office support work accurately.

Operating standard office equipment including a calculator and computer.

Time management and prioritizing multiple tasks while meeting established deadlines.

Demonstrating initiative and exercising sound independent judgment within established guidelines.

DRAFT

Establishing and maintaining effective working relationships with those contacted in the course of the work.

Communicating effectively through excellent verbal, listening, and written communication.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

Some positions in this classification may require the following:

- Sit or stand for extended periods of time and bend or kneel to access files.
- View computer screens and type for prolonged periods of time.
- Lift and carry files and boxes weighing up to 15 pounds.

Working conditions:

- Work is primarily performed in a typical office environment.

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Accounting Supervisor

Class Codes: 5P004

Salary Grade: 142

Bargaining Unit: Represented, Professional

Established Date: July 1,2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under general direction, supervises staff, participates in the most complex financial and accounting work, and coordinates integration of accounting functions with overall fiscal operations, payroll, and budgeting.

DISTINGUISHING CHARACTERISTICS

This is the supervisory level in the series. This class provides both supervision and professional financial and accounting services in support of the Air District's goals and objectives. The incumbent is responsible for providing coordination in developing, implementing, and monitoring new and revised systems and programs, and provides supervision of accounting staff.

This class is distinguished from the Manager level, in that the latter has managerial responsibility for assigned programs and staff, and for all defined functional areas.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by the manager. Responsible for direct supervision of staff.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Assigns, supervises, reviews, and evaluates the work of staff.

Prepares performance evaluations, participates in the staff selection, and provides training and professional development for assigned staff.

Provides oversight, review, and coordination of fiscal operations and payroll and benefits data for the annual Air District budget and financial reporting.

Coordinates information received from Division representatives regarding their accounting and budgeting policies, procedures, and system needs. Makes appropriate recommendations.

Researches and resolves technical questions.

Provides interpretations of county, state, federal, Generally Accepted Accounting Principles (GAAP), government circulars, and other regulatory and legislative requirements and ensures compliance of the Air District's accounting processes, fiscal controls, reporting, and the maintenance of Air District financial records.

Interprets and explains new Government Accounting Standards Board (GASB) statements.

Supervises and participates in internal and external audit activities. Performs the most difficult and complex audits.

Participates in developing, implementing, and monitoring new and revised accounting, budgeting, and auditing policies, procedures, and systems.

Reviews existing accounting, budgeting, and auditing policies, procedures, and systems for effectiveness and efficiency and develops, oversees, and implements a plan for improvement.

Supervises and participates in the preparation and distribution of financial reports for the Board of Directors and Air District management.

Confers with and advises Air District staff and other interested parties regarding accounting, fiscal systems, budgeting systems, and other fiscal policies and procedures.

Supervises and reviews the Air District's fiscal operations including accounting and auditing policies, procedures, and systems.

Provides oversight, review, and coordination of payroll and benefit data for Air District annual budget and financial reporting.

Assists with budget inquiries and provides instructions/training for budget input and preparation.

DRAFT

Participates in the preparation of the strategic goals and objectives, and budget of the assigned programs.

Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

The items listed below are the minimum requirements for this classification.

Bachelor's degree from an accredited college or university in accounting, finance, business or a closely related field and four years of accounting, budgeting, or auditing experience, including at least one year of experience providing lead direction to staff.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

LICENSES AND CERTIFICATIONS:

None.

OTHER REQUIREMENTS

None.

KNOWLEDGE AND SKILLS

The minimum knowledge and skills needed to perform the essential duties of the classification.

Knowledge of:

Principles and practices of employee supervision including selection, planning, training, work evaluation and performance management.

General, fund, and governmental accounting, including financial statement preparation and reporting methods.

Principles, policies, procedures, and systems used in accounting, budgeting, and auditing.

Applicable federal, state, and local laws, regulations, and organizational policies.

Financial software applications.

Skills in:

DRAFT

Assigning, supervising, reviewing, and evaluating the work of professional, technical, and support staff.

Selecting and motivating staff and providing for their training and professional development.

Analyzing a variety of accounting, budgeting, and auditing policies, procedures, and systems.

Recommending and implementing improved accounting methods and procedures.

Coordinating, assigning, and reviewing the work of assigned staff.

Training and evaluating staff performance.

Reviewing and verifying the accuracy of financial data and associated legal documents.

Analyzing, evaluating, and reconciling complex financial data.

Preparing clear, concise, and complete financial reports and other written correspondence.

Interpreting and applying complex financial rules, regulations, and ordinances.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

Exercising sound independent judgment within established guidelines.

Communicating effectively through excellent verbal, listening, and written communication.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

Some positions in this classification may require the following:

- Sitting for long periods of time and walking and/or standing is only required occasionally.
- View computer screens and type for prolonged periods of time.
- Occasionally lift or carry files and boxes weighing up to 15 pounds.

Working conditions:

- Work is primarily performed in a typical office environment.

DRAFT

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Air Quality Chemist I/II

Class Codes: 8P001/7P003

Salary Grade: 130/134

Bargaining Unit: Represented, Professional

Established Date: July 1, 2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under general supervision, performs a variety of laboratory analyses of environmental contaminants.

DISTINGUISHING CHARACTERISTICS

Air Quality Chemist I is the entry-level class in the chemist series. Initially under close supervision, incumbents perform routine sample analyses. As experience is gained, duties become more diversified and are performed with greater independence of action within established laboratory testing guidelines. This class is alternately staffed with Air Quality Chemist II and incumbents may advance to the higher level after gaining experience and demonstrating proficiency which meets the qualifications for the higher-level class.

Air Quality Chemist II is the journey-level class in this series, fully competent to independently perform a wide range of complex chemical analyses.

This class is distinguished from Senior Air Quality Chemist in that the latter provides lead direction on projects and has additional responsibilities requiring application and interpretation of scientific knowledge and the use of significant independent judgment.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a supervisor or manager. No supervision is exercised over others.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Follows safety protocols and ensures the laboratory is clean and organized to maintain a safe and efficient working environment.

Prepares and performs quantitative and qualitative analyses of organic and inorganic samples related to air contaminants utilizing a variety of methods and techniques

Interprets and evaluates analytical results, identifies and determines the cause of problems, and recommends corrective actions.

Sets up, calibrates, operates, and makes minor repairs and adjustments to a variety of complex laboratory instruments and equipment.

Maintains records and prepares reports, correspondence, and other written materials related to the work.

Represents the Air District at workshops, meetings, advisory and technical committees.

May direct and review the work of technicians and assist in training other laboratory staff.

Participates in regulatory audits.

May appear in court to testify about laboratory analyses during litigation.

Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

The items listed below are the minimum requirements for this classification.

Air Quality Chemist I: Bachelor's degree from an accredited college or university in chemistry or a closely related field and one year working in any laboratory performing chemical analysis.

Air Quality Chemist II: Bachelor's degree from an accredited college or university in chemistry or a closely related first and two years of laboratory experience performing chemical analysis.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

DRAFT

LICENSES AND CERTIFICATIONS:

None.

OTHER REQUIREMENTS

None.

KNOWLEDGE AND SKILLS

The minimum knowledge and skills needed to perform the essential duties of the classification.

Knowledge of:

Principles of chemistry.

Sample preparation and handling techniques.

Laboratory equipment and its use.

Principals of quality control and quality assurance.

Safety practices and safe work methods related to the work.

Industry language and terms.

Recordkeeping principles and practices.

Local, state, and federal air quality regulations.

Qualitative and quantitative chemical analyses, including complex formulas.

General instrumental upkeep and preventative maintenance.

Skills in:

Fostering collaboration and teamwork.

Using, troubleshooting, and repairing laboratory instrumentation.

Demonstrating attention to detail and effective time management.

Communicating verbally and in writing, including conveying technical information to individuals with varying levels of technical knowledge.

Performing data entry, management, and analysis.

DRAFT

Preparing clear, concise, and complete technical reports, correspondence, and other written materials.

Documenting laboratory tasks and analyses in a legally defensible manner.

Exercising sound independent judgement within established guidelines.

Reading, understanding, and applying regulatory information to analytical processes.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

Some positions in this classification may require the following:

- Sit or stand for long periods using laboratory instrumentation and a computer.
- Bend, squat, twist, kneel, push, and pull.
- Lift, carry, and push up to 20 pounds unassisted and 50 pounds assisted.
- Use Personal Protective Equipment (PPE) to avoid or limit chemical and physical hazard exposure.

Working conditions:

- Work is primarily performed in a professional laboratory environment.
- Exposure to toxic and hazardous materials.
- May be exposed to temperature extremes.
- May be exposed to loud noise and machinery.
- Occasional travel to conferences, workshops, and trainings.

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Air Quality Meteorologist I/II

Class Codes: 8P003/ 7P005

Salary Grade: 131/135

Bargaining Unit: Represented, Professional

Established Date: July 1, 2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under general supervision, collects, analyzes, and interprets meteorological and air quality data to prepare meteorological and air quality forecasts, analyze air quality incidents, and perform air quality modeling.

DISTINGUISHING CHARACTERISTICS

Air Quality Meteorologist I is the entry-level class in the meteorology series. Initially under close supervision, incumbents perform routine meteorological research and analysis duties while learning Air District policies and procedures and specific techniques related to air quality analysis, forecasting, and modeling. As experience is gained, duties become more diversified and are performed with greater independence of action within established guidelines. This class is alternately staffed with Air Quality Meteorologist II and incumbents may advance to the higher level after gaining experience and demonstrating proficiency which meet the qualifications of the higher-level class.

Air Quality Meteorologist II is the journey-level class in this series, fully competent to perform the full range of specialized and technical research, analysis, modeling and forecasting duties. Successful performance requires applying knowledge and skills in non-routine air quality and meteorological studies.

This class is distinguished from Senior Air Quality Meteorologist in that the latter performs the more complex professional work and provides lead direction on projects.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a supervisor or manager. No supervision is exercised over others.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Collects, analyzes, and interprets meteorological and air contaminated data from various sources including surface and upper air stations, satellites, simulations, and radar.

Studies and interprets synoptic reports, maps, satellite products, photographs, prognostic charts, and air contaminant data to analyze past conditions and predict long- and short-range meteorological and air quality conditions.

Issues various periodic and special air quality advisories.

Performs statistical analysis and modeling of complex meteorological and air quality relationships.

Prepares inputs to meteorological and air quality models, assesses model performance evaluation, and suggests model improvements.

Performs studies to assess the representativeness of simulation periods.

Determines compliance with Air District regulations and recommends appropriate action to achieve or maintain public health, safety, and compliance

Verifies data quality, identifies and explains meteorological trends, and researches new sources of meteorological and environmental data to support current and new projects.

Evaluates relevant sections of permit applications and provides comments.

Prepares technical reports of studies, findings, and recommendations.

Provides meteorological and air quality information and data to Air District staff, outside agencies, industry, media, and the public.

Participates in the design and implementation of special meteorological and air quality research projects.

Participates in the design and implementation of meteorological and air quality modeling.

Performs other related duties as assigned.

DRAFT

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

The items listed below are the minimum requirements for this classification.

Air Quality Meteorologist I: Bachelor's degree from an accredited college or university in meteorology or a closely related field.

Air Quality Meteorologist II: In addition to the above, two years of professional meteorological experience involving analysis, forecasting, and/or modeling.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

LICENSES AND CERTIFICATIONS:

Some positions in this classification may require possession of a valid California driver's license or ability to obtain one.

OTHER REQUIREMENTS

None.

KNOWLEDGE AND SKILLS

The minimum knowledge and skills needed to perform the essential duties of the classification.

Knowledge of:

Principles and theories of scientific meteorology, including physics, mathematics, and statistics and their applications to environmental air quality.

Meteorological and air quality analysis, modeling, and forecasting.

Modeling applications related to meteorology and air quality.

Methods and tools for collecting, interpreting, and analyzing meteorological and air quality data from various sources.

Applicable federal, state, and local laws, rules, and regulations.

Skills in:

Communicating effectively through exceptional verbal, listening, and written communication.

DRAFT

Collecting, analyzing, and interpreting meteorological and air quality data to assess trends, predict conditions, and evaluate compliance.

Disseminating complex information to groups and individuals with varying levels of scientific and technical knowledge.

Preparing clear, concise and comprehensive technical reports.

Time management and prioritizing multiple tasks while meeting established deadlines.

Effectively and quickly responding to demands in a proactive manner.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

Some positions in this classification may require the following:

- Sitting for long periods of time and walking and/or standing is only required occasionally.
- View computer screens and type for prolonged periods of time.
- Climb stairs, ladders, and towers.
- Use Personal Protective Equipment (PPE) to avoid or limit chemical and physical hazard exposure.

Working conditions:

- Work is primarily performed in a typical office environment.
- May attend public and other meetings outside of standard working hours.
- Occasional travel to facilities, such as monitoring, burn, and incident sites.
- Potential exposure to toxic or hazardous materials when visiting sites.

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Assistant Atmospheric and Air Quality Modeler

Class Codes: 7P015

Salary Grade: 132

Bargaining Unit: Represented, Professional

Established Date: July 1, 2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under close supervision, performs a variety of routine tasks supporting atmospheric and air quality modeling and research.

DISTINGUISHING CHARACTERISTICS

Assistant Atmospheric and Air Quality Modeler is the entry-level modeling and research support classification. Under close supervision, incumbents learn Air District procedures and policies while performing the routine duties that support atmospheric and air quality modeling and research. As knowledge and experience is gained, assignments are performed with greater independence of action within established guidelines.

This class is distinguished from Atmospheric and Air Quality Modeler I/II in that the latter is responsible for developing, implementing and applying atmospheric models that require greater job knowledge and performed with greater independence.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a supervisor or manager. No supervision is exercised over others.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Researches and organizes data collected from observed sources. Compiles and maintains data set to support modeling simulations.

Drafts detailed technical reports and documentation that summarizes the findings and conclusions from modeling outputs and analyses.

Runs modeling systems to produce predictive simulations. Monitors system performance and assists in analyzing initial outputs for quality and consistency.

Documents model running scripts, model inputs and outputs, statistical analysis derived from collected data, and graphical displays to illustrate findings.

Reviews regulatory model evaluation guidelines to ensure Air District models comply with guidelines.

Assists with designing field studies for the purpose of collecting data for modeling.

Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

The items listed below are the minimum requirements for this classification.

Bachelor's degree from an accredited college or university in atmospheric science, meteorology, or related field.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

LICENSES AND CERTIFICATIONS:

None.

OTHER REQUIREMENTS

None.

KNOWLEDGE AND SKILLS

The minimum knowledge and skills needed to perform the essential duties of the classification.

Knowledge of:

Basic principles of atmospheric science, meteorology, chemistry, physics and mathematics.

DRAFT

Interactions and relationships between emissions, meteorology, and pollution concentrations.

Fundamental concepts of air quality modeling simulation tools.

Methods and techniques of developing and applying mathematical and statistical models.

Basic programming and scripting languages.

Skills in:

Collecting and analyzing modeling results.

Applying mathematical and statistical models and techniques effectively.

Preparing clear and concise technical reports, correspondence, and other written materials.

Exercising sound independent judgment within established guidelines.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

Some positions in this classification may require the following:

- Sitting for long periods of time and walking and/or standing is only required occasionally.
- View computer screens and type for prolonged periods of time.

Working conditions:

- Work is primarily performed in a typical office environment.
- May be required to work after standard working hours.
- Occasional travel to conferences, workshops, and trainings.

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Atmospheric and Air Quality Modeler I/II

Class Codes: 8P005/ 7P016

Salary Grade: 136/140

Bargaining Unit: Represented, Professional

Established Date: July 1, 2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under general supervision, performs atmospheric and air quality models and research for air quality studies.

DISTINGUISHING CHARACTERISTICS

Atmospheric and Air Quality Modeler I is the entry-level class in this specialized series. Initially under close supervision, incumbents develop, implement, and apply atmospheric models tailored to the specific needs of the Air District, ensuring accurate simulations of air quality events. As experience is gained, duties become more diversified and are performed with greater independence of action within established guidelines. This class is alternately staffed with Atmospheric and Air Quality Modeler II and incumbents may advance to the higher level after gaining experience and demonstrating proficiency which meets the qualifications of the higher-level class.

Atmospheric and Air Quality Modeler II is the journey-level class in this series, fully competent to perform the full range of duties. Incumbents are expected to exercise significant independent judgment in the performance of atmospheric and air quality modeling duties including recommending improvements and refinements for models and modeling practices.

This class is distinguished from Senior Atmospheric and Air Quality Modeler in that the latter performs the more complex air quality modeling studies and creation of processes and standards, and provides lead direction on projects.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a supervisor or manager. No supervision is exercised over others.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Designs, implements, and maintains comprehensive modeling systems to address current issues with regional air quality.

Applies meteorological and photochemical models to predict and analyze air quality and utilizes data from these models to aid in the Air District's planning and decision-making process to manage and improve air quality.

Gathers various types of data including measurements from observed sources, such as air quality monitors and weather stations, and data obtained from simulated model runs, to create a comprehensive data set for future modeling simulations.

Prepares detailed technical reports and documentation that summarizes the findings and conclusions from modeling outputs and analyses.

Maintains thorough records of all aspects of model operations including documenting model running scripts, model inputs and outputs, statistical analysis derived from collected data, and graphical displays to illustrate findings.

Develops appropriate simulation techniques and methods to evaluate and interpret the simulation results, conducts simulations, analyzes simulation results, interprets the application of modeling results, and prepares reports.

Reviews regulatory model evaluation guidelines to ensure Air District models comply with guidelines.

Utilizes existing models and other analytical tools to quantify health impacts and exposure related to air pollution. Assesses model outputs to support the rulemaking process.

Collaborates with Air District staff to design, create, and evaluate emissions inventory to apply and integrate into modeling systems.

DRAFT

Establishes and maintains professional contacts and working relationships with modeling specialists outside the Air District and supports collaborative projects and regulatory actions.

Designs field studies for the purpose of collecting data for modeling.

Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

The items listed below are the minimum requirements for this classification.

Atmospheric and Air Quality Modeler I: Bachelor's degree from an accredited college or university in atmospheric science, meteorology, or related field, and one year of experience in modeling and scientific research.

Atmospheric and Air Quality Modeler II: In addition to the above, one year of experience in modeling and scientific research.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

LICENSES AND CERTIFICATIONS:

None.

OTHER REQUIREMENTS

None.

KNOWLEDGE AND SKILLS

The minimum knowledge and skills needed to perform the essential duties of the classification.

Knowledge of:

Theories, principles and practices of the physical sciences, including chemistry, physics and mathematics.

Theories, principles, and practices of meteorology, including atmospheric physics.

Relevant software and programming language.

Interactions and relationships between emissions, meteorology, and pollution concentrations.

DRAFT

Methods and techniques of developing and applying mathematical and statistical models.

Principles, methods, and techniques of research and data analysis.

Skills in:

Designing, evaluating, and analyzing modeling results to develop recommendations for air quality regulatory actions and plans.

Developing and maintaining documentation of computer files, models, input/output data, and utility programs.

Applying mathematical and statistical models and techniques effectively.

Designing and conducting complex modeling and other research projects.

Preparing clear and concise technical reports, correspondence and other written materials.

Time management and prioritizing multiple tasks while meeting established deadlines.

Exercising sound independent judgment within established guidelines.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

Some positions in this classification may require the following:

- Sitting for long periods of time and walking and/or standing is only required occasionally.
- View computer screens and type for prolonged periods of time.

Working conditions:

- Work is primarily performed in a typical office environment.
- May be required to work after standard working hours.
- Occasional travel to conferences, workshops, and trainings.

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Environmental Planner I/II

Class Codes: 8P004/ 7P007

Salary Grade: 130/134

Bargaining Unit: Represented, Professional

Established Date: July 1, 2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under general supervision, performs professional work in environmental, air quality, and climate planning and programs.

DISTINGUISHING CHARACTERISTICS

Environmental Planner I is the entry level class in this environmental planning series. Initially under close supervision, incumbents participate in a wide range of professional planning duties while learning the more skilled and complex tasks associated with environmental, air quality, and climate planning. As experience is gained, duties become more diversified and are performed with greater independence of action within established guidelines. This class is alternately staffed with Environmental Planner II and incumbents may advance to the higher level after gaining experience and demonstrating proficiency which meets the qualifications of the higher-level class.

Environmental Planner II is the journey level class in this series, fully competent to perform a wide range of professional planning duties associated with environmental, air quality and climate planning.

This class is distinguished from Senior Environmental Planner in that the latter provides lead direction and performs more complex and specialized work requiring considerable professional knowledge and the use of significant independent judgment.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a supervisor or manager. No supervision is exercised over others.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Assists in developing and implementing a variety of plans to reduce air pollution and greenhouse gas emission.

Conducts research studies, prepares reports, and develops recommendations on land use project impacts, local and regional plans, transportation, and related infrastructure projects, and stationary and mobile sources of pollution.

Participates in tracking and reporting progress on Air District plans, policies and projects addressing air quality and climate impacts in consultation with Air District staff, external partners, community organizations and other stakeholders.

Assists with tracking, reviewing, commenting and the preparation of environmental studies and reports pursuant to the California Environmental Quality Act (CEQA).

Participates in updating the Air District's CEQA documents, supporting tools and technical guidance.

Provides technical assistance to local governments on health protective and equitable air quality and climate planning, land use policy, and CEQA. Participates in the development and delivery of resources such as model ordinances, best practices, and guidelines for local climate action and land use plans and policies.

Develops and maintains strong working relationships with community-based organizations, community members, local governments, regional, state and federal agencies.

Prepares a variety of written communications, including analytical reports, emails, briefs, presentations, comment letters on projects, plans or policies.

Collects, creates, and visualizes geospatial data; creates interactive online maps, and performs statistical and geospatial analysis to support Air District programs, community-based planning, and local and regional policy.

Assists with various grant programs, including the procurement, administration, tracking and reporting of grants and contracts.

DRAFT

Represents the Air District as a subject matter expert at meetings, conferences and working groups.

Responds to public records requests and other inquiries from governmental officials, consultants and the public.

Perform other related duties as assigned.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

Environmental Planner I: Bachelor's degree from an accredited college or university in regional, urban or environmental planning or a closely related field.

Environmental Planner II: In addition to the above, two years of professional environmental planning, policy or program experience.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

LICENSES AND CERTIFICATIONS

None

OTHER REQUIREMENTS

None.

KNOWLEDGE AND SKILLS

Knowledge of:

Objectives, principles, procedures, standards, practices, information sources and trends in the field of environmental impact assessment and land use, transportation, and environmental planning.

Application of land use, physical design, demographic, environmental and social/economic concepts as applied to regional planning.

Statistical analysis and mathematical concepts related to land use, transportation, and environmental planning process.

Applicable Air District rules and regulations and state and federal laws.

Application of datasets and development of visualizations including mapping and charts

DRAFT

Local and regional government organization, functions, and practices.

Meeting and workshop development including best practices for engagement and facilitation.

Skills in:

Understanding and applying federal, state, and local laws, regulations, policies, procedures and standards pertaining to the environmental review and planning process.

Understanding and applying analytical procedures, data analysis and documentation, map, graphs and statistical data interpretation.

Preparing clear, concise reports, correspondence and other written materials.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

Communicating effectively through excellent verbal, listening, and written communication.

Making persuasive presentations of ideas and recommendations.

Exercising sound independent judgement within established guidelines.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

- Sitting for long periods of time and walking and/or standing is only required occasionally.
- View computer screens and type for prolonged periods of time.

Working conditions:

- Work is primarily performed in a typical office environment.
- May be required to attend public and other meetings after standard working hours.

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Principal Accountant

Class Codes: 4P001

Salary Grade: 142

Bargaining Unit: Represented, Professional

Established Date: July 1, 2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under general direction, performs highly specialized and complex accounting functions, leads project teams, and provides oversight of assigned program areas.

DISTINGUISHING CHARACTERISTICS

This class provides the most complex and specialized accounting work in support of the Air District's goals and objectives. Incumbents are responsible for providing subject matter expertise and project leadership in developing, implementing, and monitoring new and/or revised systems and programs.

This class is distinguished from Accounting Supervisor, in that the latter assigns, supervises, and evaluates the work of assigned staff on a continuing basis. This class is also distinguished from the Manager level in that the latter has managerial responsibility for assigned programs and staff and for all defined functional areas.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a manager. No supervision is exercised over others.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Provides lead direction, and reviews the work of staff. Prioritizes and follows up on work assignments to ensure timely and accurate completion

Leads, reviews, and coordinates fiscal operations and payroll and benefits data for the annual Air District budget and financial reporting.

Coordinates information received from Division representatives regarding their accounting and budgeting policies, procedures, and system needs. Makes appropriate recommendations.

Researches and resolves technical questions.

Provides interpretations of county, state, federal, Generally Accepted Accounting Principles (GAAP), government circulars, and other regulatory and legislative requirements and ensures compliance of the Air District's accounting processes, fiscal controls, reporting, and the maintenance of Air District financial records.

Interprets and explains new Government Accounting Standards Board (GASB) statements.

Performs the most difficult and complex audits.

Reviews, develops, implements, and monitors new and existing accounting, budgeting, and auditing policies, procedures, and systems.

Prepares and distributes financial reports for the Board of Directors and Air District management.

Confers with and advises Air District staff and other interested parties regarding accounting, fiscal systems, budgeting systems, and other fiscal policies and procedures.

Reviews and revises the Air District's fiscal operations including accounting and auditing policies, procedures, and systems.

Assists with budget inquiries and provides instructions/training for budget input and preparation.

Participates in the preparation of the strategic goals and objectives, and budget of the assigned programs.

Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

The items listed below are the minimum requirements for this classification.

DRAFT

Bachelor's degree from an accredited college or university in accounting, finance, business or a closely related field and four years of accounting, budgeting, or auditing experience.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

LICENSES AND CERTIFICATIONS:

None.

OTHER REQUIREMENTS

None.

KNOWLEDGE AND SKILLS

The minimum knowledge and skills needed to perform the essential duties of the classification.

Knowledge of:

Accounting principles, budgeting, and financial analysis methodologies.

Financial reporting standards such as Generally Accepted Accounting Principles (GAAP) and Governmental Accounting Standards Board (GASB) and their applicability to modeling and financial projections.

Principles, policies, procedures, and systems used in accounting, budgeting, and auditing.

Applicable federal, state, and local laws, regulations, and organizational policies.

Financial software applications.

Skills in:

Analyzing a variety of accounting, budgeting, and auditing policies, procedures, and systems.

Recommending and implementing improved accounting methods and procedures.

Training, reviewing, and evaluating the work of professional, technical, and support staff.

Reviewing and verifying the accuracy of financial data and associated legal documents.

Analyzing, evaluating, and reconciling complex financial data.

DRAFT

Preparing clear, concise, and complete financial reports and other written correspondence.

Interpreting and applying complex financial rules, regulations, and ordinances.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

Exercising sound independent judgment and decision making within established guidelines.

Communicating effectively through excellent verbal, listening, and written communication.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

Some positions in this classification may require the following:

- Sitting for long periods of time and walking and/or standing is only required occasionally.
- View computer screens and type for prolonged periods of time.
- Occasionally lift or carry files and boxes weighing up to 15 pounds.

Working conditions:

- Work is primarily performed in a typical office environment.

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Principal Air Quality Chemist

Class Codes: 4P005

Salary Grade: 142

Bargaining Unit: Represented, Professional

Established Date: July 1, 2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under general direction, performs complex functions for highly specialized laboratory work, leads project teams, and provides oversight of assigned program areas.

DISTINGUISHING CHARACTERISTICS

This class provides the most complex and highly specialized laboratory work in support of the Air District's goals and objectives. In addition to laboratory analyses, incumbents perform work that requires a high degree of initiative and independent judgement, providing project and laboratory program leadership. The work has significant consequences on the operations of the Division in that it involves foundational laboratory programs that other work relies on.

This class is distinguished from Manager in that the latter has managerial responsibility for assigned programs and staff, and for all defined functional areas.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a manager. No supervision is exercised over others.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Coordinates and leads the development, implementation, and monitoring of laboratory-wide programs and complex projects.

Provides lead direction and reviews the work of staff. Prioritizes and follows up on work assignments to ensure timely and accurate completion.

Leads assigned laboratory-wide programs.

Follows safety protocols and ensures the laboratory is clean and organized to maintain a safe and efficient working environment.

Prepares and performs quantitative and qualitative analyses or organic and inorganic samples related to air contaminants utilizing and variety of methods and techniques.

Interprets and evaluates analysis results, identifies and determines the cause of problems, and recommends, implements, and directs corrective actions.

Sets up, calibrates, operates, modifies, and performs maintenance, adjustments, and repairs to a variety of complex laboratory and air monitoring instruments and equipment.

Maintains records and prepares reports, correspondence, and other written materials related to the work.

Evaluates and recommends purchase of new equipment and supplies. Orders and maintains inventory of laboratory equipment and supplies.

Represents the Air District in workshops, meetings, and advisory and technical committees.

May direct and review the work of technicians and assist in training other laboratory staff.

Maintains current knowledge of new analytical methods, instrumentation, and regulatory requirements and makes recommendations.

Provides technical leadership and acts as a mentor to technicians and less experienced chemists.

Reviews, evaluates, and provides advice on appropriateness of test methods used to ensure compliance with Air District testing regulations and rules.

Leads and participates in regulatory audits.

May appear in court as an expert witness during litigation.

DRAFT

Researches, develops, and implements new laboratory methods, standard operating procedures, and policies.

Participates in the preparation of the strategic goals and objectives, and budget of the assigned programs.

Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

The items listed below are the minimum requirements for this classification.

Bachelor's degree from an accredited college or university in chemistry or a closely related field, and four years of experience performing chemical analyses of environmental contaminants in an environmental laboratory.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

LICENSES AND CERTIFICATIONS:

OTHER REQUIREMENTS

None.

KNOWLEDGE AND SKILLS

The minimum knowledge and skills needed to perform the essential duties of the classification.

Knowledge of:

Principles and practices of organic and environmental chemistry related to air quality analysis.

Sample preparation and handling techniques.

Laboratory equipment and its use.

Principals of quality control and quality assurance.

Safety practices and safe work methods related to the work.

Industry language and terms.

Record keeping principles and practices.

DRAFT

Local, state, and federal air quality regulations.

Professional writing techniques.

Qualitative and quantitative chemical analyses, including complex formulas.

Methods used in the analysis of environmental contaminants, including those in the air.

General instrumental upkeep, preventative maintenance, and repair.

Methods for developing, implementing, and leading laboratory projects and certification programs.

Skills in:

Serving as a liaison and fostering collaboration and teamwork.

Using, troubleshooting, and repairing laboratory instrumentation.

Utilizing office, communication, and laboratory computer programs and software.

Demonstrating attention to detail and effective time management.

Communicating verbally and in writing, including conveying technical information to individuals with varying levels of technical knowledge.

Analyzing and interpreting laboratory data, drawing sound conclusions, and making appropriate recommendations.

Preparing clear, concise, and complete technical reports, correspondence, and other written materials.

Documenting laboratory tasks and analyses in a legally defensible manner.

Exercising sound independent judgement within established guidelines.

Reading, understanding, interpreting, and applying local, state, and federal requirements.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

Recommending and implementing improved laboratory methods and procedures.

Developing and adapting analytical methods to address new or unusual problems and ensure reliable results.

Training others in analytical techniques and work procedures.

Handling chemicals safely.

DRAFT

Preparing and delivering presentations.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

Some positions in this classification may require the following:

- Sit or stand for long periods using laboratory instrumentation and a computer.
- Bend, squat, twist, kneel, push, and pull.
- Lift, carry, and push up to 20 pounds unassisted and 50 pounds assisted.
- Use Personal Protective Equipment (PPE) to avoid or limit chemical and physical hazard exposure.

Working conditions:

- Work is primarily performed in a professional laboratory environment.
- Exposure to toxic and hazardous materials.
- May be exposed to temperature extremes.
- May be exposed to loud noise and machinery.
- Occasional travel to conferences, workshops, and trainings.

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Principal Air Quality Meteorologist

Class Codes: 4P006

Salary Grade: 143

Bargaining Unit: Represented, Professional

Established Date: July 1, 2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under general direction, performs the most complex and highly specialized level of meteorological activities in a variety of Air District functions.

DISTINGUISHING CHARACTERISTICS

This class provides the most complex and specialized meteorology services in support of the Air District's goals and objectives. Incumbents are responsible for providing subject matter expertise, and project leadership of a wide variety of air quality meteorology activities for the Air District. This work requires considerable technical knowledge and a high degree of initiative and independent judgement. The work performed has significant consequences on operations in that it involves the development or revision of Air District-wide meteorological programs, policies and procedures.

This class is distinguished from Supervising Air Quality Meteorologist in that the latter assigns, supervises, and evaluates the work of assigned staff on a continuing basis. This class is also distinguished from the Manager level in that the latter has managerial responsibility for assigned programs and staff, and for all defined functional areas.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a supervisor or manager. No supervision is exercised over others.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Coordinates or provides a lead role in executing the most complex assignments relating to meteorological programs and activities.

Provides lead direction and reviews the work of to staff. Prioritizes and follows up on work assignments to ensure timely and accurate completion.

Provides lead direction in the collection, analysis, and interpretation of meteorological data gathered by surface and upper air stations, satellites, and radar. Verifies data and explains trends.

Performs comprehensive meteorological and air quality model performance evaluation and makes recommendations for improvements.

Assesses local and regional impacts of emissions on air quality under various meteorological conditions. Assesses impacts of pollutant transport.

Identifies sources responsible for exceeding air quality standards. Determines source compliance with Air District regulations and recommends legal action for enforcement.

Studies and interprets synoptic reports, maps, satellite products, photographs, prognostic charts, and air contaminant data to analyze past conditions and predict long- and short-range meteorological and air quality conditions.

Develops and performs complex statistical analysis and modeling to establish meteorological, emissions, and air quality relationships.

Provides lead direction in responding to events as they relate to forecasting air quality. Oversees the recommendation of various periodic and special air quality advisories and alerts.

Performs various analyses, including cluster analyses to establish representativeness, frequency of meteorological events being studied, and other analyses to identify trends.

Composes various written documentation, reports, and correspondence, including, but not limited to, weekly forecast summaries to management, standard operating procedures, and air monitoring network plans.

DRAFT

Provides technical training and participates in program development.

Represents the Air District in meetings with the public, industry, and other agencies.

Writes and implements computer programs and software to collect, manipulate, and analyze meteorological and air quality data.

Applies scientific and mathematical theories, principles, models, and techniques to solve complex air pollution analysis and forecasting problems.

Oversees the Air District's quality assurance programs for meteorological monitoring systems.

Develops and maintains meteorological and air quality databases. Develops new procedures for quality assurance data sets. Addresses quality control of newly required data sets. Ensures timely completion of requirements.

Conducts research in meteorological and air quality studies in support of the Air District's goals and objectives.

Collaborates with other divisions to disseminate daily forecast and meteorological data for incident response. May provide meteorological expertise for rule making.

Participates in the preparation of the strategic goals and objectives, and budget of the assigned programs

Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

The items listed below are the minimum requirements for this classification.

Bachelor's degree from an accredited college or university in meteorology or a closely related field and four years of professional meteorological experience involving analysis, forecasting, and/or modeling.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

LICENSES AND CERTIFICATIONS:

DRAFT

Some positions in this classification may require possession of a valid California driver's license or ability to obtain one.

OTHER REQUIREMENTS

None.

KNOWLEDGE AND SKILLS

The minimum knowledge and skills needed to perform the essential duties of the classification.

Knowledge of:

Advanced principles and theories of scientific meteorology, including physics, mathematics, and statistics and their applications to environmental air quality.

Meteorological and air quality analysis, forecasting, and modeling.

Advanced meteorological and air quality modeling techniques.

Quality assurance and quality control practices for meteorological monitoring and data management systems.

Statistical software and tools used in modeling and forecasting operations.

Methods and tools for collecting, interpreting, and analyzing meteorological and air quality data from various sources.

Applicable federal, state, and local laws, rules, and regulations.

Principles and techniques of scientific research and data analysis.

Skills in:

Performing complex modeling studies to evaluate the relationships between meteorology, emissions, and air quality.

Collecting, verifying, and interpreting complex meteorological and air quality data to identify trends, evaluate compliance and improve predictive models.

Designing and executing advanced statistical and computational analyses to solve complex forecasting and air quality problems.

Developing and implementing quality assurance and data verification programs.

DRAFT

Applying advanced meteorological and air quality principles and theories to address complex challenges.

Communicating complex scientific and technical concepts effectively to diverse audiences, including through presentations and training sessions.

Disseminating information to groups and individuals with varying levels of technical knowledge.

Managing multiple tasks, prioritizing workloads, and meeting established deadlines in a dynamic environment.

Reviewing and writing computer programs and modeling applications related to meteorology and air quality.

Training, reviewing, and evaluating the work of professional, technical, and support staff.

Providing timely and proactive responses to project and organizational demands.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

Preparing clear and concise technical reports, correspondence, and other written materials.

Leading technical projects and cross-functional teams.

Exercising sound independent judgement and decision making within established guidelines.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

Some positions in this classification may require the following:

- Sitting for long periods of time and walking and/or standing is only required occasionally.
- View computer screens and type for prolonged periods of time.
- Climb stairs, ladders, and towers.
- Use Personal Protective Equipment (PPE) to avoid or limit chemical and physical hazard exposure.

Working conditions:

DRAFT

- Work is primarily performed in a typical office environment.
- May attend public and other meetings outside of standard working hours.
- Occasional travel to facilities, such as monitoring, burn and incident sites.
- Potential exposure to chemicals and toxic or hazardous materials when visiting facilities.

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Principal Environmental Planner

Class Codes: 4P004

Salary Grade: 142

Bargaining Unit: Represented, Professional

Established Date: July 1, 2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under general direction, performs highly specialized and complex functions in environmental, air quality, and climate planning and program design and implementation activities.

DISTINGUISHING CHARACTERISTICS

This class provides the most complex and specialized environmental planning activities in support of the Air District's goals and objectives. Incumbents are responsible for providing subject matter expertise and project leadership in developing programs and for handling the most difficult and/or innovative environmental planning activities for the Air District.

This class is distinguished from Supervising Environmental Planner, in that the latter assigns, supervises, and evaluates the work of assigned staff on a continuing basis. This class is also distinguished from Manager in that the latter has managerial responsibility for assigned programs and staff and for all defined functional areas.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a manager. No supervision is exercised over others.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Provides lead direction and reviews the work of staff. Prioritizes and follows up on work assignments to ensure timely and accurate completion.

Coordinates or provides a lead role in developing new plans, projects and programs.

Provides project and program management leadership for difficult, sensitive, innovative, and/or critical projects, serving as subject matter expert to ensure timelines, resources, and deliverables are effectively managed.

Coordinates and guides the most complex and sensitive research and analysis; develops recommendations on land use project impacts, local and regional plans, transportation and related infrastructure projects, and stationary and mobile sources of pollution.

Coordinates and participates in tracking and reporting progress on Air District plans, policies and projects addressing air quality and climate impacts in consultation with Air District staff, external partners, community organizations and other stakeholders.

Tracks, reviews, edits, and prepares the most complex environmental studies and reports pursuant to the California Environmental Quality Act (CEQA).

Coordinates and participates in updated the Air District's CEQA documents, supporting tools and technical guidance.

Coordinates and reviews the work of consultants and less experienced environmental planning staff.

Designs, champions, and implements new frameworks, templates, and processes for projects and programs.

Monitors and evaluates legislation and other governmental actions relating to air quality management planning.

Develops and presents recommendations for Air District regulations, policies, and programs to Air District leadership.

Interfaces with local, state, and federal agencies regarding land use, transportation, air quality planning, and environmental review.

Represents the Air District and responds to inquiries from governmental officials, consultants, and the public related to environmental planning issues.

Analyzes issues, prepares reports, and recommendations related~~ive~~ to land use, regional development, transportation planning and programming, and related issues.

DRAFT

Coordinates and leads geospatial data collection, analysis, and mapping, and directs development and delivery of visualizations including online mapping tools to support Air District programs, community-based planning, and local and regional policy

Confers with personnel from other divisions and agencies in coordinating assigned work. Meets with community organizations and other groups to encourage cooperative action or resolve problems.

Coordinates and leads the development and management of grant programs, oversees grant and contract procurement, management, tracking and reporting.

Represents the Air District as a subject matter expert at meetings, conferences and working groups.

Leads the responses to public records requests and other inquiries from governmental officials, consultants, and the public.

Participates in the preparation of the strategic goals and objectives, and budget of the assigned programs.

Performs other related duties as assigned

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

Bachelor's degree from an accredited college or university in regional, urban, or environmental planning or a closely related field and four years of professional environmental planning experience.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

LICENSES AND CERTIFICATIONS:

None.

OTHER REQUIREMENTS

None.

KNOWLEDGE AND SKILLS

Knowledge of:

DRAFT

Objectives, principles, procedures, standards, practices, information sources and trends in the field of environmental impact assessment and land use, transportation, and environmental planning.

Application of land use, physical design, demographic, environmental and social/economic concepts as applied to regional planning.

Statistical analysis and mathematical concepts related to land use, transportation, and environmental planning process.

Applicable Air District rules and regulations and state and federal laws.

Application of datasets and development of visualizations including mapping and charts

Local and regional government organization, functions, and practices.

Meeting and workshop development including best practices for engagement and facilitation.

Project management concepts and methods for developing environmental planning programs.

Skills in:

Training, reviewing, and evaluating the work of professional, technical, and support staff.

Understanding and applying federal, state, and local laws, regulations, policies, procedures and standards pertaining to the environmental review and planning process.

Understanding and applying analytical procedures, data analysis and documentation, map, graphs and statistical data interpretation.

Preparing clear and concise reports, correspondence and other written materials.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

Making persuasive presentations of ideas and recommendations.

Exercising sound independent judgement within established guidelines.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

- Sitting for long periods of time and walking and/or standing is only required occasionally.

DRAFT

- View computer screens and type for prolonged periods of time.

Working conditions:

- Work is primarily performed in a typical office environment.
- May be required to attend public and other meetings after standard working hours.

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Principal Systems Analyst

Class Codes: 4T003

Salary Grade: 143

Bargaining Unit: Represented, Technical

Established Date: July 1, 2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under general direction, performs the most complex IT systems assignments and provides project leadership and oversight of critical IT initiatives, including the analysis, design, development, implementation, and maintenance of enterprise IT solutions.

DISTINGUISHING CHARACTERISTICS

This class provides the most complex and specialized IT services in support of the Air District's goals and objectives. Incumbents are responsible for providing subject matter expertise and oversees the most advanced IT projects and solutions, requiring extensive expertise and independent judgment. Incumbents provide technical leadership on major projects, manage complex IT systems, and coordinate efforts across functional areas.

This class is distinguished from the Supervising Systems Analyst is that the latter assigns, supervises, and evaluates the work of assigned staff on a continuing basis. This class is also distinguished from the Manager level in that the latter has managerial responsibility for assigned programs and staff, and for all defined functional areas.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a manager. No supervision is exercised over others.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Provides technical leadership for the design, implementation, and maintenance of enterprise IT systems.

Provides lead direction, and reviews the work of staff. Prioritizes and follows up on work assignments to ensure timely and accurate completion.

Advises management on IT governance, policies, and strategies to align with organizational goals.

Leads the architecture and integration of IT solutions across platforms, ensuring scalability, interoperability, and security.

Develops and leads multi-year IT roadmaps and ensures alignment with strategic objectives.

Oversees major IT initiatives, including planning, resource allocation, risk management, and stakeholder engagement.

Ensures timely delivery of projects while adhering to budget constraints and quality standards.

Resolves the most complex IT issues, providing technical expertise and innovative solutions.

Develops advanced monitoring and optimization strategies to ensure system performance and reliability.

Develops and enforces IT standards, policies, and best practices for system security, data integrity, and operational efficiency.

Ensures compliance with District, local, state, and federal IT regulations.

Leads the implementation of CI/CD pipelines and other DevOps practices to improve deployment processes.

Automates routine IT tasks to enhance efficiency and reduce operational risks.

Oversees the design and optimization of data pipelines, warehouses, and analytics platforms.

Ensures the security, accessibility, and integrity of organizational data services.

DRAFT

Represents the District in meetings with external stakeholders, vendors, and partner organizations.

Prepares and delivers presentations, reports, and technical documentation to diverse audiences.

Provides guidance and training to IT staff on complex systems and emerging technologies.

Participates in the preparation of the strategic goals and objectives, and budget of the assigned programs.

Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

The items listed below are the minimum requirements for this classification.

Bachelor's degree from an accredited college or university in computer science, information technology, or a closely related field and four years of experience in systems analysis, design, and IT project management, including significant experience in leading large-scale IT initiatives.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

LICENSES AND CERTIFICATIONS:

None.

OTHER REQUIREMENTS

Must be able to work standby and receive callback assignments outside of regular work hours.

KNOWLEDGE AND SKILLS

The minimum knowledge and skills needed to perform the essential duties of the classification.

Knowledge of:

Enterprise IT architecture and systems integration principles.

Cloud computing, virtualization, and cybersecurity frameworks.

DRAFT

Advanced database design and analytics platforms.

DevOps practices, including CI/CD pipelines and automation tools.

IT governance, compliance, and regulatory requirements.

Advanced project management methodologies and tools.

System integration and interoperability principles.

Managing and maintaining IT infrastructure and systems.

Data transfer processes and database management.

Network principles and infrastructure to support data and application integration.

IT best practices to ensure sufficient and secure systems operations.

Cybersecurity principles to protect data.

Building solutions using Software as a Service (SaaS) platforms.

Advanced principles of systems analysis, design, and integration.

IT security best practices, including cybersecurity frameworks.

Project management methodologies and tools.

Database management and data analytics techniques.

Programming languages, software development processes, and tools.

Skills in:

Leading complex, multi-disciplinary IT projects.

Analyzing and solving advanced technical issues.

Communicating IT concepts to technical and non-technical and diverse audiences.

Developing and implementing IT policies, standards, and procedures.

Mentoring and developing IT staff.

Leading technical projects and cross-functional teams.

Developing and maintaining documentation, including technical specifications.

Analytical thinking and problem solving.

DRAFT

Communicating effectively through excellent verbal, listening, and written communication.

Installing, monitoring, and maintaining systems and software.

Using system performance tools to determine hardware, software, communications and software performance levels and making necessary adjustments.

Using various methods, procedures, techniques and programming languages involved in implementing, maintaining and fine-tuning computer hardware and software, communications systems and databases.

Managing multiple tasks, prioritizing workloads, and meeting established deadlines in a dynamic environment.

Training, reviewing, and evaluating the work of professional, technical, and support staff.

Exercising sound independent judgment and decision making within established guidelines.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

Some positions in this classification may require the following:

- Sitting for long periods of time and walking and/or standing is only required occasionally.
- View computer screens and type for prolonged periods of time.
- Occasionally be required to lift up to 50 pounds, with assistance.

Working conditions:

- Work is primarily performed in a typical office environment.
- May include on-site support as needed.
- Occasional travel to support satellite sites.
- Work requires occasional after-hours or weekend support.

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Public Information Officer I/II

Class Codes: 8T012/7T020

Salary Grade: 130/134

Bargaining Unit: Represented, Technical

Established Date: July 1, 2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under general supervision, develops and implements comprehensive public information and media relations programs for the Air District.

DISTINGUISHING CHARACTERISTICS

Public Information Officer I is the entry-level class of the Public Information Officer series. Initially under close supervision, incumbents learn Air District policies, procedures, and regulations in preparation for handling media inquiries regarding the Air District's practices and for developing media content. As experience is gained, duties become more diversified and are performed with greater independence of action within established guidelines. This class is alternately staffed with Public Information Officer II and incumbents may advance to the higher level after gaining experience and demonstrating proficiency which meets the qualifications of the higher-level class.

Public Information Officer II is the journey-level class of this series, fully competent to perform the full range of duties. Incumbents are expected to exercise more initiative and independent judgment and are responsible for assignments requiring a higher degree of working knowledge.

This class is distinguished from Senior Public information Officer in that the latter performs the more complex assignments and provides lead direction on projects.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a supervisor or manager. No supervision is exercised over others.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Creates, edits, and produces high-quality multimedia content, including developing print materials, videos, writing text and creating graphics and other digital assets for social media, the Air District website, and other media platforms.

Applies advanced digital media techniques to support the Air District's communication strategies and ensures content aligns with organizational goals.

Acts as the primary spokesperson for the Air District, conducts media interviews, and responds to inquiries.

Develops and maintains strong relationships with media contacts to ensure accurate and effective communication of air quality information and Air District initiatives.

Oversees contracts related to print and digital media production and public communication plans.

Coordinates media vendor relationships, including sourcing, evaluating, and overseeing contracts and billing to ensure projects are completed on time and within budget.

Directs communication during key events and air quality alerts, provides media outreach, and produces written materials for various projects.

Develops and implements content strategies to align with objectives.

Writes, edits, and distributes press releases and other communication materials to inform the public and media about significant updates, air quality-related incidents and events.

Uses communication tools and social media to promptly reach the public and media during incidents, crisis response, and special programs.

Responds to news media inquiries, pitches feature stories, makes public presentations, and produces written media outreach materials.

Assists with internal reporting and serves as liaison for administrative committees.

DRAFT

Trains representatives from other divisions for media interviews to ensure accuracy of information being reported.

Participates in air quality-related incident and wildfire smoke response and Spare the Air media officer rotational duty, and remains available for short-notice media interviews, including occasional live on-air segments.

Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

The items listed below are the minimum requirements for this classification.

Public Information Officer I: Bachelor's degree from an accredited college or university in journalism, communications, or a closely related field and one year of experience performing professional public relations or journalism duties.

Public Information Officer II: In addition to the above, at least one year of professional experience in developing and implementing a public information and/or media relations program.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

LICENSES AND CERTIFICATIONS:

Some positions in this classification may require possession of a valid California driver's license or ability to obtain one.

OTHER REQUIREMENTS

None.

KNOWLEDGE AND SKILLS

The minimum knowledge and skills needed to perform the essential duties of the classification.

Knowledge of:

Fundamentals of public and community relations, mass communication, and media outreach strategies.

Social media platforms, digital advertising strategies, and best practices for content creation and audience engagement.

DRAFT

Principles of graphic design, layout, and branding.

Proficiency in using design software.

Basic understanding of air quality issues and environmental regulations, and best practices for communicating scientific information to the public.

Application of Associated Press (AP) Style for professional writing.

Skills in:

Writing clear, concise, and engaging content for a variety of audiences.

Adapting messages to suit different audiences and communication platforms.

Public speaking and communicating effectively with the media and the public.

Coordinating multiple projects, meeting deadlines, and maintaining productivity in a fast-paced environment.

Creating visually appealing content using graphic design tools.

Managing and growing social media accounts, creating digital campaigns, and analyzing performance metrics.

Editing and producing high-quality photo and video content using appropriate editing software.

Gathering and synthesizing information from various sources to develop content for multiple communication channels.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

Some positions in this classification may require the following:

- Sitting for long periods of time and walking and/or standing is only required occasionally.
- Standing for long periods of time at offsite media or community events may be required.
- Setup of media or community event equipment and materials at offsite locations may be required.
- View computer screens and type for prolonged periods of time.

DRAFT

- May occasionally be required to lift up to 50 pounds.

Working conditions:

- Work is primarily performed in a typical office environment.
- Work is sometimes performed in various public environments and outreach events.
- Rotating on-call schedule for evenings, weekends, and holidays.
- Respond to incidents and attend meetings and events after standard working hours as required.

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Public Information Technician

Class Codes: 7T038

Salary Grade: 126

Bargaining Unit: Represented, Technical

Established Date: July 1,2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under close supervision, performs administrative work supporting the public information and media relations programs such as assisting with press conferences and outreach campaigns, responding to public inquiries, and performing event planning activities.

DISTINGUISHING CHARACTERISTICS

Public Information Technician is the entry-level public information support classification. Under close supervision, incumbents learn Air District policies, procedures, and regulations in preparation for handling public and media inquiries regarding the Air District's practices and for developing media content. As knowledge and experience is gained, assignments are performed with more independence within established guidelines and procedures.

This class is distinguished from administrative support positions in that the latter provides general and routine office support. This class is also distinguished from Public Information Officer I/II in that the latter is responsible for developing and implementing comprehensive public information and media outreach programs and initiatives.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a supervisor or manager. No supervision is exercised over others.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Performs various administrative tasks, including, but not limited to, preparing forms, creating and maintaining organized electronic files, routine news clips, media coverage reports, print materials, and social media posts.

Identifies and evaluates potential events and sponsorship opportunities.

Conducts market research to assess the viability of events, including analyzing target audiences, competitor events, and industry trends.

Compiles and presents research findings to stakeholders, providing recommendations for event participation or sponsorship.

Serves as the primary point of contact for event organizers, vendors, and partners, ensuring clear and timely communication.

Coordinates logistics with Air District staff and external vendors, including assisting with negotiating contracts, scheduling deliveries, and managing material orders.

Partners with vendors and orders event materials and Air District logo products.

Creates invitations, notifications, and other event marketing communications.

Maintains detailed records of all correspondence and agreements, ensuring that all parties are informed of expectations and deadlines.

Assists with preparing, reviewing, and editing contracts related to event participation, sponsorship, and vendor agreements. Ensures that all contracts comply with organizational policies and legal requirements.

Engages with event attendees, providing information, answering questions, and promoting agency initiatives.

Sets up and breakdowns of event booths, displays, and materials, ensuring a professional and welcoming presence.

Updates and maintains operational procedures to enhance staff knowledge and skills.

Reviews applications and other documents for completeness.

Monitors email inboxes, answers phones, and responds with accurate and timely information.

DRAFT

Gathers and provides requested information, data, reports, or other information as requested.

Attends outreach events representing the Air District and providing information about programs.

Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

The items listed below are the minimum requirements for this classification.

Associate's Degree with coursework journalism, communications, or a related field.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

LICENSES AND CERTIFICATIONS:

Some positions in this classification may require possession of a valid California driver's license or ability to obtain one.

OTHER REQUIREMENTS

None.

KNOWLEDGE AND SKILLS

The minimum knowledge and skills needed to perform the essential duties of the classification.

Knowledge of:

Basic principles of event planning, press conference coordination, and vendor management.

Social media platforms.

Basic theories of air quality principles and practices.

Industry language and terms.

Skills in:

Coordinating logistics, managing deadlines, and ensuring smooth execution of events.

DRAFT

Performing accurate data entry, data management, and reporting.

Supporting internal and external stakeholder and customer service.

Maintaining detailed and organized records of event logistics, contracts, and correspondence.

Conducting thorough research and exhibiting resourcefulness.

Adapting to changing circumstances and resolving issues proactively.

Exercising sound independent judgment within established guidelines.

Communicating effectively through excellent verbal, listening, and written communication.

Organization and time management, including managing multiple projects and deadlines.

Working well in a team-oriented, collaborative environment.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

Some positions in this classification may require the following:

- Sitting for long periods of time and walking and/or standing is only required occasionally.
- Standing for long periods of time at offsite media or community events may be required.
- Setup of media or community event equipment and materials at offsite locations may be required.
- View computer screens and type for prolonged periods of time.
- May occasionally be required to lift up to 50 pounds.

Working conditions:

- Work is primarily performed in a typical office environment and some work at offsite indoor and outdoor community events may be required.
- Work is sometimes performed in various public environments for outreach events.

DRAFT

- Respond to incidents and attend meetings and events after standard hours as required.

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Senior Accountant

Class Codes: 6P007

Salary Grade: 138

Bargaining Unit: Represented, Professional

Established Date: July 1, 2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under general direction, provides lead direction and performs the complex financial and accounting work.

DISTINGUISHING CHARACTERISTICS

This is the advanced lead level in the accountant series. Incumbents provide lead direction and are assigned to perform the complex financial and accounting activities that support financial reporting, modeling, and the maintenance of the general ledger while exercising independent judgement.

This class is distinguished from Accounting Supervisor in that the latter assigns, supervises, reviews and evaluates the work of assigned staff on a continuing basis.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a supervisor or manager. No supervision is exercised over others.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Provides project supervision and performs complex and specialized accounting work.

Provides lead direction, coordination, training and work review to staff on routine, continuing, or well-defined tasks.

Provides a lead role in developing, implementing, and monitoring new and/or revised accounting, budgeting, and auditing policies, procedures, and systems.

Reviews existing accounting, budgeting, grants, and auditing policies, procedures, and systems for effectiveness and efficiency, and assists with developing, overseeing, and implementing a plan for improvement. Writes financial accounting practices and procedures.

Prepares and distributes monthly and quarterly financial reports for the Board of Directors and Air District management.

Researches and resolves technical questions and provides interpretations of applicable regulatory or legislative requirements regarding accounting processes, fiscal controls, reporting, and the maintenance of Air District financial records for compliance.

Interprets and explains new Government Accounting Standards Board (GASB) statements and the applicability to the Air District.

Provides project leadership for the maintenance and upgrade of the Air District's accounting system.

Confers with and advises Air District staff and other interested parties regarding accounting, financial grant reporting, and compliance with financial policies and procedures.

Provides a lead role in coordinating the development of the annual Air District operating budget and capital improvement budget and assists in preparing financial models and long-range financial plans.

Assists with budget inquiries and provides instructions and training for budget input and preparation.

Participates in internal and external audit activities. Performs the most difficult and complex audits.

Conducts a variety of feasibility studies and analyses regarding the Air District's accounting, budgeting, and auditing policies, procedures, and systems.

Coordinates information received from division representatives regarding their accounting and budgeting policies, procedures, and system needs, and makes appropriate recommendations.

DRAFT

Provides oversight, review, and coordination of fiscal operations, grant accounting, payroll and benefits data for the annual budget and financial reporting.

Leads grant accounting and reconciliations. Reviews and analyzes grant accounting expenditures to ensure compliance with grant agreement. Assists appropriate divisions to process reimbursement claims and supporting forms required by grantee agency.

Assists with grant audits, inquiries, and financial reporting.

Calculates and allocates quarterly interest to various accounts including grants accounts.

Works with appropriate divisions to upload, carryover, and reconcile project budgets and budget adjustments, project reclassification, and prepare revenue recognition journal entries.

Perform other related duties as assigned.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

The items listed below are the minimum requirements for this classification.

Bachelor's degree from an accredited college or university in accounting, finance, business, or a closely related field, and three years of accounting, budgeting, or auditing experience.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

LICENSES AND CERTIFICATIONS:

None.

OTHER REQUIREMENTS

None.

KNOWLEDGE AND SKILLS

The minimum knowledge and skills needed to perform the essential duties of the classification.

Knowledge of:

Principles and practices of general, fund, and governmental accounting, including financial statement preparation and methods of financial reporting.

DRAFT

Policies, procedures, and systems used in accounting and budgeting.

Auditing principles, practices, and methods.

Grant management and accounting practices, including fund management and compliance.

Applicable federal, state, and local laws, rules, and regulations.

Principles of budgetary administration and control.

Financial accounting software.

Skills in:

Analyzing a variety of accounting, budgeting, and auditing policies, procedures, and systems.

Coordinating and reviewing the work of assigned staff on a project basis.

Reviewing and verifying the accuracy of financial data and associated legal documents.

Analyzing, evaluating, and reconciling complex financial data.

Preparing clear, concise, and complete financial reports and written correspondence.

Recommending and implementing improved accounting methods and procedures.

Interpreting and applying complex financial rules, regulations, and ordinances.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

Exercising sound independent judgement within established guidelines.

Communicating effectively through excellent verbal, listening, and written communication.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

Some positions in this classification may require the following:

- Sit or stand for extended periods of time and bend or kneel to access files.
- View computer screens and type for prolonged periods of time.
- Lift and carry files and boxes weighing up to 15 pounds.

Working conditions:

DRAFT

- Work is primarily performed in a typical office environment.

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Senior Air Quality Chemist

Class Codes: 6P002

Salary Grade: 138

Bargaining Unit: Represented, Professional

Established Date: July 1, 2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under general direction, provides lead direction and performs complex functions in developing, applying and overseeing analytical methods and procedures for laboratory operations.

DISTINGUISHING CHARACTERISTICS

This is the advanced lead level in the chemist series. In addition to laboratory analyses, incumbents provide lead direction and perform complex functions that require the ability to apply and interpret scientific knowledge and judgment to analytical processes, equipment, and technical communication.

This class is distinguished from the Principal Air Quality Chemist in that the latter is responsible for providing subject matter expertise, overseeing specific program areas, and providing lead direction for specialized laboratory projects.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a supervisor or manager. No supervision is exercised over others.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Provides lead direction, coordination, training and work review to staff on routine, continuing, or well-defined tasks.

Performs the more difficult and complex sample analysis. Researches and develops new analytical methods and procedures to detect and analyze environmental contaminants.

Follows safety protocols and ensures the laboratory is clean and organized to maintain a safe and efficient working environment. Prepares and performs quantitative and qualitative analyses or organic and inorganic samples related to air contaminants utilizing and variety of methods and techniques.

Interprets and evaluates analysis results, identifies and determines the cause of problems, and recommends, implements, and directs corrective actions.

Sets up, calibrates, operates, modifies, and performs maintenance, adjustments, and repairs to a variety of complex laboratory and air monitoring instruments and equipment.

Maintains records and prepares reports, correspondence, and other written materials related to the work.

Evaluates and recommends purchases of new equipment and supplies for the laboratory.

Represents the Air District in workshops, meetings, and advisory and technical committees.

May direct and review the work of technicians and assist in training other laboratory staff.

Maintains current knowledge of new analytical methods, instrumentation, and regulatory requirements and makes recommendations.

Provides technical leadership and acts as a mentor to technicians and less experienced chemists.

Participates in regulatory audits.

May appear in court as an expert witness during litigation.

Researches, develops, and implements new laboratory methods, standard operating procedures, and policies.

Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

The items listed below are the minimum requirements for this classification.

DRAFT

Bachelor's degree from an accredited college or university in chemistry or a closely related field, and three years of experience performing chemical analyses of environmental contaminants in an environmental laboratory.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

LICENSES AND CERTIFICATIONS:

None.

OTHER REQUIREMENTS

None.

KNOWLEDGE AND SKILLS

The minimum knowledge and skills needed to perform the essential duties of the classification.

Knowledge of:

Principles and practices of organic and environmental chemistry related to air quality analysis.

Sample preparation and handling techniques.

Laboratory equipment and its use.

Principals of quality control and quality assurance.

Safety practices and safe work methods related to the work.

Industry language and terms.

Recordkeeping principles and practices.

Local, state, and federal air quality regulations.

Professional writing techniques.

Qualitative and quantitative chemical analyses, including complex formulas.

Methods used in the analysis of environmental contaminants.

General instrumental upkeep, preventative maintenance, and repair.

Skills in:

DRAFT

Serving as a liaison and fostering collaboration and teamwork.

Using, troubleshooting, and repairing laboratory instrumentation.

Utilizing office, communication, and laboratory computer programs and software.

Demonstrating attention to detail and effective time management.

Communicating verbally and in writing, including conveying technical information to individuals with varying levels of technical knowledge.

Analyzing and interpreting laboratory data, drawing sound conclusions, and making appropriate recommendations.

Preparing clear, concise, and complete technical reports, correspondence, and other written materials.

Documenting laboratory tasks and analyses in a legally defensible manner.

Exercising sound independent judgment within established guidelines.

Reading, understanding, interpreting, and applying local, state, and federal requirements.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

Recommending and implementing improved laboratory methods and procedures.

Developing and adapting analytical methods to address new or unusual problems and ensure reliable results.

Training others in analytical techniques and work procedures.

Handling chemicals safely.

Preparing and delivering effective presentations.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

Some positions in this classification may require the following:

- Sit or stand for long periods using laboratory instrumentation and a computer.
- Bend, squat, twist, kneel, push, and pull.
- Lift, carry, and push up to 20 pounds unassisted and 50 pounds assisted.
- Use Personal Protective Equipment (PPE) to avoid or limit chemical and physical hazard exposure.

DRAFT

Working conditions:

- Work is primarily performed in a professional laboratory environment.
- Exposure to toxic and hazardous materials.
- May be exposed to temperature extremes.
- May be exposed to loud noise and machinery.
- Occasional travel to conferences, workshops, and trainings.

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Senior Air Quality Meteorologist

Class Codes: 6P004

Salary Grade: 139

Bargaining Unit: Represented, Professional

Established Date: July 1, 2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under general direction, provides lead direction, and performs the more complex meteorological and air quality forecasting, air quality incident analyzation, and modeling.

DISTINGUISHING CHARACTERISTICS

This is the advanced lead level in the meteorology series. Incumbents perform the more complex meteorological studies and meteorological modeling systems, as well as reviewing, assessing, and improving modeling systems.

This class is distinguished from the Principal Air Quality Meteorologist in that the latter performs the most complex assignments and leads complex projects. This class is also distinguished from the Supervising Air Quality Meteorologist in that the latter assigns, supervises, and evaluates the work of assigned staff on a continuing basis.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a supervisor or manager. No supervision is exercised over others.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Performs the more difficult and complex meteorological and air quality data analysis, forecasting, and modeling.

Provides lead direction, coordination, training, and work review to staff on routine, continuing, or well-defined tasks.

Coordinates the Air District's quality assurance programs for meteorological monitoring systems.

Coordinates telemetry and satellite data collection and analysis systems.

Determines source compliance with Air District regulations. Determines the responsible source for exceedances of air quality standards. Recommends appropriate action to achieve or maintain compliance.

Identifies, designs, and conducts technical and statistical studies and reports on findings.

Represents the Air District in coordinating activities with other operational and research groups and public agencies.

Collects, analyzes, and interprets meteorological and air contaminated data from various sources including surface and upper air stations, satellites, and radar.

Studies and interprets synoptic reports, maps, satellite products, photographs, and prognostic charts and air contaminant data to analyze past conditions and predict long- and short- range meteorological and air quality conditions.

Issues various periodic and special air quality advisories.

Maintains meteorological and air quality databases. Ensures quality control of data sets.

Performs statistical analysis and modeling of complex meteorological and air quality relationships. Develops and recommends model improvements.

Writes and implements computer programs and software to manipulate and analyze meteorological and air quality data.

Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

The items listed below are the minimum requirements for this classification.

DRAFT

Bachelor’s degree from an accredited college or university in meteorology or a closely related field and three years of professional meteorological experience involving analysis, forecasting, and modeling.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

LICENSES AND CERTIFICATIONS:

Some positions in this classification may require possession of a valid California driver's license or ability to obtain one.

OTHER REQUIREMENTS

None.

KNOWLEDGE AND SKILLS

The minimum knowledge and skills needed to perform the essential duties of the classification.

Knowledge of:

Principles and theories of scientific meteorology, including physics, mathematics, statistics, and their applications to environmental air quality.

Meteorological and air quality analysis, forecasting, and modeling.

Advanced meteorological and air quality modeling techniques.

Quality assurance and quality control practices for meteorological monitoring and data management systems

Methods and tools for collecting, interpreting, and analyzing meteorological and air quality data from various sources.

Applicable federal, state, and local laws, rules, and regulations.

Principles and techniques of scientific research and data analysis.

Skills in:

Performing complex modeling studies of the relationships between meteorology and air quality.

Using statistical and computational methods to evaluate complex relationships and improve predictive models.

DRAFT

Developing and implementing quality assurance and data verification programs.

Applying meteorological and air quality principles and theories.

Preparing and analyzing meteorological and air quality data and predicting accurate forecasts.

Communicating effectively through exceptional verbal, listening, and written communication.

Disseminating complex information to groups and individuals with varying levels of scientific and technical knowledge.

Time management and prioritizing multiple tasks while meeting established deadlines.

Preparing clear and concise technical reports, correspondence, and other written materials.

Effectively and quickly responding to demands in a proactive manner.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

Some positions in this classification may require the following:

- Sitting for long periods of time and walking and/or standing is only required occasionally.
- View computer screens and type for prolonged periods of time.
- Climb stairs, ladders, and towers.
- Use Personal Protective Equipment (PPE) to avoid or limit chemical and physical hazard exposure.

Working conditions:

- Work is primarily performed in a typical office environment.
- May attend public and other meetings outside of standard working hours.
- Occasional travel to facilities, such as monitoring, burn and incident sites.
- Potential exposure to toxic or hazardous materials when visiting sites.

DRAFT

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Senior Atmospheric and Air Quality Modeler

Class Codes: 6P005

Salary Grade: 144

Bargaining Unit: Represented, Professional

Established Date: July 1, 2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under general direction, provides lead direction and performs the most complex atmospheric and air quality modeling and research.

DISTINGUISHING CHARACTERISTICS

This is the advanced lead level in this specialized series. Incumbents provide lead direction and perform highly complex atmospheric modeling research. Incumbents exercise independent judgment and the work requires extensive scientific knowledge.

This class is distinguished from the Manager level in that the latter has managerial responsibility for assigned programs and staff, and for all defined functional areas.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a supervisor or manager. No supervision is exercised over others.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Provides lead direction, coordination, training, and work review to staff on routine, continuing, or well-defined tasks.

Selects, optimizes, maintains, and applies complex meteorological and photochemical models to predict and analyze air quality and utilizes data from these models to aid in the Air District's quality planning process and decision-making process to improve air quality.

Researches and acquires air quality monitoring data relevant to the modeling studies conducted and evaluates air quality model predictions using the monitoring data.

Designs, implements, and maintains the more complex modeling systems.

Develops modeling tools and methodologies to simulate, analyze, and rank air quality control strategies.

Provides lead direction in developing simulation techniques and methodologies to evaluate and interpret modeling results. Ensures appropriate models are used, analyzes and interprets simulation results, , and prepares summary of findings.

Reviews regulatory model evaluation guidelines to ensure Air District models comply with guidelines.

Leads and coordinates with Air District staff to design, create, and evaluate emissions inventory to apply and integrate into modeling systems.

Utilizes existing models and other analytical tools to quantify health impacts and exposure related to air pollution. Assesses model outputs to support the rulemaking process.

Designs field studies for the purpose of collecting data for modeling.

Establishes and maintains professional contacts and working relationships with modeling specialists outside the Air District and supports collaborative projects and regulatory actions.

Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

The items listed below are the minimum requirements for this classification.

Bachelor's degree from an accredited college or university in atmospheric science, meteorology, environmental science, or related field, and three years of experience in modeling and scientific research.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

DRAFT

LICENSES AND CERTIFICATIONS:

None.

OTHER REQUIREMENTS

None.

KNOWLEDGE AND SKILLS

The minimum knowledge and skills needed to perform the essential duties of the classification.

Knowledge of:

Atmospheric processes and their underlying sciences.

Development and implementation of numerical algorithms relevant to chemistry or atmospheric chemistry.

Preparation of model inputs and post-processing of model outputs.

Available monitoring networks for obtaining measurement data of gaseous and particulate atmospheric pollutants.

Techniques and methodologies for evaluating model performance through statistical analysis and data visualization.

Guidelines for regulatory air quality model applications.

Relevant software and programming language.

Skills in:

Problem solving and analytical skills.

Designing, evaluating, and analyzing modeling results to develop recommendations for air quality regulatory actions and plans.

Developing and maintaining documentation of computer files, models, input/output data, and utility programs.

Applying mathematical and statistical models and techniques.

Designing and conducting complex research projects.

Preparing clear, concise, and complete technical reports, correspondence and other written materials.

DRAFT

Time management and prioritizing multiple tasks while meeting established deadlines.

Exercising sound independent judgement within established guidelines.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

Some positions in this classification may require the following:

- Sitting for long periods of time and walking and/or standing is only required occasionally.
- View computer screens and type for prolonged periods of time.

Working conditions:

- Work is primarily performed in a typical office environment.
- May be required to work after standard working hours.
- Occasional travel to conferences, workshops, and trainings.

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Senior Environmental Planner

Class Codes: 6P006

Salary Grade: 138

Bargaining Unit: Represented, Professional

Established Date: July 1, 2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under general direction, provides lead direction to environmental planning staff and performs complex functions in environmental, air quality and climate planning and program activities.

DISTINGUISHING CHARACTERISTICS

This is the advanced lead level in the environmental planning series. Incumbents provide lead direction and perform the more specialized and complex planning functions. Incumbents are assigned to planning activities that require considerable professional knowledge and the use of independent judgement.

This class is distinguished from Principal Environmental Planner in that the latter has responsibility for implementing new projects and handling the most difficult, sensitive, novel or critical projects. This class is also distinguished from the Supervising Environmental Planner in that the latter assigns, supervises, and evaluates the work of assigned staff on a continuing basis.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a supervisor or manager. No supervision is exercised over others.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Provides lead direction, coordination, training and work review to staff on routine, continuing, or well-defined tasks.

Leads the development and implementation of plans to reduce air pollution and greenhouse gas emission.

Leads and conducts research studies, prepares reports, and develops recommendations on land use project impacts, local and regional plans, transportation and related infrastructure projects, and stationary and mobile sources of pollution.

Tracks and reports on progress on Air District plans, policies and projects addressing air quality and climate impacts in consultation with Air District staff, external partners, community organizations and other stakeholders.

Tracks, reviews, comments, and prepares the more complex environmental studies and reports pursuant to the California Environmental Quality Act (CEQA).

Leads and participates in updating the Air District's CEQA documents, supporting tools and technical guidance.

Provides technical assistance to local governments on health protective and equitable air quality and climate planning, land use policy, and CEQA. Participates in the development and delivery of resources such as model ordinances, best practices, and guidelines for local climate action and land use plans and policies.

Develops and maintains strong working relationships with community-based organizations, community members, local governments, regional, state and federal agencies.

Prepares a variety of written communications, including analytical reports, emails, briefs, presentations, comment letters on projects, plans or policies.

Collects, creates, and visualizes geospatial data, creates interactive online maps, and performs statistical and geospatial analysis to support Air District programs, community-based planning, and local and regional policy.

Leads and reviews various grant programs, including the procurement, administration, tracking and reporting of grants and contracts.

Represents the Air District as a technical expert at meetings, conferences and working groups.

DRAFT

Leads responses to public records requests and other inquiries from governmental officials, consultants and the public.

Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

Bachelor's degree from an accredited college or university in regional, urban, or environmental planning or a closely related field and three years of professional environmental planning, policy or program experience.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

LICENSES AND CERTIFICATIONS:

None.

OTHER REQUIREMENTS

None.

KNOWLEDGE AND SKILLS

Knowledge of:

Objectives, principles, procedures, standards, practices, information sources and trends in the field of environmental impact assessment and land use, transportation, and environmental planning.

Application of land use, physical design, demographic, environmental and social/economic concepts as applied to regional planning.

Statistical analysis and mathematical concepts related to land use, transportation, and environmental planning process.

Applicable Air District rules and regulations and state and federal laws.

Application of datasets and development of visualizations including mapping and charts

Local and regional government organization, functions, and practices.

Meeting and workshop development including best practices for engagement and facilitation.

DRAFT

Project management concepts and methods for developing environmental planning programs.

Skills in:

Understanding and applying federal, state, and local laws, regulations, policies, procedures and standards pertaining to the environmental review and planning process.

Understanding and applying analytical procedures, data analysis and documentation, map, graphs and statistical data interpretation.

Preparing clear, concise reports, correspondence and other written materials.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

Making persuasive presentations of ideas and recommendations.

Exercising sound independent judgement within established guidelines.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

- Sitting for long periods of time and walking and/or standing is only required occasionally.
- View computer screens and type for prolonged periods of time.

Working conditions:

- Work is primarily performed in a typical office environment.
- May be required to attend public and other meetings after standard working hours.

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Senior Public Information Officer

Class Codes: 6T005

Salary Grade: 138

Bargaining Unit: Represented, Technical

Established Date: July 1, 2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under general direction, provides lead direction and performs the more complex assignments in the public information and media relations programs.

DISTINGUISHING CHARACTERISTICS

This is the advanced lead level in the Public Information Officer series. Incumbents provide lead direction on assignments and perform highly specialized and difficult public education, media relations and public information functions.

This class is distinguished from Supervising Public Information Officer in that the latter assigns, supervises, and evaluates the work of assigned staff on a continuing basis.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a supervisor or manager. No supervision is exercised over others.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Leads and coordinates the more difficult public information and media relations activities.

Provides lead direction, coordination, training, and work review to staff, on routine, continuing, or well-defined tasks.

Prepares and disseminates press releases, educational materials, and responses to public and media inquiries.

Collaborates with senior leadership to refine and adjust communication strategies based on evolving priorities and feedback.

Oversees the integration of new platforms and tools to enhance public engagement and communication effectiveness.

Develops crisis communication protocols and works closely with other divisions to ensure preparedness.

Proactively identifies and addresses internal communication needs and collaborates with leadership to ensure internal and external communication efforts are aligned with the Air District's overall mission.

Edits and proofreads materials to ensure accuracy, clarity, and consistency and provides additional writing, editing, and proofreading support for various department projects.

Develops and implements communication strategies and oversees the production of informational materials.

Writes, edits, designs, and oversees the production of media kits, web content, and other informational reference materials.

Coordinates and leads activities related to special programs including announcements, notifications, press releases, media responses, and Air Quality Advisory notices.

Participates in air quality-related incident and wildfire smoke response and Spare the Air media officer rotational duty, and remains available for short-notice media interviews, including occasional live on-air segments.

Provides oversight and guidance for public-facing website content and agency publications and materials content.

Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

The items listed below are the minimum requirements for this classification.

DRAFT

Bachelor’s degree from an accredited college or university in journalism, communications, or a closely related field and three years of professional experience in developing and implementing a public information and/or media relations program.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

LICENSES AND CERTIFICATIONS:

Some positions in this classification may require possession of a valid California driver's license or ability to obtain one.

OTHER REQUIREMENTS

None.

KNOWLEDGE AND SKILLS

The minimum knowledge and skills needed to perform the essential duties of the classification.

Knowledge of:

Environmental and air quality policies, regulations, and standards, including how they interact with federal, state, and local regulations.

Advanced knowledge of crisis communication strategies and leading communication efforts during emergencies.

Strategic communication planning for developing and executing comprehensive strategies aligned with organizational goals.

Grammar, syntax, and style for writing and editing communication pieces including Associated Press Style.

Media relations strategies, including effective communication and handling media inquiries.

Principles, theories, and techniques of journalism, expository writing, proofreading, and editing.

Principles and applications of design, production, printing, and layout techniques.

Technical software for creating, editing, and producing publications.

Skills in:

DRAFT

Analytical and strategic thinking to assess the effectiveness of communication strategies, identify areas for improvement, and adjust tactics as needed.

Conducting media interviews, acting as spokesperson, and managing complex media interactions, including high-stress situations like live broadcasts.

Crisis communication including developing and delivering appropriate messages quickly and accurately.

Researching, compiling, and summarizing complex reports and informational materials.

Planning and organizing news conferences and public meetings.

Communicating effectively through excellent verbal, listening, and written communication.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

Some positions in this classification may require the following:

- Sitting for long periods of time and walking and/or standing is only required occasionally.
- Standing for long periods of time at offsite media or community events may be required.
- Setup of media or community event equipment and materials at offsite locations may be required.
- View computer screens and type for prolonged periods of time.
- May occasionally be required to lift up to 50 pounds.

Working conditions:

- Work is primarily performed in a typical office environment.
- Work is sometimes performed in various public environments and outreach events.
- Rotating on-call schedule for evenings, weekends, and holidays.
- Respond to incidents and attend meetings and events after standard working hours as required.

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Senior Systems Analyst

Class Codes: 6T010

Salary Grade: 139

Bargaining Unit: Represented, Technical

Established Date: July 1, 2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under general direction, performs the more complex systems analysis, provides technical expertise, and leads the design, development, implementation, and maintenance of complex IT systems.

DISTINGUISHING CHARACTERISTICS

This is the advanced lead level in the systems analyst series. Incumbents perform complex work, provide lead direction to project teams, resolve complex issues and provide advanced technical solutions.

This class is distinguished from Principal Systems Analyst in that the latter provides a higher level of leadership and broader scope of responsibility. This class is also distinguished from Supervising Systems Analyst, in that the latter assigns, supervises, and evaluates the work of assigned staff on a continuing basis.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a supervisor or manager. No supervision is exercised over others.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Provides lead direction, coordination, training and work review to staff on routine, continuing, or well-defined tasks.

Serves as a technical lead for complex IT projects, ensuring effective coordination and delivery.

Provides advanced systems analysis, design, and implementation for IT solutions.

Leads, designs, configures, and maintains enterprise IT systems, ensuring functionality and performance.

Develops strategies to enhance systems and address emerging business needs.

Leads, designs and implements CI/CD pipelines to streamline software development and deployment processes.

Develops automation scripts and tools to improve system reliability, scalability, and deployment speed.

Monitors and optimizes cloud and on-premises infrastructure to support development and operational needs.

Develops and maintains custom software applications to meet organizational needs, using programming languages such as Python, Java, or C#.

Integrates third-party APIs and tools into existing systems to enhance functionality and workflow efficiency.

Leads code reviews and collaborates with development teams to ensure high-quality software delivery.

Designs and manages data pipelines and ETL processes to support analytics and reporting functions.

Develops and optimizes database structures and queries for performance and scalability.

Ensures the security, integrity, and accessibility of data services across the organization, including compliance with data governance standards.

Resolves complex technical issues, including root cause analysis and system optimization.

Provides advanced troubleshooting for on-premises and cloud-based systems.

DRAFT

Collaborates with stakeholders to understand requirements and recommend solutions.

Prepares and delivers presentations, training, and technical documentation.

Ensures systems adhere to organizational policies and regulatory requirements.

Implements best practices for system security and data protection.

Leads IT initiatives, including planning, resource allocation, and tracking milestones.

Monitors project progress and provides updates to stakeholders.

Estimates level of effort across multiple IT disciplines

Stays current with emerging technologies and identifies opportunities for innovation.

Conducts feasibility studies and prepares recommendations for system improvements.

Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

The items listed below are the minimum requirements for this classification.

Bachelor's degree from an accredited college or university in computer science, information technology, or a closely related field and three years of experience in IT systems analysis, design, and project management, including significant experience in complex IT environments.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

LICENSES AND CERTIFICATIONS:
None.

OTHER REQUIREMENTS

Must be able to work standby and receive callback assignments outside of regular work hours.

KNOWLEDGE AND SKILLS

The minimum knowledge and skills needed to perform the essential duties of the classification.

Knowledge of:

DRAFT

System integration and interoperability principles.

Managing and maintaining IT infrastructure and systems.

Data transfer processes and database management.

Network principles and infrastructure to support data and application integration.

IT best practices to ensure sufficient and secure systems operations.

Cybersecurity principles to protect data.

Standard Query Language (SQL) servers, including the use of remote desktop tools.

Programming and markup languages.

Building solutions using Software as a Service (SaaS) platforms.

Advanced principles of systems analysis, design, and integration.

IT security best practices, including cybersecurity frameworks.

Project management methodologies and tools.

Database management and data analytics techniques.

Programming languages, software development processes, and tools.

Cloud computing platforms and virtualization technologies.

IT governance, compliance, and regulatory standards.

Skills in:

Leading technical projects and cross-functional teams.

Analyzing and resolving complex IT issues.

Communicating technical concepts to diverse audiences.

Developing and maintaining documentation, including technical specifications.

Managing multiple tasks and competing priorities effectively.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

Translating technical requirements to non-technical stakeholders.

Analytical thinking and problem solving.

DRAFT

Effective verbal, written, and active listening communication skills.

Managing multiple projects with competing deadlines.

Installing, monitoring, and maintaining systems including relational database management software.

Installing and using system performance tools to determine hardware, software, communications and performance levels and making necessary adjustments.

Using various methods, procedures, techniques and programming languages involved in implementing, maintaining and fine-tuning computer hardware and software, communications systems and databases.

Exercising sound independent judgment and decision making within established guidelines.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

Some positions in this classification may require the following:

- Sitting for long periods of time and walking and/or standing is only required occasionally.
- View computer screens and type for prolonged periods of time.
- Occasionally be required to lift up to 50 pounds, with assistance.

Working conditions:

- Work is primarily performed in a typical office environment.
- May include on-site support as needed.
- Occasional travel to support satellite sites.
- Occasional after standard hours work or weekend support required.

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Supervising Air Quality Meteorologist

Class Codes: 5P002

Salary Grade: 143

Bargaining Unit: Represented, Professional

Established Date: July 1, 2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under general direction, supervises the meteorological staff and participates in the most complex and highly specialized level of assigned meteorological activities in a variety of Air District functions.

DISTINGUISHING CHARACTERISTICS

This is the supervisory level in the Air Quality Meteorologist series. This class provides both supervision and professional meteorology services in support of the Air District's goals and objectives. Incumbents are responsible for ensuring adherence to the Air District's policies and procedures in the performance of a wide variety of air quality meteorology activities for the Air District.

This class is distinguished from the Manager level in that the latter has managerial responsibility for assigned programs and staff, and for all defined functional areas.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a manager. Responsible for direct supervision of staff.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Assigns, supervises, reviews, and evaluates the work of staff.

Prepares performance evaluations, participates in the staff selection, and provides training and professional development for assigned staff.

Supervises and participates in the coordination of the Air District's quality assurance programs for meteorological monitoring systems.

Supervises and participates in meteorological and air quality research in support of Air District goals and objectives.

Supervises and participates in the collection, analysis, and interpretation of meteorological

data gathered by surface and upper air stations, satellites, and radar.

Supervises and participates in the study and interpretation of synoptic reports, maps, satellite products, photographs, and prognostic charts and air contaminant data to analyze past conditions and predict long- and short-range meteorological and air quality conditions.

Oversees the issuance of various periodic and special air quality advisories and alerts.

Supervises and participates in the coordination of telemetry and satellite data collection and analysis systems.

Supervises and participates in determining compliance with Air District regulations by identifying responsible sources air quality standard exceedances, assessing regulatory compliance, and recommending enforcement and legal action.

Represents the Air District in meetings with the public, industry, and other agencies.

Supervises and participates in writing and implementing computer programs and software to collect, manipulate, and analyze meteorological and air quality data.

Applies scientific and mathematical theories, principles, models, and techniques to solve complex air pollution analysis and forecasting problems.

Supervises the development and maintenance of meteorological and air quality databases. Develops new procedures for quality assurance data sets. Addresses quality control of newly required data sets. Ensures timely completion of requirements.

Participates in the preparation of the strategic goals and objectives, and budget of the assigned programs.

DRAFT

Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

The items listed below are the minimum requirements for this classification.

Bachelor's degree from an accredited college or university in meteorology or a closely related field and four years of professional meteorological experience involving analysis, forecasting, and/or modeling, including at least one year of experience providing lead direction to staff.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

LICENSES AND CERTIFICATIONS:

Some positions in this classification may require possession of a valid California driver's license or ability to obtain one.

OTHER REQUIREMENTS

None.

KNOWLEDGE AND SKILLS

The minimum knowledge and skills needed to perform the essential duties of the classification.

Knowledge of:

Principles and practices of employee supervision including selection, planning, training, work evaluation and performance management.

Advanced principles and theories of scientific meteorology, including physics, mathematics, and statistics and their applications to environmental air quality.

Meteorological and air quality analysis, forecasting, and modeling.

Advanced meteorological and air quality modeling techniques.

Quality assurance and quality control practices for meteorological monitoring and data management systems.

Statistical software and tools used in modeling and forecasting operations.

DRAFT

Methods and tools for collecting, interpreting, and analyzing meteorological and air quality data from various sources.

Applicable federal, state, and local laws, rules, and regulations.

Principles and techniques of scientific research and data analysis.

Skills in:

Assigning, supervising, reviewing, and evaluating the work of professional, technical, and support staff.

Selecting and motivating staff and providing for their training and professional development.

Performing complex modeling studies to evaluate the relationships between meteorology, emissions, and air quality.

Collecting, verifying, and interpreting complex meteorological and air quality data to identify trends, evaluate compliance and improve predictive models.

Designing and executing advanced statistical and computational analyses to solve complex forecasting and air quality problems.

Developing and implementing quality assurance and data verification programs.

Applying advanced meteorological and air quality principles and theories to address complex challenges.

Communicating complex scientific and technical concepts effectively to diverse audiences, including through presentations and training sessions.

Disseminating information to groups and individuals with varying levels of technical knowledge.

Managing multiple tasks, prioritizing workloads, and meeting established deadlines in a dynamic environment.

Reviewing and writing computer programs and modeling applications related to meteorology and air quality.

Training, reviewing, and evaluating the work of professional, technical, and support staff.

Providing timely and proactive responses to project and organizational demands.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

DRAFT

Preparing clear and concise technical reports, correspondence, and other written materials.

Exercising sound independent judgement and decision making within established guidelines.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

Some positions in this classification may require the following:

- Sitting for long periods of time and walking and/or standing is only required occasionally.
- View computer screens and type for prolonged periods of time.
- Climb stairs, ladders, and towers.
- Use Personal Protective Equipment (PPE) to avoid or limit chemical and physical hazard exposure.

Working conditions:

- Work is primarily performed in a typical office environment.
- May attend public and other meetings outside of standard working hours.
- Occasional travel to facilities, such as monitoring, burn, and incident sites.
- Potential exposure to toxic or hazardous materials when visiting sites.

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Supervising Environmental Planner

Class Codes: 5P003

Salary Grade: 142

Bargaining Unit: Represented, Professional

Established Date: July 1, 2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under general direction, supervises staff and performs highly specialized and complex functions in environmental, air quality, and climate planning and program activities.

DISTINGUISHING CHARACTERISTICS

This is the supervisory level in the environmental planning series. This class provides both supervision and professional environmental planning services in support of the Air District's goals and objectives. Incumbents are responsible for handling difficult and/or innovative environmental planning activities for the Air District and providing subject matter expertise and project leadership in developing programs.

This class is distinguished from Manager in that the latter has managerial responsibility for assigned programs and staff and for all defined functional areas.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a manager. Responsible for direct supervision of staff.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Assigns, supervises, reviews, and evaluates the work of staff.

Prepares performance evaluations, participates in the staff selection, and provides training and professional development for assigned staff.

Supervises and participates in the most complex and sensitive research and analysis;, develops reports and recommendations on land use project impacts, local and regional plans, transportation and related infrastructure projects, and stationary and mobile sources of pollution.

Supervises and participates in the tracking and reporting progress on Air District plans, policies and projects addressing air quality and climate impacts in consultation with Air District staff, external partners, community organizations and other stakeholders.

Tracks, reviews, edits, and prepares complex environmental studies and reports pursuant to the California Environmental Quality Act (CEQA).

Coordinates and participates in updated the Air District's CEQA documents, supporting tools and technical guidance.

Supervises, develops and implements new and innovative policies, programs, projects and resources providing technical assistance and support to local governments on health protective and equitable air quality and climate planning, land use policy, and CEQA.

Develops and maintains strong working relationships with community-based organizations, community members, local governments, regional, state and federal agencies.

Supervises and reviews staff work on geospatial data collection, analysis, and mapping, and directs development and delivery of visualizations including online mapping tools to support Air District programs, community-based planning, and local and regional policy.

Supervises and leads the development and management of grant programs, oversees grant and contract procurement, management, tracking and reporting.

Represents the Air District as a subject matter expert at meetings, conferences and working groups.

Supervises the responses to public records requests and other inquiries from governmental officials, consultants, and the public.

Participates in the preparation of the strategic goals and objectives, and budget of the assigned programs.

Performs other related duties as assigned

DRAFT

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

Bachelor's degree from an accredited college or university in regional, urban, or environmental planning or a closely related field and four years of professional environmental planning experience, including at least one year of experience providing lead direction to staff.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

LICENSES AND CERTIFICATIONS:

None.

OTHER REQUIREMENTS

None.

KNOWLEDGE AND SKILLS

Knowledge of:

Principles and practices of employee supervision including selection, planning, training, work evaluation and performance management.

Objectives, principles, procedures, standards, practices, information sources and trends in the field of environmental impact assessment and land use, transportation, and environmental planning.

Application of land use, physical design, demographic, environmental and social/economic concepts as applied to regional planning.

Statistical analysis and mathematical concepts related to land use, transportation, and environmental planning process.

Applicable Air District rules and regulations and state and federal laws.

Application of datasets and development of visualizations including mapping and charts

Local and regional government organization, functions, and practices.

Meeting and workshop development including best practices for engagement and facilitation.

DRAFT

Project management concepts and methods for developing environmental planning programs.

Skills in:

Assigning, supervising, reviewing, and evaluating the work of professional, technical, and support staff.

Selecting and motivating staff and providing for their training and professional development.

Understanding and applying federal, state, and local laws, regulations, policies, procedures and standards pertaining to the environmental review and planning process.

Understanding and applying analytical procedures, data analysis and documentation, map, graphs and statistical data interpretation.

Preparing clear, concise reports, correspondence and other written materials.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

Making persuasive presentations of ideas and recommendations.

Exercising sound independent judgement within established guidelines.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

- Sitting for long periods of time and walking and/or standing is only required occasionally.
- View computer screens and type for prolonged periods of time.

Working conditions:

- Work is primarily performed in a typical office environment.
- May be required to attend public and other meetings after standard working hours.

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Supervising Public Information Officer

Class Codes: 5T006

Salary Grade: 142

Bargaining Unit: Represented, Technical

Established Date: July 1, 2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under general direction, supervises the staff and activities for assigned public information and media relation programs.

DISTINGUISHING CHARACTERISTICS

This is the supervisory level in the Public Information Officer series. This class provides both supervision and professional public information and media relation functions in support of the Air District's goals and objectives. The work requires the use of independent judgement and initiative within established guidelines. Incumbents are responsible for accomplishing program goals and objectives within policy guidelines.

This class is distinguished from the Manager level in that the latter has managerial responsibility for assigned programs and staff, and for all defined functional areas.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a manager. Responsible for direct supervision of staff.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Assigns, supervises, reviews and evaluates the work of staff.

Prepares performance evaluations, participates in the staff selection, and provides training and professional development for assigned staff.

Develops and recommends improved or new public information programs and media campaigns.

Supervises, directs, assigns, and participates in the preparation and publication of informational material for release to the media, target audiences, or the public.

Supervises, coordinates, and participates in public information and media relations activities necessary to achieve Air District's goals and objectives.

Supervises and coordinates public education and information projects and activities with other Air District staff.

Coordinates and represents the Air District with the media and responds to questions and concerns about the Air District activities.

Supervises, develops and oversees implementation of communication strategies, crisis responses, and manages on-call schedule.

Participates in the preparation of the strategic goals and objectives, and budget of the assigned programs.

Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

The items listed below are the minimum requirements for this classification.

Bachelor's degree from an accredited college or university in journalism, communications, or a closely related field and four years of professional experience in developing and implementing a public information program and/or media relations program, including at least one year of experience providing lead direction to staff.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

LICENSES AND CERTIFICATIONS:

Some positions in this classification may require possession of a valid California driver's license or ability to obtain one.

OTHER REQUIREMENTS

DRAFT

None.

KNOWLEDGE AND SKILLS

The minimum knowledge and skills needed to perform the essential duties of the classification.

Knowledge of:

Principles and practices of employee supervision, including selection, planning, training, work evaluation, and discipline.

Environmental and air quality policies, regulations, and standards, including how they interact with federal, state, and local regulations.

Advanced knowledge of crisis communication strategies and leading communication efforts during emergencies.

Strategic communication planning for developing and executing comprehensive strategies aligned with organizational goals.

Grammar, syntax, and style for writing and editing duties including Associated Press Style.

Media relations strategies for effective communication and handling media inquiries.

Principles, theories, and techniques of journalism, expository writing, proofreading, and editing.

Principles and applications of design, production, printing, and layout techniques.

Technical software for creating, editing, and producing publications.

Skills in:

Assigning, supervising, reviewing and evaluating the work of professional, technical, and support staff.

DRAFT

Selecting and motivating staff and providing for their training and professional development.

Conducting media interviews, acting as spokesperson, and managing complex media interactions, including high-stress situations like live broadcasts.

Crisis communication for developing and delivering appropriate messages quickly and accurately.

Researching, compiling, and summarizing complex reports and informational materials.

Overseeing, planning, and organizing news conferences and public meetings.

Communicating effectively through excellent verbal, listening, and written communication.

Exercising sound independent judgment and decision making within established guidelines.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

Some positions in this classification may require the following:

- Sitting for long periods of time and walking and/or standing is only required occasionally.
- Standing for long periods of time at offsite media or community events may be required.
- Setup of media or community event equipment and materials at offsite locations may be required.
- View computer screens and type for prolonged periods of time.

DRAFT

- May occasionally be required to lift up to 50 pounds.

Working conditions:

- Work is primarily performed in a typical office environment.
- Work is sometimes performed in various public environments and outreach events.
- Covers rotating on-call schedule for evenings, weekends, and holidays as needed.
- Respond to incidents and attend meetings and events after standard working hours as required.

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Supervising Systems Analyst

Class Codes: 5T007

Salary Grade: 139

Bargaining Unit: Represented, Technical

Established Date: July 1, 2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under general direction, supervises staff and activities, and performs the most complex IT systems assignments.

DISTINGUISHING CHARACTERISTICS

This is the supervisory level in the systems analyst series. This class provides both supervision and technical expertise to management and in support of the Air District's goals and objectives. Incumbents are responsible for accomplishing program goals and objectives within policy guidelines.

This class is distinguished from the Manager level in that the latter has overall managerial responsibility for assigned programs and staff, and for all defined function areas.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a manager. Responsible for direct supervision of staff.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Assigns, supervises, reviews, and evaluates the work of staff.

Participates in the staff selection, prepares performance evaluations, and provides training and professional development for assigned staff.

Oversees the design, implementation, and maintenance of complex IT systems, including hardware, software, and network infrastructure.

Ensures system performance, reliability, and security through proactive monitoring and maintenance.

Oversees IT projects from inception to completion, including defining objectives, timelines, and resource requirements.

Coordinates with stakeholders to ensure project deliverables meet organizational needs.

Develops and enforces IT policies, procedures, and best practices to enhance operational efficiency and compliance.

Stays current with industry trends and recommends updates to policies and systems.

Provides high-level technical support to resolve complex IT issues.

Oversees the escalation process and ensures timely resolution of critical incidents.

Assists in developing the IT budget, including forecasting costs for hardware, software, and services.

Evaluates and procures IT solutions, negotiating contracts and managing vendor relationships.

Coordinates with other departments to identify IT needs and deliver appropriate solutions.

Prepares and delivers reports, presentations, and technical documentation.

Oversees the implementation of DevOps practices, including CI/CD pipelines and infrastructure automation.

Ensures efficient deployment processes and reduces operational overhead through automation.

Implements and enforces cybersecurity policies to protect organizational data and systems.

Ensures IT systems comply with relevant regulations and standards.

Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

DRAFT

EDUCATION AND EXPERIENCE:

The items listed below are the minimum requirements for this classification.

Bachelor's degree from an accredited college or university in computer science, information technology, or a closely related field and four years of experience in systems analysis, design, and IT project management, including at least two years in a leadership or supervisory role.

Any combination of education and experience that provides the necessary qualifications will be considered.

LICENSES AND CERTIFICATIONS:

None.

OTHER REQUIREMENTS

Must be able to work standby and receive callback assignments outside of regular work hours.

KNOWLEDGE AND SKILLS

The minimum knowledge and skills needed to perform the essential duties of the classification.

Knowledge of:

Principles and practices of employee supervision, including performance management and professional development.

Advanced IT systems, including hardware, software, networking, and cloud services.

Cybersecurity principles, frameworks, and best practices.

Project management methodologies, including Agile and Waterfall.

IT procurement and vendor management practices.

DevOps practices, including CI/CD pipelines and infrastructure as code.

IT governance frameworks and regulatory requirements.

Data management, including ETL processes, data integrity, and security.

Incident management processes and disaster recovery planning.

Emerging technologies and their applications in enterprise.

DRAFT

Skills in:

Assigning, supervising, reviewing, and evaluating the work of professional, technical, and support staff.

Selecting and motivating staff and providing for their training and professional development.

Using management tools such as project managing applications and ticketing systems to effectively manage work.

Communicating IT concepts to technical and non-technical and diverse audiences.

Managing complex IT projects and allocating resources effectively.

Analyzing and resolving advanced technical problems.

Developing and implementing IT policies, standards, and procedures.

Using automation tools to improve efficiency and reduce manual effort.

Performing risk assessments and implementing mitigation strategies for IT systems.

Conducting performance evaluations and creating professional development plans.

Managing multiple tasks, prioritizing workloads, and meeting established deadlines in a dynamic environment.

Communicating effectively through excellent verbal, listening, and written communication

Exercising sound independent judgment and decision making within established guidelines.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

Some positions in this classification may require the following:

- Sitting for long periods of time and walking and/or standing is only required occasionally.
- View computer screens and type for prolonged periods of time.
- Occasionally be required to lift up to 50 pounds, with assistance.

Working conditions:

DRAFT

- Work is primarily performed in a typical office environment.
- May include on-site support as needed.
- Occasional travel to support satellite sites.
- Work requires occasional after-hours or weekend support.

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Systems Analyst I/II

Class Codes: 8T017/ 7T037

Salary Grade: 131/135

Bargaining Unit: Represented, Technical

Established Date: July 1, 2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under general supervision, analyzes, designs, develops, implements, and maintains the Air District's information technology (IT) systems, including on-premises technologies and cloud-based infrastructure services.

DISTINGUISHING CHARACTERISTICS

Systems Analyst I is the entry-level class in the systems analyst series. Initially under close supervision, incumbents perform routine technical duties while learning Air District systems, policies, and procedures, and focusing on gaining proficiency in IT systems analysis and development, including hybrid environments. As experience is gained, duties become more diversified and are performed with greater independence of action within established guidelines. This class is alternately staffed with the Systems Analyst II and incumbents may advance to the higher level after gaining experience and demonstrating proficiency which meets the qualifications for the higher-level class.

Systems Analyst II is the journey-level class in the systems analyst series, fully competent to perform the full range of technical duties independently, including designing and maintaining both on-premises and cloud-based systems, and may provide guidance to entry-level staff.

This class is distinguished from the Senior Systems Analyst in that the latter is responsible for the more complex work and provides lead direction on projects and to staff.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a supervisor or manager. No supervision is exercised over others.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Collaborates with stakeholders to gather, analyze, and document business requirements for IT systems.

Designs, develops, tests, and implements IT solutions that integrate on-premises and cloud technologies.

Conducts feasibility studies and recommends IT solutions tailored to specific operational needs.

Configures and maintains physical and virtual hardware, software, and network systems across hybrid environments. Troubleshoots hardware, software, and network issues and implements corrective measures.

Monitors and optimizes system performance, ensuring high availability and reliability.

Develops, tests, and deploys software scripts and applications to meet organizational needs.

Participates in software lifecycle processes, including sprint planning, bug resolution, and version control.

Creates automated workflows to improve operational efficiency.

Designs, maintains, and optimizes databases and data pipelines to ensure data integrity and availability.

Analyzes and resolves database performance issues.

Prepares custom queries, reports, and data visualizations to support decision-making.

Integrates third-party APIs, SaaS platforms, and on-premises applications to create unified solutions.

DRAFT

Evaluates emerging integration technologies to improve workflows.

Maintains an up-to-date knowledge base to support system users and IT staff.

Develops detailed technical documentation, including system diagrams, installation guides, and user manuals.

Conducts training sessions for staff on new systems, tools, and processes.

Implements IT security measures, including user access controls, data encryption, and system monitoring.

Ensures compliance with organizational IT policies and regulatory requirements for data protection.

Performs regular audits of hybrid IT systems to identify and mitigate vulnerabilities.

Configures, monitors, and manages both on-premises data centers and cloud-based infrastructure.

Evaluates cloud service offerings and recommends strategies for migration or integration.

Oversees the deployment of virtual machines, containers, and other cloud resources.

Provides technical support for end users, including diagnosing and resolving system issues.

Creates, processes, and sets user accounts, permissions, and access across hybrid environments.

Assists with ticket management, ensuring timely resolution of requests and incidents.

Plans and executes IT projects, including hardware upgrades, system migrations, and software implementations.

Assists and participates in developing project timelines, allocates resources, and tracks progress to meet deadlines.

Prepares reports and presentations for stakeholders on project status and outcomes.

Researches emerging IT trends and recommends updates to existing systems.

Participates in disaster recovery planning and testing.

Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

DRAFT

EDUCATION AND EXPERIENCE:

The items listed below are the minimum requirements for this classification.

Systems Analyst I: Bachelor's degree from an accredited college or university in computer science, information technology, or a closely related field.

Systems Analyst II: In addition to the above, two years of experience in IT systems analysis, design, or development in hybrid IT environments.

Any equivalent combination of education and experience that provides the necessary qualifications will be considered.

LICENSES AND CERTIFICATIONS:

None.

OTHER REQUIREMENTS

Must be able to work standby and receive callback assignments outside of regular work hours.

KNOWLEDGE AND SKILLS

The minimum knowledge and skills needed to perform the essential duties of the classification.

Knowledge of:

Principles and techniques of IT systems analysis, design, and implementation for on-premises and cloud IT environments.

Database management systems, ETL processes, and cloud-based data solutions.

Networking principles and troubleshooting for cloud and on-premises environments.

Cloud computing platforms and virtualization technologies, such as VMware, AWS, or Azure.

IT security protocols, including identity management and incident response.

Tools and programming languages for systems and software development, such as Python, Java, or PowerShell.

IT service management frameworks and ticketing systems, such as ITIL and Jira.

DRAFT

Skills in:

Exercising sound independent judgment and decision making within established guidelines.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

Designing and implementing scalable IT systems across on-premises and cloud platforms.

Troubleshooting complex hardware, software, and network issues in on premises and cloud environments.

Communicating technical concepts effectively to diverse stakeholders.

Creating and maintaining detailed technical documentation and system diagrams.

Conducting performance tuning and optimization for databases and other systems.

Managing multiple priorities and meeting deadlines.

Monitoring system health using tools like Splunk, SolarWinds, or CloudWatch.

Leading small IT projects and coordinating across teams.

Effective verbal, written, and active listening communication skills.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

Some positions in this classification may require the following:

- Sitting for long periods of time and walking and/or standing is only required occasionally.
- View computer screens and type for prolonged periods of time.
- Occasionally be required to lift up to 50 pounds, with assistance.

Working conditions:

- Work is primarily performed in a typical office environment.
- May include on-site support as needed.
- Occasional travel to support satellite sites.
- Occasional after standard hours work or weekend support required.

DRAFT

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

Bay Area Air District

CLASSIFICATION SPECIFICATION

Classification Specification Name: Systems Technician

Class Codes: 7T039

Salary Grade: 127

Bargaining Unit: Represented, Technical

Established Date: July 1, 2026

Revision Date:

DRAFT

CLASSIFICATION SUMMARY

Under close supervision, provides Information Technology (IT) support, including configuring, troubleshooting, and maintaining on-premises and cloud-based hardware and software systems.

DISTINGUISHING CHARACTERISTICS

Systems Technician is the entry-level IT support classification. Under close supervision, incumbents perform routine technical IT support and maintenance tasks while learning the Air District policies and procedures. As experience is gained, there is greater independence of action within established guidelines.

This class is distinguished from Systems Analyst I/II in that that latter is responsible for the analyses, design and implementation of IT systems.

SUPERVISION RECEIVED AND/OR EXERCISED

Supervision is provided by a supervisor or manager. No supervision is exercised over others.

EXAMPLES OF DUTIES

The following duties are typical for jobs in the class. They are for illustrative purposes only and do not reflect the full scope of job duties.

Provides support for desktop and laptop computers, including troubleshooting, configuration, and general maintenance for users in diverse locations, including remote sites, homes, and field offices.

Provides support for desktop and laptop computers, including installation, troubleshooting, and maintenance.

Assists in resolving issues related to on-premises and cloud-based applications and services.

Responds to user inquiries and escalates complex issues as needed.

Configures and deploys IT hardware, including computers, mobile devices, printers, and peripherals.

Assists in setting up and managing cloud-based workstations and applications.

Supports secure connections for remote access and VPN services.

Writes and modifies software scripts under supervision to address basic user requirements.

Reviews and troubleshoots existing software scripts and code.

Participates in testing and debugging processes for new applications and system updates.

Maintains and analyzes databases and data repositories to ensure data integrity.

Assists in developing queries and reports to support departmental needs.

Supports data backup and restoration processes.

Assists in monitoring IT systems, identifying performance issues, and implementing corrective actions.

Supports enterprise-grade and consumer-grade IT devices, ensuring proper functionality and connectivity.

Monitors and resolves issues in ticketing systems, documenting resolutions for future reference.

Follows established IT security protocols to safeguard organizational data and systems.

Assists in applying patches and updates to software and systems to maintain compliance.

Monitors systems for potential security threats and reports concerns to senior staff.

Provides basic training to end users on IT tools, applications, and best practices.

DRAFT

Works with IT team members to support cross-departmental projects and initiatives.

Assists in documenting IT procedures, configurations, and troubleshooting steps.

Stays informed about emerging technologies and trends in IT.

Performs other related duties as assigned.

MINIMUM QUALIFICATIONS

EDUCATION AND EXPERIENCE:

The items listed below are the minimum requirements for this classification.

Associate degree in computer science, information technology, or a closely related field.

Any equivalent combination of education and experience that provides the necessary qualifications to successfully perform the duties of the position will be considered.

LICENSES AND CERTIFICATIONS:

None.

OTHER REQUIREMENTS

Must be able to work standby and receive callback assignments outside of regular work hours.

KNOWLEDGE AND SKILLS

The minimum knowledge and skills needed to perform the essential duties of the classification.

Knowledge of:

IT infrastructure, including desktops, laptops, servers, mobile devices, and peripherals.

On-premises and cloud-based systems and services, including Microsoft 365, AWS, or Azure.

Network fundamentals, such as TCP/IP, VPNs, firewalls, and wireless access.

Basic programming and scripting languages, such as Python, PowerShell, or JavaScript.

Database structures, including relational databases, SQL, and basic ETL processes.

IT security concepts, including access control, encryption, and vulnerability mitigation.

Operating systems, including Windows and mobile platforms.

DRAFT

Software installation, configuration, and troubleshooting processes.

IT ticketing systems and documentation best practices.

Techniques for delivering effective end-user training and support.

Skills in:

Effectively and quickly responding to requests in a proactive manner.

Establishing and maintaining effective working relationships with those contacted in the course of the work.

Diagnosing and resolving technical issues with IT systems and applications.

Configuring and maintaining IT hardware, software, and networking components.

Writing, testing, and modifying scripts for system automation and customization.

Communicating technical information clearly to technical and non-technical audiences.

Prioritizing and managing multiple tasks to meet deadlines effectively.

Maintaining accurate records and documentation of IT activities and assets.

Collaborating with team members to implement IT solutions and projects.

Adapting to new technologies and learning emerging IT tools and methodologies.

Performing data analysis and creating queries, reports, and dashboards.

Assisting in the development and execution of system testing plans and troubleshooting scenarios.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Physical demands:

Some positions in this classification may require the following:

- Periods of frequent standing, sitting, kneeling, and crawling.
- View computer screens and type for prolonged periods of time.
- Occasionally be required to lift up to 50 pounds, with assistance.

Working conditions:

- Work is primarily performed in a typical office environment.
- May include on-site support as needed.
- Occasional travel to support satellite sites.

DRAFT

- Occasional after standard hours work or weekend support required.

This classification specification outlines the general nature and level of work performed. It is not a complete list of all duties and responsibilities.

DRAFT

BAY AREA AIR DISTRICT
Memorandum

To: Chairperson Lynda Hopkins and Members of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: June 3, 2026

Re: Authorization to Execute Contract with Robert Half for Temporary Staffing

RECOMMENDED ACTION

Authorize the Executive Officer/APCO to execute a contract with Robert Half for a three-year term, in an amount not to exceed $1,500,000, for temporary staff augmentation to support the Air District's Strategic Plan.

BACKGROUND

In June 2023, the Air District issued a Request for Qualifications (RFQ) to identify qualified temporary staffing agencies capable of providing high-quality, cost-effective professional, and administrative support. Robert Half was selected as one of the primary partners to fulfill these needs for a three-year term ending on June 30, 2026. A new agreement with Robert Half will need to be established to address ongoing temporary operational backlogs and persistent recruitment difficulties in certain specialized fields. By utilizing these temporary staffing services, the Air District ensures business continuity and maintains the flexibility required for temporary support during peak periods or hiring gaps. Throughout the agreement, Robert Half has successfully supported our staffing requirements by providing high-quality candidates tailored to specific roles, excellent customer service and account management, and impressive turnaround times.

DISCUSSION

To meet the Air District's evolving needs, we are seeking to utilize temporary staffing to provide the agility necessary to scale our workforce without the long-term commitment of permanent contracts. This approach is essential for addressing project-based requirements such as a six-month information technology (IT) system migration project or any other projects that are aligned to the Air District's Strategic Plan. Furthermore, temporary staffing offers immediate coverage for emergency gaps caused by unexpected leave or sudden separations. While traditional hiring processes typically span 60 to 90 days, utilizing a bench of pre-vetted talent allows us to fill critical roles within 24 to 48 hours, providing immediate access to specialized and niche expertise.

Public Contract Code (PCC) § 10290 et seq. and 12101.5 and Air District Procurement Policy Section 8.k, allow for the use of alternative procurement methods by local government agencies, including the use of national cooperative programs. Robert Half Customer Agreement with Robert Half is available through Houston-Galveston Area Council (HGAC) Cooperative Master Agreement Number: TS06-25 for Temporary Staffing, Direct-Hire and Other Employer Services, including any amendments thereto, between Robert Half and the Houston-Galveston Area Council. This agreement allows public agencies to procure services from Robert Half without conducting separate solicitation, thereby saving time and administrative resources while ensuring compliance with public procurement requirements. Air District staff recommend entering into an agreement co-terming with the HGAC (Co-Op) agreement for a term up to three years. The HGAC (Co-Op) agreement is valid until May 31, 2029.

BUDGET CONSIDERATION/FINANCIAL IMPACT

Funding is included in the proposed Fiscal Year 2026–2027 budget within the respective programs. Costs for Fiscal Years 2027–2028 and 2028–2029 will be incorporated into the respective program budgets to cover expenses that may be incurred under this Professional Services Agreement, not to exceed $1,500,000.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Joseph Huynh
Reviewed by: Lisa Baker

ATTACHMENT(S):

1. Robert Half Inc. 2026.062
2. HGAC Robert Half MSA TS06-25
3. HGAC Robert Half Rate Card

RH Customer Agreement

This RH Customer Agreement for Contract Talent Solutions (the "Agreement" or "Contract") governs transactions by which you retain the Talent Solutions of Robert Half Inc., doing business through its Practice Groups ("RH" or "Contractor"), to assist **Bay Area Air Quality Management District** ("you", "your", "District" or "BAAQMD") in meeting its staffing needs.

Part 1 - General

1.1 Definitions

"Contract Talent Solutions" means the provision of services by a Professional and/or Full-Time Engagement Professionals to you.

"Full-Time Engagement Professionals" means the Professional(s) who are full-time, salaried employees of RH placed through RH's full time engagement professionals Practice Groups.

"HGAC Agreement" means the June 1, 2025 HGAC Contract TS06-25 for Temporary Staffing, Direct-Hire and Other Employer Services, including any amendments thereto, between RH and the Houston-Galveston Area Council, which is incorporated into, and made part of, this Agreement.

"Practice Groups" means the following practice groups of RH: administrative & customer support, finance & accounting, management resources, technology, legal, and marketing & creative.

"Professional(s)" means the individual(s) assigned to you by RH to perform Contract Talent Solutions.

1.2 Agreement Structure

Additional terms for Contract Talent Solutions are included in Exhibit A, which is attached to this Agreement. RH also provides additional terms for Contract Talent Solutions in documents called "Job Arrangement Letters" which are also part of this Agreement. All transactions for Contract Talent Solutions under this Agreement will have a Job Arrangement Letter, which will be sent to you when RH provides Contract Talent Solutions to you.

In order to initiate Talent Solutions, you will provide RH with notice (e.g., via telephone, e-mail, facsimile or mail) describing the Talent Solutions you need in reasonable detail. RH will promptly reply to such request and indicate whether RH will or will not provide the requested Talent Solutions. If RH elects to provide the requested Talent Solutions, RH will send you a Job Arrangement Letter, as applicable.

You accept the terms in a Job Arrangement Letter by your approval of the Professional's weekly timesheet or electronic time record.

Talent Solutions become subject to this Agreement when RH accepts your order by 1) sending you a Job Arrangement Letter, as applicable, or 2) providing the Talent Solutions.

If there is a conflict among the terms in the various documents, those of this Agreement prevail over those of a Job Arrangement Letter. This Agreement and its Job Arrangement Letter(s) are the complete agreement regarding these transactions and replace any prior oral or written communications between RH and you regarding these transactions.

1.3 Charges and Payment

Amounts are due and payable as RH specifies in Exhibit A, including the fees payable for directly hiring Professionals and the fees payable if a Professional works overtime, e.g., in excess of 40 hours per week. You agree to pay accordingly, including any late payment fee.

1.4 Changes to the Agreement Terms

This Agreement represents the final, complete, and exclusive statement of the agreement between the parties related to the provision of Talent Solutions to BAAQMD, and supersedes all prior and contemporaneous understandings and agreements of the parties. No party has been induced to enter into this Agreement by, nor is any party relying upon, any representation or warranty outside those expressly set forth herein. For a change to this Agreement to be valid, it must be in writing and signed by both parties

1.5 Limitation of Liability

Circumstances may arise where, because of a default on RH's part or other liability, BAAQMD is entitled to recover damages from RH. Regardless of the basis on which BAAQMD is entitled to claim damages from RH (including fundamental breach, negligence, misrepresentation, or other contract or tort claim), RH's liability, if any, will (in the aggregate for all claims, causes of action or damages) be limited to any actual direct damages up to an amount equal to up to 2x the fees actually paid to RH for the services that are the subject of the claim. It is understood that BAAQMD is responsible for implementing and maintaining usual, customary and appropriate internal accounting procedures and controls, internal controls and other appropriate procedures and controls (including information technology, proprietary information, creative designs and trade secret safeguards) for your company and RH shall not be responsible for any losses, liabilities or claims arising from the lack of such controls or procedures

Items for Which RH is Not Liable

Under no circumstances is RH liable for any special, incidental, exemplary, indirect lost profits, or consequential damages (including, but not limited to, lost business, revenue, goodwill, or anticipated savings), even if informed of the possibility.

© Robert Half Inc., 2026. All rights reserved. **Robert Half Inc. is an Equal Opportunity Employer M/F/D/V**

Indemnification

A. CONTRACTOR shall indemnify and hold DISTRICT, its officers, employees and agents harmless from and against any and all liability, loss, expense, including reasonable attorneys' fees, or claims for injury or damages arising out of the performance of this Contract but only in proportion to and to the extent such liability, loss, expense, attorneys' fees, or claims for injury or damages are caused by or result from the negligent acts or omissions of CONTRACTOR, its officers, agents, or employees.

B. DISTRICT shall indemnify and hold CONTRACTOR, its officers, employees and agents harmless from and against any and all liability, loss, expense, including reasonable attorneys' fee, or claims for injury or damages arising out of the performance of this Contract but only in proportion to and to the extent such liability, loss, expense, attorneys' fees, or claims for injury or damages are caused by or result from the negligent acts or omissions of DISTRICT, its officers, agents, or employees.

1.6 General Principles of Our Relationship

a. RH shall maintain workers' compensation insurance and commercial liability insurance.
b. RH will be responsible, to the extent applicable, for any workers' compensation insurance, federal, state and local withholding and unemployment taxes, social security, state disability insurance or other payroll charges for the Professionals.
c. In the event that any provision of this Agreement is held to be invalid or unenforceable, the remaining provisions of this Agreement remain in full force and effect.
d. CONTRACTOR shall maintain the following insurance:
    i. Workers' compensation and employers' liability insurance as required by California law or other applicable statutory requirements.
    ii. Occurrence-based commercial general liability insurance or equivalent form with a limit of not less than one million dollars ($1,000,000) each occurrence. Such insurance shall include DISTRICT and its officers, agents, and employees as additional insureds and shall be primary with respect to any insurance maintained by DISTRICT.
    iii. Business automobile liability insurance or equivalent form with a limit of not less than one million dollars ($1,000,000) each accident. Such insurance shall include coverage for owned, hired, and non-owned vehicles.
    iv. Professional liability insurance with limits not less than five million dollars ($5,000,000) for each claims.
e. All insurance shall be placed with insurers acceptable to DISTRICT.
f. Prior to commencement of work under this Contract, CONTRACTOR shall furnish properly-executed certificates of insurance for all required insurance. CONTRACTOR shall notify DISTRICT in writing thirty (30) days prior to cancellation or modification of any required insurance policy. Any such modifications are subject to pre-approval by DISTRICT.
g. Both parties shall comply with all applicable laws during the Term of this Agreement.

1.7 Agreement Term

This Agreement will be effective as of the last date of signature and will continue for a period of one year. Thereafter, upon BAAQMD thirty (30) days prior written notice to CONTRACTOR, this Agreement shall be extended for additional one (1) year terms up to a maximum of three (3) extensions; otherwise this Agreement will automatically terminate.

Either party may terminate this Agreement if the other does not comply with any of its terms, provided the one who is not complying is given written notice and reasonable time to comply.

Either party may terminate this Contract at any time, at will, and without specifying any reason, by notifying the other party in writing. The notice of termination shall specify the effective date of termination, which shall be no less than thirty (30) calendar days from the date of delivery of the notice of termination, and shall be delivered in accordance with the provisions of section 2.10 below. Immediately upon receipt of the notice of termination, CONTRACTOR shall cease all work under this Contract, except such work as is specified in the notice of termination. CONTRACTOR shall deliver a final invoice for all remaining work performed but not billed, including any work specified in the termination notice, on or before ten (10) business days following the termination date.

Either party may terminate this Contract for breach by the other party.

Failure to perform any agreement or obligation contained in this Contract or failure to perform the services in a satisfactory manner shall constitute a breach of the Contract.

The non-breaching party may terminate the Contract by delivery of a written notice of breach. The notice of breach shall specify the date of termination, which shall be no earlier than fifteen (15) business days from delivery of the notice of breach. In the alternative, at its sole discretion, the non-breaching party may require the breaching party to cure the breach. The notice of breach shall specify the nature of the breach and the date by which such breach must be cured.

Notwithstanding any language in this Agreement to the contrary (including any references to fixed-price, deliverables, acceptance of deliverables, or milestones), RH shall be compensated on a time and materials basis only. RH provides Contract Talent Solutions and does not provide deliverables.

The notice of breach shall be provided in accordance with the notice requirements set forth in section 2.10.

The non-breaching party reserves all rights under law and equity to enforce this Contract and recover any damages.

The terms of section 1.7, including the payment obligations set forth in Section 1.3 above, remain in effect until fulfilled, even if the agreement is terminated, and apply to each party's respective successors and assignees.

© Robert Half Inc., 2026. All rights reserved. **Robert Half Inc. is an Equal Opportunity Employer M/F/D/V**

1.8 Warranties

EXCEPT AS SET FORTH IN EXHIBIT A, RH MAKES NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY OF QUALITY, PERFORMANCE, MERCHANTABILITY OR FITNESS FOR ANY PURPOSE WITH RESPECT TO ANY TALENT SOLUTIONS PERFORMED OR ANY GOODS PROVIDED, INCLUDING, BUT NOT LIMITED TO, FINANCIAL OR ACCOUNTING TALENT SOLUTIONS PERFORMED, OR SOFTWARE DEVELOPED, FOR YOU.

1.9 Confidentiality

You agree to hold in confidence the identity of any candidate and the candidate's resume, social security number and other legally protected personal information, and you agree to implement and maintain reasonable security procedures and practices to protect such information from unauthorized access, use, modification or disclosure.

The Professionals will execute any confidentiality agreement that you may require. BAAQMD agrees to be responsible for obtaining the Professional's signature. To the extent allowed by law, BAAQMD agrees to hold in confidence Professional's social security number and other legally protected personal information, and you agree to implement and maintain reasonable security procedures and practices to protect such information from unauthorized access, use, modification or disclosure.

Carrying out the purposes of this Agreement may require access to certain of BAAQMD's confidential information (including trade secrets, inventions, confidential know-how, confidential business information, and other information that DISTRICT considers confidential) (collectively, "Confidential Information"). It is expressly understood and agreed that BAAQMD may designate in a conspicuous manner Confidential Information that Professional or RH obtains from BAAQMD, and RH and Professional will, to the extent actually obtained:

A. Observe complete confidentiality with respect to such information, including without limitation, agreeing not to disclose or otherwise permit access to such information by any other person or entity in any manner whatsoever, except that such disclosure or access shall be permitted to Professional requiring access in fulfillment of the services provided under this Agreement.
B. Ensure that RH's officers, employees, agents, representatives, and independent contractors are informed of the confidential nature of such information and to assure by agreement or otherwise that they are prohibited from copying or revealing, for any purpose whatsoever, the contents of such information or any part thereof, or from taking any action otherwise prohibited under this section.
C. Not use such information or any part thereof in the performance of services to others or for the benefit of others in any form whatsoever whether gratuitously or for valuable consideration, except as permitted under this Agreement.
D. Notify BAAQMD promptly and in writing of the circumstances surrounding any possession, use, or knowledge of such information or any part thereof by any person or entity other than those authorized by this section. Take at RH's expense, but at BAAQMD's option and in any event under BAAQMD's control, any legal action necessary to prevent unauthorized use of such information by any third party or entity which has gained access to such information at least in part due to the fault of RH or Professional.
E. Take any and all other actions necessary or desirable to assure such continued confidentiality and protection of such information during the term of this Agreement and following expiration or termination of the Agreement.
F. Prevent access to such materials by a person or entity not authorized under this Agreement.
G. Establish specific procedures in order to fulfill the obligations of this section.

This section shall not apply to (1) information that is in the public domain; (2) information that was known to the receiving party before receipt of the information from the disclosing party; or, (3) information received from a third party having the right to lawfully possess and disclose such information without breaching any promise of confidentiality. In addition, no receiving party shall be in violation of this Agreement if required to disclose such information by a court of competent jurisdiction or governmental agency with power to force disclosure. However, upon receipt of a subpoena or other order to produce Confidential Information, the receiving party shall promptly notify the disclosing party in writing of such disclosure requirement, and allow that other Party the opportunity to seek to prevent the disclosure, at their sole discretion.

1.10 Candidate Screening Process

To the extent permitted by applicable law, RH will have a third party vendor perform:

(a) perform a Social Security Number verification;

(b) perform a seven-year criminal background investigation for all (i) state felony convictions and pending charges, and (ii) state misdemeanor convictions and pending charges involving crimes of dishonesty or violence, in each county where our professional has resided or worked in the U.S. in the last seven years as stated on his or her application; however, where such criminal background investigation is either impracticable, unavailable or would result in a delay of assignment (as determined by the third party vendor), the third party vendor will endeavor to complete a seven-year statewide criminal background investigation, if available;

© Robert Half Inc., 2026. All rights reserved.

(c) perform a seven-year criminal background investigation by having the third party perform a search of its private database of U.S. national criminal records searching for felony convictions and misdemeanor convictions for crimes of dishonesty or violence. BAAQMD understands and agrees that the third party vendor's database of U.S. national criminal records (i) is maintained by the third party vendor and not a governmental entity, (ii) is an incomplete aggregation of criminal records, and (iii) will not reveal or identify all criminal convictions. If any of the checks are not possible to complete due to delays and/or unavailability of one or more sources, BAAQMD acknowledges that the checks will not be completed for our professional in time for his or her start date due to such delays or unavailability of sources. BAAQMD will permit our professional to start an assignment with BAAQMD on the start date while attempting to complete the checks, to the extent allowed by law; and

(d) if the Professional holds a license to practice law from the bar association of any U.S. state, or holds a certification from the National Association of Legal Assistants or National Federation of Paralegal Associations as indicated on his or her application, RH will have a third party vendor request confirmation of that licensure or certification.

If BAAQMD requests a copy of the results of any checks conducted on RH's our Professionals, BAAQMD agrees to keep such results strictly confidential and to use such results in accordance with applicable laws and solely for employment purposes. RH reviews the information revealed by these checks and determines the candidate's eligibility for jobs in accordance with applicable law.

Part 2 – Contract Talent Solutions

2.1 Scope of Assignment

You agree that you are responsible for supervising the Professionals. You will not permit or require a Professional (i) to perform Contract Talent Solutions outside of the scope of their assignment, (ii) to sign contracts or statements (including SEC documents or any documents required by any other securities regulatory agencies), (iii) to make any management decisions, (iv) to make any final decisions regarding system design, software development or the acquisition of hardware or software, (v) to operate machinery (other than office machines) or automotive equipment, or (vi) unless otherwise agreed in writing by RH, to use software, services, tools, e-mail accounts, or network equipment owned or licensed by the Professional.

2.2 Cash Handling and Other Financial Transactions and Activities

Since RH is not a professional accounting firm, you agree that you will not permit or require Professionals (a) to render an opinion on behalf of RH or on your behalf regarding financial statements, (b) to sign the name of RH on any document or (c) to sign their own names on financial statements or tax returns. If you permit or allow Professional to sign, endorse, wire, transport or otherwise convey cash, securities, checks, or any negotiable instruments or valuables, or conduct financial transactions or other related activities, you accept sole responsibility for all claims, demands and liability that may arise from permitting these activities. You represent and warrant that to the extent you permit or allow a Professional to engage in the activities described in this paragraph, you will not permit or allow the Professional to handle more than (i) $1,000 per day if you are a non-profit entity, or (ii) $25,000 per day if you are a for-profit entity.

2.3 Attorney Placements

You recognize that RH is not a law firm and is not licensed to practice law and has not been retained to provide legal advice or services. In order to satisfy the requirements of the various state/provincial bars and similar organizations that regulate the practice of law, you agree that RH's placement of licensed attorneys (as project attorneys or in a non-attorney role) ("Project Attorneys") with you is subject to the following terms and conditions:

a. You acknowledge and accept that our Project Attorneys perform all duties under your management, supervision, direction and guidance within their skills related to the engagement, except they are not authorized to directly represent any person, entity or organization, sign contracts, statements, pleadings, affidavits or declarations, correspondence with court officials, term sheets, settlement agreements, or take or defend depositions, appear as the lawyer of record in any court or legal proceeding, including, but not limited to, any court hearings, arbitrations, settlement conferences, mediations or depositions, or render legal opinions on behalf of RH, you or any other party, person, entity, or organization while on engagement.

b. Each Project Attorney will be under the management, supervision, direction and guidance of an employee or partner of your firm or legal department who is an active member of the State Bar, or otherwise authorized, to practice law in the state or province where the Project Attorney is providing Contract Talent Solutions. You will determine that the Project Attorney has the requisite knowledge and skill level, furnish all necessary resources to the Project Attorney and take all appropriate steps to protect client confidential information without any participation by RH.

c. You will consult with each proposed Project Attorney prior to any assignment to determine that any previous services performed by the Project Attorney will not create a conflict of interest, including, but not limited to a risk disclosure of client confidential information or present any other ethical issue. If you determine that such a conflict of interest, including, but not limited to a risk disclosure of client confidential information or other ethical issue exists, you will inform RH immediately, and RH will provide a replacement attorney with no charge for the time spent by the original Project Attorney participating in this preliminary ethical determination.

d. You acknowledge and accept that: (i) RH is not a law firm and is not licensed to practice law and has not been retained to provide legal advice or services; (ii) RH will not be involved in the planning, review, execution or completion of any legal project; (iii) RH does not limit the amount of time our Project Attorney may spend on any

© Robert Half Inc., 2026. All rights reserved.

particular matter; (iv) RH will not have any control over the matters our Project Attorney may handle or the manner in which they are handled; and (v) neither you nor RH will require our Project Attorney to take any matter in which there is a potential conflict of interest, including, but not limited to, a risk disclosure of client confidential information or any other ethical issues.

e. The fees paid to RH under this Agreement are solely for locating, recruiting, and paying Project Attorneys and no portion of such amount shall be deemed to represent legal fees paid to RH.

2.4 Remote Work

Notwithstanding anything to the contrary in this Agreement:

a. In the event you permit any Professional to provide services to you remotely (i.e., from a location other than your or your customer's offices) using a laptop and/or other computer or telecommunications equipment of you, RH or the Professional (the "Equipment"), you acknowledge and agree that RH shall have no control over, and that you shall be solely responsible for, (i) the logical and physical performance, reliability and security of the Equipment and related devices, network accessibility and availability, software, services, tools and e-mail accounts (collectively, "Computer Systems") used by the Professional, and (ii) the security, integrity and backing up, of the data and other information stored therein or transmitted thereby. You shall not permit a Professional to save or store any of your files or other data on the Computer Systems provided by RH (including, but not limited to, any virtual desktop infrastructure or Microsoft Office 365 solution). You agree that RH shall not be liable for any loss, damage, expense, harm, business interruption or inconvenience resulting from the use of such Computer Systems.

b. In addition to subsection (a) above, the additional terms of this subsection (b) shall also apply if you permit any Professional to use their own personal Equipment. You agree to take full responsibility for verifying, supervising and ensuring (i) that the Computer Systems used by the Professional meet your privacy and security standards, including, but not limited to, the physical, administrative and technical safeguards required for compliance with applicable data privacy laws, and (ii) that such standards on the Computer Systems are maintained throughout the assignment. You also agree to defend, indemnify and hold harmless RH (including, but not limited to, its employees, officers and directors) with respect to any claim, demand or liability that may arise from the Professional's use of the Computer Systems.

2.5 Workplace Safety

You agree that you have full responsibility for: (i) providing safe working conditions as required by law, including compliance with all public health and occupational safety regulations and guidelines applicable to your business, and (ii) ensuring that safety plans exist for, and safety related training is provided to, Professionals working on your premises. To ensure the safety of potentially vulnerable individuals on your premises, you agree not to permit Professionals to have unsupervised or unmonitored contact with (a) minors, or (b) adults who are under your care, custody or supervision because of mental health impairments. If any assignment under this Agreement is for work to be performed under a government contract or subcontract, you will notify RH immediately (1) of any obligations in the government contract or subcontract relating to wages, and (2) if RH is legally required to initiate E-Verify verification procedures for any Professional.

2.6 Operation of Vehicles and Equipment

RH does not authorize Professionals to operate machinery (other than office machines) or vehicles. If you wish to permit Professionals to drive for business purposes, you accept sole responsibility for all liability, damages, injuries or other claims that may arise or be incurred as a result of such driving. If you require Professionals to drive a vehicle owned by you or by your employee, you agree to maintain such vehicle in good working condition and maintain all necessary and appropriate insurance for the operation of such vehicle. Under no circumstances will you permit Professionals to (i) make bank deposits, (ii) carry cash in excess of $100, negotiable instruments or other valuables while driving, or (iii) have passengers in the vehicle. It is agreed that you accept full responsibility for, and that RH does not maintain insurance to cover, any injury, damage, or loss that may result from your failure to comply with the foregoing.

2.7 You agree that you are responsible for reporting any claim to RH in writing during or within ninety (90) days after the termination of the applicable assignment. RH will not be responsible for any claim related to the engagement, including, but not limited to, any Talent Solutions performed during such engagement unless you have reported such claim in writing to RH within ninety (90) days after termination of the applicable assignment.

2.8 You agree that you are responsible for implementing and maintaining usual, customary and appropriate internal procedures and controls (including accounting, information technology, proprietary information, creative designs and trade secret safeguards) for your company or law firm. You agree that you are fully responsible for, and that RH will not be responsible for, any injuries, claims, damages or losses that may result from your failure to comply with the foregoing.

2.9 Professionals will execute any confidentiality agreement that you may require. You are responsible for obtaining the Professional's signature.

2.10. Notices

All notices that are required under this Agreement shall be provided in the manner set forth herein, unless specified otherwise. Notice to a party shall be delivered to the attention of the person listed below, or to such other person or persons as may hereafter be designated by that party in writing. Notice shall be in writing sent by e-mail, facsimile, or regular first class mail. In the case of e-mail and facsimile communications, valid notice shall be deemed to have been delivered upon sending, provided the sender obtained an electronic confirmation of delivery. E-mail and facsimile

© Robert Half Inc., 2026. All rights reserved. **Robert Half Inc. is an Equal Opportunity Employer M/F/D/V**

communications shall be deemed to have been received on the date of such transmission, provided such date was a business day and delivered prior to 4:00 p.m. Pacific Time. Otherwise, receipt of e-mail and facsimile communications shall be deemed to have occurred on the following business day. In the case of regular mail notice, notice shall be deemed to have been delivered on the mailing date and received five (5) business days after the date of mailing.

DISTRICT: Bay Area Air Quality Management District
375 Beale St, Suite 600, San Francisco, CA 94105
Attn: Judy Yu, Manager, Human Resources

CONTRACTOR: Robert Half Inc.
3001 Bishop Drive, Suite 140
Attn: Contract Manager, Enterprise Contracts & Law

2.11 RH shall be responsible for the cost of regular pay to its employees, as well as cost of vacation leave, vacation replacements, sick leave, severance pay, and pay for legal holidays. RH, its officers, employees, agents, or representatives shall not be considered employees or agents of BAAQMD, nor shall CONTRACTOR, its officers, employees, agents, or representatives be entitled to or eligible to participate in any benefits, privileges, or plans, given or extended by DISTRICT to its employees.

2.12 Intellectual Property Rights

Title and full ownership rights to all intellectual property developed under this Contract shall at all times remain with DISTRICT, unless otherwise agreed to in writing.

2.13 Publication

A. DISTRICT shall approve in writing any report or other document prepared by CONTRACTOR in connection with performance under this Contract prior to dissemination or publication of such report or document to a third party. DISTRICT may waive in writing its requirement for prior approval.

B. Until approved by DISTRICT, any report or other document prepared by CONTRACTOR shall include on each page a conspicuous header, footer, or watermark stating "DRAFT – Not Reviewed or Approved by BAAQMD," unless DISTRICT has waived its requirement for prior approval pursuant to paragraph A of this section.

C. Information, data, documents, or reports developed by CONTRACTOR's Professionals for DISTRICT, pursuant to this Contract, shall be part of DISTRICT's public record, unless otherwise indicated. CONTRACTOR may use or publish, at its own expense, such information, provided DISTRICT approves use of such information in advance. The following acknowledgment of support and disclaimer must appear in each publication of materials, whether copyrighted or not, based upon or developed under this Contract.

"This report was prepared as a result of work sponsored, paid for, in whole or in part, by the Bay Area Air Quality Management District (District). The opinions, findings, conclusions, and recommendations are those of the author and do not necessarily represent the views of the District. The District, its officers, employees, contractors, and subcontractors make no warranty, expressed or implied, and assume no legal liability for the information in this report."

D. CONTRACTOR shall inform its officers, employees, and subcontractors involved in the performance of this Contract of the restrictions contained herein and shall require compliance with the above.

2.14 Non-Discrimination

In the performance of this Contract, CONTRACTOR shall not discriminate in its recruitment, hiring, promotion, demotion, and termination practices on the basis of race, religious creed, color, national origin, ancestry, sex, age, marital status, sexual orientation, medical condition, or physical or mental disability and shall comply with the provisions of the California Fair Employment & Housing Act (Government Code Section 12900 et seq.), the Federal Civil Rights Act of 1964 (P.L. 88-352) and all amendments thereto, and all administrative rules and regulations issued pursuant to said Acts. CONTRACTOR shall also require each subcontractor performing work in connection with this Contract to comply with this section and shall include in each contract with such subcontractor provisions to accomplish the requirements of this section. Robert Half International Inc. is an Equal Opportunity Employer. Notwithstanding anything to the contrary herein, DISTRICT acknowledges that CONTRACTOR does not: (i) track or request race, gender, veteran or disability status of the assigned Professionals; or (ii) meet any applicant tracking or recordkeeping requirements.

2.15 Property and Security

Without limiting CONTRACTOR'S obligations with regard to security, CONTRACTOR will require its Professionals to comply with all the rules and regulations established by DISTRICT for access to and activity in and around DISTRICT's premises. RH employees shall not enter DISTRICT'S premises without agreeing to comply.

© Robert Half Inc., 2026. All rights reserved. **Robert Half Inc. is an Equal Opportunity Employer M/F/D/V**

2.16 Assignment

No party shall assign, sell, license, or otherwise transfer any rights or obligations under this Contract to a third party without the prior written consent of the other party, and any attempt to do so shall be void upon inception.

2.17 Waiver

No waiver of a breach, of failure of any condition, or of any right or remedy contained in or granted by the provisions of this Contract shall be effective unless it is in writing and signed by the party waiving the breach, failure, right, or remedy. No waiver of any breach, failure, right, or remedy shall be deemed a waiver of any other breach, whether or not similar, nor shall any waiver constitute a continuing waiver unless the writing so specifies. Further, the failure of a party to enforce performance by the other party of any term, covenant, or condition of this Contract, and the failure of a party to exercise any rights or remedies hereunder, shall not be deemed a waiver or relinquishment by that party to enforce future performance of any such terms, covenants, or conditions, or to exercise any future rights or remedies.

2.18 Attorney's Fees

In the event any action is filed in connection with the enforcement or interpretation of this Contract, each party shall bear its own attorneys' fees and costs.

2.19 Force Majeure

Neither DISTRICT nor CONTRACTOR shall be liable for or deemed to be in default for any delay or failure in performance under this Contract or interruption of services resulting, directly or indirectly, from acts of God, enemy or hostile governmental action, civil commotion, strikes, lockouts, labor disputes, fire or other casualty, judicial orders, governmental controls, regulations or restrictions, inability to obtain labor or materials or reasonable substitutes for labor or materials necessary for performance of the services, or other causes, except financial, that are beyond the reasonable control of DISTRICT or CONTRACTOR, for a period of time equal to the period of such force majeure event, provided that the party failing to perform notifies the other party within fifteen calendar days of discovery of the force majeure event, and provided further that that party takes all reasonable action to mitigate the damages resulting from the failure to perform. Notwithstanding the above, if the cause of the force majeure event is due to party's own action or inaction, then such cause shall not excuse that party from performance under this Contract.

2.20 Severability

If a court of competent jurisdiction holds any provision of this Contract to be illegal, unenforceable or invalid in whole or in part for any reason, the validity and enforceability of the remaining provisions, or portions of them will not be affected.

2.21 Headings

Headings on the sections and paragraphs of this Contract are for convenience and reference only, and the words contained therein shall in no way be held to explain, modify, amplify, or aid in the interpretation, construction, or meaning of the provisions of this Contract.

2.22 Counterparts/DocuSign/Scans

This Contract may be executed and delivered in any number of counterparts, each of which, when executed and delivered, shall be deemed an original, and all of which together shall constitute the same contract. The parties may rely upon a DocuSign or scanned copy of any party's signature as an original for all purposes.

2.23 Dispute Resolution

A party that disputes a notice of breach must first seek mediation to resolve the dispute in accordance with the provisions set forth below.

A. Upon receipt of a notice of breach of contract, the party may submit a demand for mediation to resolve whether or not a breach occurred. The party must state the basis of the dispute and deliver the demand within ten (10) business days of the date of receipt of the notice of breach.

B. The mediation shall take place at DISTRICT's office at 375 Beale Street, Suite 600, San Francisco, or at such other place as may be mutually agreed upon by the parties and the mediator.

C. The parties shall make good faith efforts to hold the mediation within sixty (60) days after receipt of the demand for mediation.

D. Each party shall bear its own mediation costs.

E. In the event the parties are unable to resolve the dispute, either party may file an action in a court of competent jurisdiction in accordance with section 2.23 to enforce the Contract.

F. Maximum recovery under this section shall be one million five hundred thousand dollars ($1,500,000), The mediation costs shall not reduce the maximum amount recoverable under this section.

2.24 Governing Law

Any dispute that arises under or relates to this Contract shall be governed by California law, excluding any laws that

© Robert Half Inc., 2026. All rights reserved.

direct the application of another jurisdiction's laws. Venue for resolution of any dispute that arises under or relates to this Contract, including mediation, shall be San Francisco, California.

2.25 Not to Exceed

Total cost of Contract not to exceed $1,500,000.00. Notwithstanding anything to the contrary in this Agreement, RH may at any time, in its sole discretion, discontinue performance of the services once the Not-to-Exceed Amount has been attained (even if RH continued to provide services after the Not-to-Exceed Amount was reached).

By signing below, both parties agree to the terms of this Agreement. Once signed, 1) any reproduction of this Agreement or a Job Arrangement Letter or Placement Letter made by reliable means (for example, photocopy or facsimile) is considered an original and 2) all Talent Solutions ordered under this Agreement are subject to it.

Agreed to:
Bay Area Air Quality Management

By_____
Authorized signature

Name (type or print): Philip M. Fine

Date:

Customer address:

375 Beale Street, Ste 600
San Francisco, CA 94105
Attn: Judy Yu, Manager, Human Resources

Approved as to form:

_____
Alexander G. Crockett
General Counsel

Agreed to:
Robert Half Inc.

By_____
Authorized signature

Name (type or print):

Date:

RH address:

3001 Bishop Drive, Suite 140
San Ramon, CA 94583
Attn: Contracts Manager, Strategic Accounts

After signing, please return a copy of this Agreement to the "RH address" shown above.

© Robert Half Inc., 2026. All rights reserved.

Exhibit A

Professionals are assigned to you under the following additional terms:

1. Guarantee - RH guarantees your satisfaction with the Contract Talent Solutions and Full-Time Engagement Professionals services of the Professional by extending to you a guarantee period equal to the first: (i) one-day (9 hours) of the assignment for finance & accounting, administrative & customer support and legal practice groups; (ii) two (2) days (18 hours) of the assignment for management resources or marketing & creative practice groups; and (iii) five (5) days (44 hours) of the assignment for the technology practice group or Full-Time Engagement Professionals. If, for any reason, you are dissatisfied with the Professional assigned to you, RH will not charge for the hours worked during the applicable guarantee period, provided you allow RH to replace the Professional. Unless you contact RH before the end of the applicable guarantee period, you agree the Professional is satisfactory.

2. Bill Rates and Time Sheet - Hourly bill rates for all assignments will be negotiated on a case-by-case basis pursuant to the HGAC Agreement. Professionals will present a time sheet or an electronic time record to you or your representative for verification and approval at the end of each week. RH will bill you weekly for the total hours worked; RH's invoices are due thirty (30) days following BAAQMD receipt and approval, including applicable sales and service taxes all of which are payable by BAAQMD. Additionally, RH may, at its option, charge interest on any overdue amounts at a rate equal to the lesser of one-half percent (.50%) per month or the highest rate allowed by applicable law from the date the amount first became due.

   RH may charge you a technology fee for the provision of equipment or technology, if you request that a Professional use equipment or technology provided by RH. RH will provide written or verbal notice of any technology fees starting as of the effective date RH specifies.

3. Overtime - If applicable, overtime will be billed at 1.50 times the normal billing rate or as otherwise required by applicable state law. Federal law defines overtime as hours in excess of 40 hours per week, state laws vary.

4. Hiring the Professional - After you evaluate the performance and potential of a Professional on the job, you may wish to employ this person directly. In such event, you agree to pay a conversion fee. The conversion fee is payable if you hire the Professional, regardless of the employment classification, on either a full-time, temporary (including temporary assignments through another agency) or consulting basis during, or within twelve months after the last day of, the assignment. The conversion fee will be owed and invoiced upon your hiring of the Professional, and payment is due within thirty (30) days following your receipt of the invoice. RH will calculate any and all conversion fees using the full-time equivalent salary of the Professional.

   a. The conversion fee will be pursuant to the HGAC Agreement and equal twenty-five percent (25%) of the aggregate annual compensation, including bonuses for any Professionals placed within the first 6 months of an assignment. After a Professional from the management resources, finance & accounting, contract talent, administrative & customer support, technology, marketing & creative, or legal practice groups has been billed and paid for 6 months on assignment with you, no conversion fee shall be owed.

© Robert Half Inc., 2026. All rights reserved. **Robert Half Inc. is an Equal Opportunity Employer M/F/D/V**

Docusign Envelope ID: 50E5BC2C-AE5C-4193-B9C8-21AAF617C8C1

MASTER GENERAL PROVISIONS

This Master Agreement is made and entered into, by and between the Houston-Galveston Area Council hereinafter referred to as H-GAC having its principal place of business at 3555 Timmons Lane, Suite 120, Houston, Texas 77027 and Robert Half Inc., dba Robert Half hereinafter referred to as the Contractor, having its principal place of business at P.O. Box 743295, Los Angeles, CA 90074.

WITNESSETH:

WHEREAS, H-GAC hereby engages the Contractor to perform certain services in accordance with the specifications of the Master Agreement; and

WHEREAS, the Contractor has agreed to perform such services in accordance with the specifications of the Master Agreement;

NOW, THEREFORE, H-GAC and the Contractor do hereby agree as follows:

ARTICLE 1: LEGAL AUTHORITY

The Contractor warrants and assures H-GAC that it possesses adequate legal authority to enter into this Master Agreement. The Contractor's governing body, where applicable, has authorized the signatory official(s) to enter into this Master Agreement and bind the Contractor to the terms of this Master Agreement and any subsequent amendments hereto.

ARTICLE 2: APPLICABLE LAWS

The Contractor agrees to conduct all activities under this Master Agreement in accordance with all federal laws, executive orders, policies, procedures, applicable rules, regulations, directives, standards, ordinances, and laws, in effect or promulgated during the term of this Master Agreement, including without limitation, workers' compensation laws, minimum and maximum salary and wage statutes and regulations, and licensing laws and regulations. When required, the Contractor shall furnish H-GAC with satisfactory proof of its compliance therewith.

ARTICLE 3: PUBLIC INFORMATION

Except as stated below, all materials submitted to H-GAC, including any attachments, appendices, or other information submitted as a part of a submission or Master Agreement, are considered public information, and become the property of H-GAC upon submission and may be reprinted, published, or distributed in any manner by H-GAC according to open records laws, requirements of the US Department of Labor and the State of Texas, and H-GAC policies and procedures. In the event the Contractor wishes to claim portions of the response are not subject to the Texas Public Information Act, it shall so; however, the determination of the Texas Attorney General as to whether such information must be disclosed upon a public request shall be binding on the Contractor. H-GAC will request such a determination only if Contractor bears all costs for preparation of the submission. H-GAC is not responsible for the return of creative examples of work submitted. H-GAC will not be held accountable if material from submissions is obtained without the written consent of the contractor by parties other than H-GAC, at any time during the evaluation process.

ARTICLE 4: INDEPENDENT CONTRACTOR

The execution of this Master Agreement and the rendering of services prescribed by this Master Agreement do not change the independent status of H-GAC or the Contractor. No provision of this Master Agreement or act of H-GAC in performance of the Master Agreement shall be construed as making the Contractor the agent, servant, or employee of H-GAC, the State of Texas, or the United States Government. Employees of CONTRACTOR are

Docusign Envelope ID: 50E5BC2C-AE5C-4193-B9C8-21AAF617C8C1

subject to the exclusive control over the employment relationship and human resource supervision by CONTRACTOR. The Contractor is solely responsible for employee related disputes and discrepancies, including employee payrolls and any claims arising therefrom.

ARTICLE 5: ANTI-COMPETITIVE BEHAVIOR

Contractor will not collude, in any manner, or engage in any practice which may restrict or eliminate competition or otherwise restrain trade.

ARTICLE 6: SUSPENSION AND DEBARMENT

Debarment and Suspension (Executive Orders 12549 and 12689) – A contract award (2 CFR 180.220) must not be made to parties listed on the government-wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR Part 1966 Comp. p. 189) and 12689 (3 CFR Part 1989 Comp. p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

Pursuant to the Federal Rule above, Respondent certifies that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation by any federal department or agency or by the State of Texas and at all times during the term of the Contract neither it nor its principals will be debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation by any federal department or agency or by the State of Texas Respondent shall immediately provide the written notice to H-GAC if at any time the Respondent learns that this certification was erroneous when submitted or has become erroneous by reason of changed circumstances. H-GAC may rely upon a certification of the Respondent that the Respondent is not debarred, suspended, ineligible, or voluntarily excluded from the covered contract, unless the H-GAC knows the certification is erroneous.

ARTICLE 7: GOAL FOR CONTRACTING WITH SMALL AND MINORITY BUSINESSES, WOMEN'S BUSINESS ENTERPRISES, AND LABOR SURPLUS AREA FIRMS (if subcontracts are to be let)

H-GAC's goal is to assure that small and minority businesses, women's business enterprises, and labor surplus area firms are used when possible in providing services under a contract. In accordance with federal procurements requirements of 2 CFR §200.321, if subcontracts are to be let, the prime contractor must take the affirmative steps listed below:

1. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
2. Assuring that small and minority businesses and women's business enterprises are solicited whenever they are potential sources;
3. Dividing total requirements, when economically feasible, into smaller task or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
4. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;
5. Using the services and assistance as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.
6.

Nothing in this provision will be construed to require the utilization of any firm that is either unqualified or unavailable. The Small Business Administration (SBA) is the primary reference and database for information on requirements related to Federal Subcontracting https://www.sba.gov/federal-contracting/contracting-guide/prime-subcontracting

NOTE: The term DBE as used in this solicitation is understood to encompass all programs/business enterprises such as: Small Disadvantaged Business (SDB), Historically Underutilized Business (HUB), Minority Owned Business Enterprise (MBE), Women Owned Business Enterprise (WBE) and Disabled Veteran Business Enterprise (DVBE) or other designation as issued by a certifying agency.

Contractor agrees to work with and assist HGACBuy customer in meeting any DBE targets and goals, as may be required by any rules, processes, or programs they might have in place. Assistance may include compliance with reporting requirements, provision of documentation, consideration of Certified/Listed

Docusign Envelope ID: 50E5BC2C-AE5C-4193-B9C8-21AAF617C8C1

subcontractors, provision of documented evidence that an active participatory role for a DBE entity was considered in a procurement transaction, etc.

ARTICLE 8: SCOPE OF SERVICES

The services to be performed by the Contractor are outlined in an Attachment to this Master Agreement.

ARTICLE 9: PERFORMANCE PERIOD

This Master Agreement shall be performed during the period which begins Jun 01 2025 and ends May 31 2029. All services under this Master Agreement must be rendered within this performance period, unless directly specified under a written change or extension provisioned under Article 21, which shall be fully executed by both parties to this Master Agreement.

ARTICLE 10: PAYMENT OR FUNDING

Payment provisions under this Master Agreement are outlined in the Special Provisions. H-GAC will not pay for any expenses incurred prior to the execution date of a contract, or any expenses incurred after the termination date of the contract.

ARTICLE 11: PAYMENT FOR WORK

The H-GAC Customer is responsible for making payment to the Contractor upon delivery and acceptance of the goods or completion of the services and submission of the subsequent invoice.

ARTICLE 12: PAYMENT TERMS/PRE-PAYMENT/QUANTITY DISCOUNTS

If discounts for accelerated payment, pre-payment, progress payment, or quantity discounts are offered, they must be clearly indicated in the Contractor’s submission prior to contract award. The applicability or acceptance of these terms is at the discretion of the Customer.

ARTICLE 13: REPORTING REQUIREMENTS

If the Contractor fails to submit to H-GAC in a timely and satisfactory manner any report required by this Master Agreement, or otherwise fails to satisfactorily render performances hereunder, H-GAC may terminate this Master Agreement with notice as identified in Article 29 of these General Provisions. H-GAC has final determination of the adequacy of performance and reporting by Contractor. Termination of this Master Agreement for failure to perform may affect Contractor’s ability to participate in future opportunities with H-GAC. The Contractor's failure to timely submit any report may also be considered cause for termination of this Master Agreement. Any additional reporting requirements shall be set forth in the Special Provisions of this Master Agreement.

ARTICLE 14: INSURANCE

Contractor shall maintain insurance coverage for work performed or services rendered under this Master Agreement as outlined and defined in the attached Special Provisions.

ARTICLE 15: SUBCONTRACTS AND ASSIGNMENTS

Except as may be set forth in the Special Provisions, the Contractor agrees not to assign, transfer, convey, sublet, or otherwise dispose of this Master Agreement or any right, title, obligation, or interest it may have therein to any third party without prior written approval of H-GAC. The Contractor acknowledges that H-GAC is not liable to any subcontractor or assignee of the Contractor. The Contractor shall ensure that the performance rendered under all subcontracts shall result in compliance with all the terms and provisions of this Master Agreement as if the performance rendered was rendered by the Contractor. Contractor shall give all required notices, and comply with all laws and regulations applicable to furnishing and performance of the work. Except where otherwise expressly required by applicable law or regulation, H-GAC shall not be responsible for monitoring Contractor's compliance, or that of Contractor’s subcontractors, with any laws or regulations.

ARTICLE 16: AUDIT

Notwithstanding any other audit requirement, H-GAC reserves the right to conduct or cause to be conducted an independent audit of any transaction under this Master Agreement, such audit may be performed by the H-GAC local government audit staff, a certified public accountant firm, or other auditors designated by H-GAC and will be conducted in accordance with applicable professional standards and practices. The Contractor understands and

Docusign Envelope ID: 50E5BC2C-AE5C-4193-B9C8-21AAF617C8C1

agrees that the Contractor shall be liable to the H-GAC for any findings that result in monetary obligations to H-GAC.

ARTICLE 17: TAX EXEMPT STATUS

H-GAC and Customer members are either units of government or qualified non-profit agencies, and are generally exempt from Federal and State sales, excise or use taxes. Respondent must not include taxes in its Response. It is the responsibility of Contractor to determine the applicability of any taxes to an order and act accordingly. Exemption certificates will be provided upon request.

ARTICLE 18: EXAMINATION OF RECORDS

The Contractor shall maintain during the course of the work complete and accurate records of all of the Contractor's costs and documentation of items which are chargeable to H-GAC under this Master Agreement. H-GAC, through its staff or designated public accounting firm, the State of Texas, and United States Government, shall have the right at any reasonable time to inspect, copy and audit those records on or off the premises by authorized representatives of its own or any public accounting firm selected by H-GAC. The right of access to records is not limited to the required retention period, but shall last as long as the records are retained. Failure to provide access to records may be cause for termination of the Master Agreement. The records to be thus maintained and retained by the Contractor shall include (without limitation): (1) personnel and payroll records, including social security numbers and labor classifications, accounting for total time distribution of the Contractor's employees working full or part time on the work, as well as cancelled payroll checks, signed receipts for payroll payments in cash, or other evidence of disbursement of payroll payments; (2) invoices for purchases, receiving and issuing documents, and all other unit inventory records for the Contractor's stocks or capital items; and (3) paid invoices and cancelled checks for materials purchased and for subcontractors' and any other third parties' charges.

Contractor agrees that H-GAC will have the right, with reasonable notice, to inspect its records pertaining to purchase orders processed and the accuracy of the fees payable to H-GAC. The Contractor further agrees that the examination of records outlined in this article shall be included in all subcontractor or third-party Master Agreements.

ARTICLE 19: RETENTION OF RECORDS

The Contractor and its subcontractors shall maintain all records pertinent to this Master Agreement, and all other financial, statistical, property, participant records, and supporting documentation for a period of no less than seven (7) years from the later of the date of acceptance of the final payment or until all audit findings have been resolved. If any litigation, claim, negotiation, audit or other action involving the records has been started before the expiration of the retention period, the records shall be retained until completion of the action and resolution of all issues which arise from it, or until the end of the seven (7) years, whichever is later, and until any outstanding litigation, audit, or claim has been fully resolved.

ARTICLE 20: DISTRIBUTORS, VENDORS, RESELLERS

Contractor agrees and acknowledges that any such designations of distributors, vendors, resellers or the like are for the convenience of the Contractor only and the awarded Contractor will remain responsible and liable for all obligations under the Contract and the performance of any designated distributor, vendor, reseller, etc. Contractor is also responsible for receiving and processing any Customer purchase order in accordance with the Contract and forwarding of the Purchase Order to the designated distributor, vendor, reseller, etc. to complete the sale or service. H-GAC reserves the right to reject any entity acting on the Contractor’s behalf or refuse to add entities after a contract is awarded.

ARTICLE 21: CHANGE ORDERS AND AMENDMENTS

A. Any alterations, additions, or deletions to the terms of this Master Agreement, which are required by changes in federal or state law or by regulations, are automatically incorporated without written amendment hereto, and shall become effective on the date designated by such law or by regulation.

B. To ensure the legal and effective performance of this Master Agreement, both parties agree that any amendment that affects the performance under this Master Agreement must be mutually agreed upon and

Docusign Envelope ID: 50E5BC2C-AE5C-4193-B9C8-21AAF617C8C1

that all such amendments must be in writing. After a period of no less than 30 days subsequent to written notice, unless sooner implementation is required by law, such amendments shall have the effect of qualifying the terms of this Master Agreement and shall be binding upon the parties as if written herein.

C. Customers have the right to issue a change order to any purchase orders issued to the Contractor for the purposes of clarification or inclusion of additional specifications, qualifications, conditions, etc. The change order must be in writing and agreed upon by Contractor and the Customer agency prior to issuance of any Change Order. A copy of the Change Order must be provided by the Contractor to, and acknowledged by, H-GAC.

ARTICLE 22: CONTRACT ITEM CHANGES

A. If a manufacturer discontinues a contracted item, that item will automatically be considered deleted from the contract with no penalty to Contractor. However, H-GAC may at its sole discretion elect to make a contract award to the next lowest Respondent for the item, or take any other action deemed by H-GAC, at its sole discretion, to be in the best interests of its Customers.

B. If a manufacturer makes any kind of change in a contracted item which affects the contract price, Contractor must advise H-GAC of the details. H-GAC may allow or reject the change at its sole discretion. If the change is rejected, H-GAC will remove the item from its program and there will be no penalty to Contractor. However, H- GAC may at its sole discretion elect to make a contract award to the next lowest Respondent for the item, or take any other action deemed by H-GAC, at its sole discretion, to be in the best interests of its Customers.

C. If a manufacturer makes any change in a contracted item which does not affect the contract price, Contractor shall advise H-GAC of the details. If the 'new' item is equal to or better than the originally contracted item, the 'new' item shall be approved as a replacement. If the change is rejected H-GAC will remove the item from its program and there will be no penalty to Contractor. However, H-GAC may at its sole discretion elect to make a contract award to the next lowest Respondent for the item or may take any other action deemed by H-GAC at its sole discretion, to be in the best interests of its Customers.

D. In the case of specifically identified catalogs or price sheets which have been contracted as base bid items or as published options, routine published changes to products and pricing will be automatically incorporated into the contract. However, Contractor must still provide written notice and an explanation of the changes to products and pricing. H-GAC will respond with written approval.

ARTICLE 23: CONTRACT PRICE ADJUSTMENTS

Price Decreases

If Contractor's Direct Cost decreases at any time during the full term of this award, Contractor must immediately pass the decrease on to H-GAC and lower its prices by the amount of the decrease in Direct Cost. (Direct Cost means Contractor's cost from the manufacturer of any item or if Contractor is the manufacturer, the cost of raw materials required to manufacture the item, plus costs of transportation from manufacturer to Contractor and Contractor to H-GAC. Contractor must notify H-GAC of price decreases in the same way as for price increases set out below. The price decrease shall become effective upon H-GAC's receipt of Contractor's notice. If Contractor routinely offers discounted contract pricing, H-GAC may request Contractor accept amended contract pricing equivalent to the routinely discounted pricing.

Price Increase

Contractors may request a price increase for items priced as Base Bid items and Published Options. The amount of any increase will not exceed actual documented increase in Contractor's Direct Cost and will not exceed 10% of the previous bid price. Considerations on the percentage limit will be given if the price increase is the result of increased tariff charges or other governmental actions, or other economic factors. Manufacturer price/contract changes involving the sale of motor vehicles will be considered and may be allowed during the entire contract

Docusign Envelope ID: 50E5BC2C-AE5C-4193-B9C8-21AAF617C8C1

period subject to submission and verification of the proper documentation required for a contract change as referenced in this section.

Price Changes
Any permanent increase or decrease in offered pricing for a base contract item or published option is considered a price change. Temporary increases in pricing by whatever name (e.g., 'surcharge', 'adjustment', 'equalization charge', 'compliance charge', 'recovery charge', etc.), are also considered to be price changes.
For published catalogs and price sheets as part of an H-GAC contract, requests to amend the contract to reflect any new published catalog or price sheet must be submitted whenever the manufacturer publishes a new document. The request must include the new catalog or price sheet. All Products shall, at time of sale, be equipped as required under any then current applicable local, state, and federal government requirements. If, during any contract, changes are made to any government requirements which cause a manufacturer's costs of production to increase, Contractor may increase pricing to the extent of Contractor's actual cost increase. The increase must be substantiated with support documentation acceptable to H-GAC prior to taking effect. Modifications to a Product required to comply with such requirements which become effective after the date of any sale are the responsibility of the Customer.

Requesting Price Increase/Required Documentation
Contractor must submit a written overview of changes requested and reasons for the request, stating the amount of the increase, along with an itemized list of any increased prices, showing the Contractor's current price, revised price, the actual dollar difference and the percentage of the price increase by line item. Price change requests must be supported with substantive documentation (e.g., notices from suppliers and manufacturers of pricing changes in products, components, transportation, raw materials or commodities, and/or product availability, copies of invoices from suppliers, etc.) clearly showing that Contractor's actual costs have increased per the applicable line-item bid. The Producer Price Index (PPI) may be used as partial justification, subject to approval by H-GAC, but no price increase based solely on an increase in the PPI will be allowed. This documentation should be submitted in Excel format to facilitate analysis and updating of the website. The letter and documentation must be sent to Lead Program Coordinator, james.glover@h-gac.com.

Review/Approval of Requests
If H-GAC approves the price increase, Contractor will be notified in writing; no price increase will be effective until Contractor receives this notice. If H-GAC does not approve Contractor's price increase, Contractor may terminate its performance upon sixty (60) days advance written notice to H-GAC, however Contractor must fulfill any outstanding Purchase Orders. Termination of performance is Contractor's only remedy if H-GAC does not approve the price increase. H-GAC reserves the right to accept or reject any price change request.

ARTICLE 24: DELIVERIES AND SHIPPING TERMS

The Contractor agrees to make deliveries only upon receipt of authorized Customer Purchase Order acknowledged by H-GAC. Delivery made without such Purchase Order will be at Contractor's risk and will leave H-GAC the option of canceling any contract awarded to the Contractor. The Contractor must secure and deliver any item within five (5) working days, or as agreed to on any corresponding customer Purchase Order.

Unless otherwise addressed, the following requirements shall apply:

a. Title to goods, and responsibility and liability for loss and/or damage in shipping pass to End User at the delivery destination after receipt and acceptance have taken place. Cost of shipping/delivery shall be paid by End User unless otherwise agreed to by Contractor. If Contractor will be paying for shipping/delivery, shipping terms must be "F.O.B. Destination, Freight Prepaid". If End User will be paying for shipping/delivery, shipping terms must be "F.O.B. Destination – Freight Collect".
b. The details for the application and calculation of shipping and delivery charges must be stated in the Response on Form E. Any freight, shipping or delivery charged to End User will be prepaid and added to the invoice, and will be clearly shown an any Contract Pricing Worksheet or other quote presented to the End User.

ARTICLE 25: RESTOCKING (EXCHANGES AND RETURNS)

Docusign Envelope ID: 50E5BC2C-AE5C-4193-B9C8-21AAF617C8C1

There will be no restocking charge to the Customer for return or exchange of any item purchased under the terms of any award. If the Customer wishes to return items purchased under an awarded contract, the Contractor agrees to exchange, these items for other items, with no additional charge incurred. Items must be returned to Contractor within thirty (30) days from date of delivery. If there is a difference in price in the items exchanged, the Contractor must notify H-GAC and invoice Customer for increase price or provide the Customer with a credit or refund for any decrease in price per Customer's preference. On items returned, a credit or cash refund will be issued by the Contractor to Customer. This return and exchange option will extend for thirty (30) days following the expiration of the term of the Contract. All items returned by the Customer must be unused and in the same merchantable condition as when received. Items that are special ordered may be returned only upon approval of the Contractor.

ARTICLE 26: MANUALS

Each product delivered under contract to any Customer must be delivered with at least one (1) copy of a safety and operating manual and any other technical or maintenance manual. The cost of the manual(s) must be included in the price for the Product offered.

ARTICLE 27: OUT OF STOCK, PRODUCT RECALLS, AND DISCONTINUED PRODUCTS

H-GAC does NOT purchase the products sold pursuant to a Solicitation or Master Agreement. Contractor is responsible for ensuring that notices and mailings, such as Out of Stock or Discontinued Notices, Safety Alerts, Safety Recall Notices, and customer surveys, are sent directly to the Customer with a copy sent to H-GAC. Customer will have the option of accepting any equivalent product or canceling the item from Customer's Purchase Order. Contractor is not authorized to make substitutions without prior approval.

ARTICLE 28: WARRANTIES, SALES, AND SERVICE

Warranties must be the manufacturer's standard and inclusive of any other warranty requirements stated in the Master Agreement; any warranties offered by a dealer will be in addition to the manufacturer's standard warranty and will not be a substitute for such. Pricing for any product must be inclusive of the standard warranty.

Contractor is responsible for the execution and effectiveness of all product warranty requests and any claims, Contractor agrees to respond directly to correct warranty claims and to ensure reconciliation of warranty claims that have been assigned to a third party.

ARTICLE 29: TERMINATION PROCEDURES

The Contractor acknowledges that this Master Agreement may be terminated for Convenience or Default. H-GAC will not pay for any expenses incurred after the termination date of the contract.

A. *Convenience*

H-GAC may terminate this Master Agreement at any time, in whole or in part, with or without cause, whenever H-GAC determines that for any reason such termination is in the best interest of H-GAC, by providing written notice by certified mail to the Contractor. Upon receipt of notice of termination, all services hereunder of the Contractor and its employees and subcontractors shall cease to the extent specified in the notice of termination.

The Contractor may cancel or terminate this Master Agreement upon submission of thirty (30) days written notice, presented to H-GAC via certified mail. The Contractor may not give notice of cancellation after it has received notice of default from H-GAC.

B. *Default*

H-GAC may, by written notice of default to the Contractor, terminate the whole or any part of the Master Agreement, in any one of the following circumstances:

(1) If the Contractor fails to perform the services herein specified within the time specified herein or any extension thereof; or

(2) If the Contractor fails to perform any of the other provisions of this Master Agreement for any reason whatsoever, or so fails to make progress or otherwise violates the Master Agreements that completion of services herein specified within the Master Agreement term is significantly endangered, and in either of these two instances does not cure such failure within a period of ten (10) days (or such longer

Docusign Envelope ID: 50E5BC2C-AE5C-4193-B9C8-21AAF617C8C1

period of time as may be authorized by H-GAC in writing) after receiving written notice by certified mail of default from H-GAC.

(3) In the event of such termination, Contractor will notify H-GAC of any outstanding Purchase Orders and H-GAC will consult with the End User and notify the Contractor to what extent the End User wishes the Contractor to complete the Purchase Order. If Contractor is unable to do so, Contractor may be subject to a claim for damages from H-GAC and/or the End User.

ARTICLE 30: SEVERABILITY

H-GAC and Contractor agree that should any provision of this Master Agreement be determined to be invalid or unenforceable, such determination shall not affect any other term of this Master Agreement, which shall continue in full force and effect.

ARTICLE 31: FORCE MAJEURE

To the extent that either party to this Master Agreement shall be wholly or partially prevented from the performance of any obligation or duty placed on such party by reason of or through strikes, stoppage of labor, riot, fire, flood, acts of war, insurrection, accident, order of any court, act of God, or specific cause reasonably beyond the party's control and not attributable to its neglect or nonfeasance, in such event, the time for the performance of such obligation or duty shall be suspended until such disability to perform is removed. Determination of force majeure shall rest solely with H-GAC.

ARTICLE 32: CONFLICT OF INTEREST

No officer, member or employee of the Contractor or Contractors subcontractor, no member of the governing body of the Contractor, and no other public officials of the Contractor who exercise any functions or responsibilities in the review or Contractor approval of this Master Agreement, shall participate in any decision relating to this Master Agreement which affects his or her personal interest, or shall have any personal or pecuniary interest, direct or indirect, in this Master Agreement.

A. **Conflict of Interest Questionnaire:** Chapter 176 of the Texas Local Government Code requires contractors contracting or seeking to contract with H-GAC to file a conflict-of-interest questionnaire (CIQ) if they have an employment or other business relationship with an H-GAC officer or an officer's close family member. The required questionnaire and instructions are located on the H-GAC website or at the Texas Ethics Commission website https://www.ethics.state.tx.us/forms/CIQ.pdf. H-GAC officers include its Board of Directors and Executive Director, who are listed on this website. Respondent must complete and file a CIQ with the Texas Ethics Commission if an employment or business relationship with H-GAC office or an officer's close family member as defined in the law exists.

B. **Certificate of Interested Parties Form – Form 1295:** As required by Section 2252.908 of the Texas Government Code. H-GAC will not enter a Contract with Contractor unless (i) the Contractor submits a disclosure of interested parties form to H-GAC at the time the Contractor submits the contract H-GAC, or (ii) the Contractor is exempt from such requirement. The required form and instructions are located at the Texas Ethics Commission website https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm. Respondents who are awarded a Contract must submit their Form 1295 with the signed Contract to H-GAC.

ARTICLE 33: FEDERAL COMPLIANCE

Contractor agrees to comply with all federal statutes relating to nondiscrimination, labor standards, and environmental compliance. With regards to "Rights to Inventions Made Under a Contract or Master Agreement," If the Federal award meets the definition of "funding Master Agreement" under 37 CFR § 401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding Master Agreement," the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Master Agreements," and any implementing regulations issued by the awarding agency. Contractor agrees to be wholly compliant with the provisions of 2 CFR 200, Appendix II. Additionally, for work to be performed under the Master Agreement or subcontract thereof, including procurement of materials or leases of equipment, Contractor shall notify each potential subcontractor or supplier of the

Docusign Envelope ID: 50E5BC2C-AE5C-4193-B9C8-21AAF617C8C1

Contractor's federal compliance obligations. These may include, but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§ 1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) the Fair Labor Standards Act of 1938 (29 USC 676 et. seq.), (d) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794), which prohibits discrimination on the basis of handicaps and the Americans with Disabilities Act of 1990; (e) the Age Discrimination in Employment Act of 1967 (29 USC 621 et. seq.) and the Age Discrimination Act of 1974, as amended (42 U.S.C. §§ 6101-6107), which prohibits discrimination on the basis of age; (f) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (g) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to the nondiscrimination on the basis of alcohol abuse or alcoholism; (h) §§ 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. 290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (i) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. § 3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (j) any other nondiscrimination provisions in any specific statute(s) applicable to any Federal funding for this Master Agreement; (k) the requirements of any other nondiscrimination statute(s) which may apply to this Master Agreement; (l) applicable provisions of the Clean Air Act (42 U.S.C. §7401 et seq.), the Federal Water Pollution Control Act, as amended (33 U.S.C. §1251 et seq.), Section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and the Environmental Protection Agency regulations at 40 CPR Part 15; (m) applicable provisions of the Davis- Bacon Act (40 U.S.C. 276a - 276a-7), the Copeland Act (40 U.S.C. 276c), and the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-332), as set forth in Department of Labor Regulations at 20 CPR 5.5a; (n) the mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (P.L. 94-163).

ARTICLE 34: PROHIBITION ON CONTRACTING WITH ENTITIES USING CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE EQUIPMENT (EFFECTIVE AUG. 13, 2020 AND AS AMENDED OCTOBER 26, 2020)

Pursuant to 2 CFR 200.216, Contractor shall not offer equipment, services, or system that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. Covered telecommunications equipment or services means 1) telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities); 2) for the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities); 3) telecommunications or video surveillance services provided by such entities or using such equipment; or 4) telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country. Respondent must comply with requirements for certifications. The provision at 48 C.F.R Section 52.204-26 requires that offerors review SAM prior to completing their required representations. This rule applies to all acquisitions, including acquisitions at or below the simplified acquisition threshold and to acquisitions of commercial items, including commercially available off the-shelf items.

ARTICLE 35: DOMESTIC PREFERENCE

In accordance with 2 CFR 200.322, as appropriate and to the extent consistent with law, when using federal grant award funds H-GAC should, to the greatest extent practicable, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). H-GAC must include this requirement in all subawards including all contracts and purchase orders for work or products under the federal grant award. If Contractor intends to qualify for Purchase Orders using federal grant money, then it shall work with H-GAC to provide all required certifications and other documentation needed to show compliance.

ARTICLE 36: CRIMINAL PROVISIONS AND SANCTIONS

Docusign Envelope ID: 50E5BC2C-AE5C-4193-B9C8-21AAF617C8C1

The Contractor agrees to perform the Master Agreement in conformance with safeguards against fraud and abuse as set forth by the H-GAC, the State of Texas, and the acts and regulations of any related state or federal agency. The Contractor agrees to promptly notify H-GAC of any actual or suspected fraud, abuse, or other criminal activity through the filing of a written report within twenty-four (24) hours of knowledge thereof. Contractor shall notify H-GAC of any accident or incident requiring medical attention arising from its activities under this Master Agreement within twenty-four (24) hours of such occurrence. Theft or willful damage to property on loan to the Contractor from H-GAC, if any, shall be reported to local law enforcement agencies and H-GAC within two (2) hours of discovery of any such act.

The Contractor further agrees to cooperate fully with H-GAC, local law enforcement agencies, the State of Texas, the Federal Bureau of Investigation, and any other duly authorized investigative unit, in carrying out a full investigation of all such incidents.

The Contractor shall notify H-GAC of the threat of lawsuit or of any actual suit filed against the Contractor pertaining to this Master Agreement or which would adversely affect the Contractor's ability to perform services under this Master Agreement.

ARTICLE 37: INDEMNIFICATION AND RECOVERY

H-GAC's liability under this Master Agreement, whether for breach of contract, warranty, negligence, strict liability, in tort or otherwise, is limited to its order processing charge. In no event will H-GAC be liable for any loss of use, loss of time, inconvenience, commercial loss, lost profits, or savings or other incidental, special or consequential damages to the full extent such use may be disclaimed by law. Contractor agrees, to the extent permitted by law, to defend and hold harmless H-GAC, its board members, officers, agents, officials, employees, and indemnities from any and all claims, costs, expenses (including reasonable attorney fees), actions, causes of action, judgements, and liens arising as a result of Contractor's negligent act or omission under this Master Agreement. Contractor shall notify H-GAC of the threat of lawsuit or of any actual suit filed against Contractor relating to this Master Agreement.

ARTICLE 38: LIMITATION OF CONTRACTOR'S LIABILITY

Except as specified in any separate writing between the Contractor and an END USER, Contractor's total liability under this Master Agreement, whether for breach of contract, warranty, negligence, strict liability, in tort or otherwise, but excluding its obligation to indemnify H-GAC, is limited to the price of the particular products/services sold hereunder, and Contractor agrees either to refund the purchase price or to repair or replace product(s) that are not as warranted. In no event will Contractor be liable for any loss of use, loss of time, inconvenience, commercial loss, loss of profits or savings or other incidental, special or consequential damages to the full extent such use may be disclaimed by law. Contractor understands and agrees that it shall be liable to repay and shall repay upon demand to END USER any amounts determined by H-GAC, its independent auditors, or any agency of State or Federal government to have been paid in violation of the terms of this Master Agreement.

ARTICLE 39: TITLES NOT RESTRICTIVE

The titles assigned to the various Articles of this Master Agreement are for convenience only. Titles shall not be considered restrictive of the subject matter of any Article, or part of this Master Agreement.

ARTICLE 40: JOINT WORK PRODUCT

This Master Agreement is the joint work product of H-GAC and the Contractor. This Master Agreement has been negotiated by H-GAC and the Contractor and their respective counsel and shall be fairly interpreted in accordance with its terms and, in the event of any ambiguities, no inferences shall be drawn against any party.

ARTICLE 41: PROCUREMENT OF RECOVERED MATERIAL

H-GAC and the Respondent must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include: (1) procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds $10,000 or the value of the quantity acquired during the preceding fiscal year exceeded $10,000; (2) procuring solid waste management services in a manner that

Docusign Envelope ID: 50E5BC2C-AE5C-4193-B9C8-21AAF617C8C1

maximizes energy and resource recovery; and (3) establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines. Pursuant to the Federal Rule above, as required by the Resource Conservation and Recovery Act of 1976 (42 U.S.C. § 6962(c)(3)(A)(i)), Respondent certifies that the percentage of recovered materials content for EPA-designated items to be delivered or used in the performance of the Contract will be at least the amount required by the applicable contract specifications or other contractual requirements.

ARTICLE 42: COPELAND "ANTI-KICKBACK" ACT

Contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into the contract. The contractor or subcontractor shall insert in any subcontracts the clause above and such other clauses as appropriate agency instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses. A breach of the contract clauses above may be grounds for termination of the Contract, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. § 5.12.

ARTICLE 43: DISCRIMINATION

Respondent and any potential subcontractors shall comply with all Federal statutes relating to nondiscrimination. These include, but are not limited to:

a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352), which prohibits discrimination on the basis of race, color, or national origin;
b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex;
c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps;
d) The Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101- 6107), which prohibits discrimination on the basis of age;
e) The Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse;
f) The Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism;
g) Sections 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records;
h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental, or financing of housing;
i) Any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and
j) The requirements of any other nondiscrimination statute(s) that may apply to the application.

ARTICLE 44: DRUG FREE WORKPLACE

Contractor must provide a drug-free workplace in accordance with the Drug-Free Workplace Act, as applicable. For the purposes of this Section, "drug-free" means a worksite at which employees are prohibited from engaging in the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance. H-GAC may request a copy of this policy.

ARTICLE 45: APPLICABILITY TO SUBCONTRACTORS

Respondent agrees that all contracts it awards pursuant to the contract awarded as a result of this Master Agreement will be bound by the foregoing terms and conditions.

ARTICLE 46: WARRANTY AND COPYRIGHT

Submissions must include all warranty information, including items covered, items excluded, duration, and renewability. Submissions must include proof of licensing if using third party code for programming.

Docusign Envelope ID: 50E5BC2C-AE5C-4193-B9C8-21AAF617C8C1

ARTICLE 47: DATA HANDLING AND SECURITY

It will always be the responsibility of the selected Contractor to manage data transfer and to secure all data appropriately during the project to prevent unauthorized access to all data, products, and deliverables.

ARTICLE 48: DISPUTES

All disputes concerning questions of fact or of law arising under this Master Agreement, which are not addressed within the Whole Master Agreement as defined pursuant to Article 4 hereof, shall be decided by the Executive Director of H-GAC or his designee, who shall reduce his decision to writing and provide notice thereof to the Contractor. The decision of the Executive Director or his designee shall be final and conclusive unless, within thirty (30) days from the date of receipt of such notice, the Contractor requests a rehearing from the Executive Director of H-GAC. In connection with any rehearing under this Article, the Contractor shall be afforded an opportunity to be heard and offer evidence in support of its position. The decision of the Executive Director after any such rehearing shall be final and conclusive. The Contractor may, if it elects to do so, appeal the final and conclusive decision of the Executive Director to a court of competent jurisdiction. Pending final decision of a dispute hereunder, the Contractor shall proceed diligently with the performance of the Master Agreement and in accordance with H-GAC's final decision.

ARTICLE 49: CHOICE OF LAW: VENUE

This Master Agreement shall be governed by the laws of the State of Texas. Venue and jurisdiction of any suit or cause of action arising under or in connection with the Master Agreement shall lie exclusively in Harris County, Texas. Disputes between END USER and Contractor are to be resolved in accordance with the law and venue rules of the state of purchase. Contractor shall immediately notify H-GAC of such disputes.

ARTICLE 50: ORDER OF PRIORITY

In the case of any conflict between or within this Master Agreement, the following order of priority shall be utilized: 1) General Provisions, 2) Special Provisions, 3) Scope of Work, and 4) Other Attachments.

ARTICLE 51: WHOLE MASTER AGREEMENT

Please note, this is an H-GAC Master Agreement template and is used for all products and services offered in H-GAC Cooperative Purchasing. Any redlines to this Master Agreement may not be reviewed. If this Master Agreement has not been signed by the Contractor within 30 calendar days, this Master Agreement will be automatically voided. The Master General Provisions, Master Special Provisions, and Attachments, as provided herein, constitute the complete Master Agreement between the parties hereto, and supersede any and all oral and written Master Agreements between the parties relating to matters herein. Except as otherwise provided herein, this Master Agreement cannot be modified without written consent of the parties.

ARTICLE 52: UNIVERSAL IDENTIFIER AND SYSTEM FOR AWARD MANAGEMENT (SAM)

In accordance with 2 CFR Title 2, Subtitle A, Chapter I, Part 25 as it applies to a Federal awarding agency's grants, cooperative agreements, loans, and other types of Federal financial assistance as defined in 2 CFR 25.406. Contractor understands and as it relates to 2 CFR 25.205(a), a Federal awarding agency may not make a Federal award or financial modification to an existing Federal award to an applicant or recipient until the entity has complied with the requirements described in 2 CFR 25.200 to provide a valid unique entity identifier and maintain an active SAM registration (www.SAM.gov) with current information (other than any requirement that is not applicable because the entity is exempted under § 25.110). 2 CFR 25.200(b) requires that registration in the SAM **prior to submitting an application or plan**; and maintain an active SAM registration with current information, including information on a recipient's immediate and highest level owner and subsidiaries, as well as on all predecessors that have been awarded a Federal contract or grant within the last three years, if applicable, at all times during which it has an active Federal award or an application or plan under consideration by a Federal awarding agency; and provide its unique entity identifier in each application or plan it submits to the Federal awarding agency. To remain registered in the SAM database after the initial registration, the applicant is required to review and update its information in the SAM database on an annual basis from the date of initial registration or subsequent updates to ensure it is current, accurate and complete. At the time a Federal awarding agency is ready to make a Federal award, if the intended recipient has not complied with an applicable requirement to provide a unique entity identifier or maintain an active SAM registration with current information, the Federal awarding

Docusign Envelope ID: 50E5BC2C-AE5C-4193-B9C8-21AAF617C8C1

agency: (1) May determine that the applicant is not qualified to receive a Federal award; and (2) May use that determination as a basis for making a Federal award to another applicant.

ARTICLE 53: PROCUREMENT OF RECOVERED MATERIALS

In accordance with 2 CFR 200.323, the Houston-Galveston Area Council and the Contractor or Subrecipient must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include: (1) procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds $10,000 or the value of the quantity acquired during the preceding fiscal year exceeded $10,000; (2) procuring solid waste management services in a manner that maximizes energy and resource recovery; and (3) establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines. Pursuant to the Federal Rule above, as required by the Resource Conservation and Recovery Act of 1976 (42 U.S.C. § 6962(c)(3)(A)(i)), the Contractor or Subrecipient certifies that the percentage of recovered materials content for EPA-designated items to be delivered or used in the performance of the Agreement will be at least the amount required by the applicable contract specifications or other contractual requirements.

SIGNATURES:

H-GAC and the Contractor have read, agreed, and executed the whole Master Agreement as of the date first written above, as accepted by:

Robert Half Inc. , dba Robert Half

Signature DocuSigned by: Meghan Reilly 7C841FFA6B484DC...

Name Meghan Reilly

Title Vice President - Contract Finance & Accounting

Date 5/30/2025

H-GAC

Signature DocuSigned by: 82EC270D5D61423...

Name Chuck Wemple

Title Executive Director

Date 6/17/2025

Docusign Envelope ID: 50E5BC2C-AE5C-4193-B9C8-21AAF617C8C1

MASTER SPECIAL PROVISIONS

Please note, this is an H-GAC Master Agreement template and is used for all products and services offered in H-GAC Cooperative Purchasing. Any redlines to this Master Agreement may not be reviewed. Incorporated by attachment, as part of the whole Master Agreement, H-GAC and the Contractor do, hereby agree to the Master Special Provisions as follows:

ARTICLE 1: BIDS/PROPOSALS INCORPORATED

In addition to the whole Master Agreement, the following documents listed in order of priority are incorporated into the Master Agreement by reference: Bid/Proposal Specifications and Contractor's Response to the Bid/Proposal.

ARTICLE 2: END USER MASTER AGREEMENTS ("EUA")

H-GAC acknowledges that the END USER, which is the HGACBuy customer utilizing the contract (CUSTOMER and END USER may be used interchangeably) may choose to enter into an End User Master Agreement (EUA) with the Contractor through this Master Agreement. A CUSTOMER/END USER is a state agency, county, municipality, special district, or other political subdivision of a state, or a qualifying non-profit corporation (providing one or more governmental function or service that possess legal authority to enter into the Contract. The term of the EUA may exceed the term of the current H-GAC Master Agreement.

H-GAC's acknowledgement is not an endorsement or approval of the End User Master Agreement's terms and conditions. Contractor agrees not to offer, agree to or accept from the CUSTOMER/END USER, any terms or conditions that conflict with those in Contractor's Master Agreement with H-GAC. Contractor affirms that termination of its Master Agreement with H-GAC for any reason shall not result in the termination of any underlying EUA, which shall in each instance, continue pursuant to the EUA's stated terms and duration. Pursuant to the terms of this Master Agreement, termination of this Master Agreement will disallow the Contractor from entering into any new EUA with CUSTOMER/END USER. Applicable H-GAC order processing charges will be due and payable to H-GAC on any EUAs, surviving termination of this Master Agreement between H-GAC and Contractor.

ARTICLE 3: MOST FAVORED CUSTOMER CLAUSE

If CONTRACTOR, at any time during this Contract, routinely enters into agreements with other governmental customers within the State of Texas and offers the same or substantially the same products/services offered to H-GAC on a basis that routinely provides pricing more favorable than those provided to H-GAC hereunder, CONTRACTOR shall notify H-GAC within ten (10) business days. This Contract between H-GAC and CONTRACTOR shall be automatically amended, effective the date of notification.
The Parties accept the following definition of routine: A prescribed, detailed course of action to be followed regularly; a standard procedure. The Parties accept the following definition of agreement: A contractual document that applies to more than one staffing assignment and contains defined pricing rates."
If CONTRACTOR claims that a more favorable price, warranty, benefit, or term that was charged or offered to another governmental entity in the State of Texas during the term of this Agreement, does not constitute more favorable treatment, than CONTRACTOR shall, within ten (10) business days, notify H-GAC in writing, setting forth the detailed reasons CONTRACTOR believes the aforesaid offer is not in fact most favored treatment. H-GAC, after due consideration of CONTRACTOR's written explanation, may decline to accept such explanation

Docusign Envelope ID: 50E5BC2C-AE5C-4193-B9C8-21AAF617C8C1

and thereupon this Agreement between H-GAC and CONTRACTOR shall be automatically amended, effective retroactively, to the effective date of the most favored agreement, to provide the same prices, warranties, benefits, or terms to H-GAC and the END USER.
EXCEPTION: This clause shall not be applicable to prices and price adjustments offered by a bidder, proposer or contractor, which are not within bidder's/proposer's control [example; a manufacturer's bid concession], or to any prices offered to the Federal Government and its agencies.

ARTICLE 4: PARTY LIABILITY

Contractor's total liability under this Master Agreement, whether for breach of contract, warranty, negligence, strict liability, in tort or otherwise, is limited to the price of the particular products/services sold hereunder. Contractor agrees either to refund the purchase price or to repair or replace product(s) that are not as warranted. Contractor accepts liability to repay, and shall repay upon demand to CUSTOMER/END USER, any amounts determined by H-GAC, its independent auditors, or any state or federal agency, to have been paid in violation of the terms of this Master Agreement. Employees of CONTRACTOR are subject to the exclusive control over the employment relationship and human resource supervision by CONTRACTOR. The Contractor is solely responsible for employee related disputes and discrepancies, including employee payrolls and any claims arising therefrom.

ARTICLE 5: GOVERNING LAW & VENUE

Contractor and H-GAC agree that Contractor will make every reasonable effort to resolve disputes with the CUSTOMER/END USER in accord with the law and venue rules of the state of purchase. Contractor shall immediately notify H-GAC of such disputes.

ARTICLE 6: SALES AND ORDER PROCESSING CHARGE

Contractor shall sell its products to CUSTOMER/END USER based on the pricing and terms of this Master Agreement. H-GAC will invoice Contractor for the applicable order processing charge when H-GAC receives notification of a CUSTOMER/END USER order. Contractor shall remit to H-GAC the full amount of the applicable order processing charge, after delivery of any product or service and subsequent CUSTOMER/END USER acceptance. Payment of the Order Processing Charge shall be remitted from Contractor to H-GAC, within thirty (30) calendar days or ten (10) business days after receipt of a CUSTOMER/END USER's payment, whichever comes first, notwithstanding Contractor's receipt of invoice. For sales made by Contractor based on this Master Agreement, including sales to entities without Interlocal Master Agreements, Contractor shall pay the applicable order processing charges to H-GAC. Further, Contractor agrees to encourage entities who are not members of H-GAC's Cooperative Purchasing Program to execute an H-GAC Interlocal Master Agreement. H-GAC reserves the right to take appropriate actions including, but not limited to, Master Agreement termination if Contractor fails to promptly remit the appropriate order processing charge to H-GAC. In no event shall H-GAC have any liability to Contractor for any goods or services a CUSTOMER/END USER procures from Contractor. At all times, Contractor shall remain liable to pay to H-GAC any order processing charges on any portion of the Master Agreement actually performed, and for which compensation was received by Contractor.

ARTICLE 7: LIQUIDATED DAMAGES

Contractor and H-GAC agree that Contractor shall cooperate with the CUSTOMER/END USER at the time a CUSTOMER/END USER purchase order is placed, to determine terms for any liquidated damages.

ARTICLE 8: INSURANCE

Unless otherwise stipulated in Section B of the Bid/Proposal Specifications, Contractor must have the following insurance and coverage minimums:

Docusign Envelope ID: 50E5BC2C-AE5C-4193-B9C8-21AAF617C8C1

a. General liability insurance with a Single Occurrence limit of at least $1,000,000.00, and a General Aggregate limit of at least two times the Single Occurrence limit.
b. Product liability insurance with a Single Occurrence limit of at least $1,000,000.00, and a General Aggregate limit of at least two times the Single Occurrence limit for all Products except Automotive Fire Apparatus. For Automotive Fire Apparatus, see Section B of the Bid/Proposal Specifications.
c. Property Damage or Destruction insurance is required for coverage of End User owned equipment while in Contractor's possession, custody, or control. The minimum Single Occurrence limit is $500,000.00 and the General Aggregate limit must be at least two times the Single Occurrence limit. This insurance may be carried in several ways, e.g. under an Inland Marine policy, as art of Automobile coverage, or under a Garage Keepers policy. In any event, this coverage must be specifically and clearly listed on insurance certificate(s) submitted to H-GAC.
d. Insurance coverage shall be in effect for the length of any contract made pursuant to the Bid/Proposal, and for any extensions thereof, plus the number of days/months required to deliver any outstanding order after the close of the contract period.
e. Original Insurance Certificates must be furnished to H-GAC on request, showing Contractor as the insured and showing coverage and limits for the insurances listed above.
f. If any Product(s) or Service(s) will be provided by parties other than Contractor, all such parties are required to carry the minimum insurance coverages specified herein, and if requested by H-GAC, a separate insurance certificate must be submitted for each such party.
g. H-GAC reserves the right to contact insurance underwriters to confirm policy and certificate issuance and document accuracy.

ARTICLE 9: PERFORMANCE AND PAYMENT BONDS FOR INDIVIDUAL ORDERS

H-GAC's contractual requirements DO NOT include a Performance & Payment Bond (PPB); therefore, Contractor shall offer pricing that reflects this cost savings. Contractor shall remain prepared to offer a PPB to cover any order if so requested by the CUSTOMER/END USER. Contractor shall quote a price to CUSTOMER/END USER for provision of any requested PPB, and agrees to furnish the PPB within ten business (10) days of receipt of CUSTOMER/END USER's purchase order.

ARTICLE 10: ORDER PROCESSING CHARGE

H-GAC will apply an Order Processing Charge for each sale done through the H-GAC contract, with the exception of orders for motor vehicles. Any pricing submitted must include this charge amount per the most current H-GAC schedule. For motor vehicle orders, the Processing Charge is paid by the CUSTOMER/END USER. Contractor will need to refer to the solicitation for the Order Processing Charge.

ARTICLE 11: CHANGE OF STATUS

Contractor shall immediately notify H-GAC, in writing, of ANY change in ownership, control, dealership/franchisee status, Motor Vehicle license status, or name. Contractor shall offer written guidance to advise H-GAC if this Master Agreement shall be affected in any way by such change. H-GAC shall have the right to determine whether or not such change is acceptable, and to determine what action shall be warranted, up to and including cancellation of Master Agreement.

ARTICLE 12: REQUIREMENTS TO APPLICABLE PHYSICAL GOODS

In the case of physical goods (e.g. equipment, material, supplies, as opposed to services), all Products offered must comply with any applicable provisions of the Texas Business and Commerce Code, Title 1, Chapter 2 and with at least the following:

Docusign Envelope ID: 50E5BC2C-AE5C-4193-B9C8-21AAF617C8C1

a. Be new, unused, and not refurbished.
b. Not be a prototype as the general design, operation, and performance. This requirement is NOT meant to preclude the Contractor from offering new models or configurations which incorporate improvements in a current design or add functionality, but in which new model or configuration may be new to the marketplace.
c. Include all accessories which may or may not be specifically mentioned in the Master Agreement, but which are normally furnished or necessary to make the Product ready for its intended use upon delivery. Such accessories shall be assembled, installed, and adjusted to allow continuous operation of Product at time of delivery.
d. Have assemblies, sub-assemblies and component parts that are standard and interchangeable throughout the entire quantity of a Product as may be purchased simultaneously by any END USER/CUSTOMER.
e. Be designed and constructed using current industry accepted engineering and safety practices, and materials.
f. Be available for inspection at any time prior to or after procurement.

ARTICLE 13: TEXAS MOTOR VEHICLE BOARD LICENSING

All Contractors that deal in motor vehicles shall maintain current licenses that are required by the Texas Motor Vehicle Commission Code. If at any time during this Master Agreement term, any required Contractor license is denied, revoked, or not renewed, Contractor shall be in default of this Master Agreement, unless the Texas Motor Vehicle Board issues a stay or waiver. Contractor shall promptly provide copies of all current applicable Texas Motor Vehicle Board documentation to H-GAC upon request.

ARTICLE 14: INSPECTION/TESTING

All Products sold pursuant to this Master Agreement will be subject to inspection/testing by or at the direction of H-GAC and/or the ordering CUSTOMER/END USER, either at the delivery destination or the place of manufacture. In the event a Product fails to meet or exceed all requirements of this Master Agreement, and unless otherwise agreed in advance, the cost of any inspection and/or testing, will be the responsibility of the Contractor.

ARTICLE 15: ADDITIONAL REPORTING REQUIREMENTS

Contractor agrees to submit written quarterly reports to H-GAC detailing all transactions during the previous three (3) month period. Reports must include, but are not limited, to the following information:

a. CUSTOMER/END USER Name
b. Product/Service purchased, including Product Code if applicable
c. Customer Purchase Order Number
d. Purchase Order Date
e. Product/Service dollar amount
f. HGACBuy Order Processing Charge amount

ARTICLE 16: BACKGROUND CHECKS

Cooperative customers may request background checks on any awarded contractor's employees who will have direct contact with students, or for any other reason they so choose, any may require contractor to pay the cost of obtaining any background information requested by the CUSTOMER/END USER.

ARTICLE 17: PROHIBITION ON CONTRACTS WITH COMPANIES BOYCOTTING ISRAEL CERTIFICATION

As required by Chapter 2271 of the Texas Local Government Code the Contractor must verify that it 1) does not boycott Israel; and 2) will not boycott Israel during the term of the Contract. Pursuant to Section 2271.001, Texas Government Code:

1. "Boycott Israel" means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes; and

2. "Company" means a for-profit sole proprietorship, organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, or any limited liability company, including a wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate of those entities or business associations that exist to make a profit.

ARTICLE 18: NO EXCLUDED NATION OR TERRORIST ORGANIZATION CERTIFICATION

As required by Chapter 2252 of the Texas Government Code the Contractor must certify that it is not a company engaged in active business operations with Sudan, Iran, or a foreign terrorist organization – specifically, any company identified on a list prepared and maintained by the Texas Comptroller under Texas Government Code §§806.051, 807.051, or 2252.153. (A company that the U.S. Government affirmatively declares to be excluded from its federal sanctions regime relating to Sudan, Iran, or any federal sanctions regime relating to a foreign terrorist organization is not subject to the contract prohibition.)

ARTICLE 19: PROHIBITION ON CONTRACTING WITH ENTITIES USING CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE EQUIPMENT (Effective Aug. 13, 2020 and as amended October 26, 2020)

Pursuant to 2 CFR 200.216, Contractor shall not offer equipment, services, or system that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. ''Covered telecommunications equipment or services means 1) telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities); 2) for the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities); 3) telecommunications or video surveillance services provided by such entities or using such equipment; or 4) telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

Contractor must comply with requirements for certifications. The provision at 48 C.F.R Section 52.204-26 requires that Contractors review SAM prior to completing their required representations. This rule applies to all acquisitions, including acquisitions at or below the simplified acquisition threshold and to acquisitions of commercial items, including commercially available off the-shelf items.

ARTICLE 20: BUY AMERICA ACT (National School Lunch Program and Breakfast Program)

With respect to products purchased by CUSTOMER/END USER for use in the National School Lunch Program and/or National School Breakfast Program, Contractor shall comply with all federal procurement laws and regulations with respect to such programs, including the Buy American provisions set forth in 7 C.F.R. Part 210.21(d), to the extent applicable. Contractor agrees to provide all certifications required by CUSTOMER/END USER regarding such programs.

In the event Contractor or Contractor's supplier(s) are unable or unwilling to certify compliance with the Buy American Provision, or the applicability of an exception to the Buy American provision, H-GAC CUSTOMER/END USER may decide not to purchase from Contractor. Additionally, H-GAC

CUSTOMER/END USER may require country of origin on all products and invoices submitted for payment by Contractor, and Contractor agrees to comply with any such requirement.

ARTICLE 21: BUY AMERICA REQUIREMENT (Applies only to Federally Funded Highway and Transit Projects)

With respect to products purchased by CUSTOMER/END USER for use in federally funded highway projects, Contractor shall comply with all federal procurement laws and regulations with respect to such projects, including the Buy American provisions set forth in 23 U.S.C. Section 313, 23 C.F.R. Section 635.410, as amended, and the Steel and Iron Preference provisions of Texas Transportation Code Section 223.045, to the extent applicable. Contractor agrees to provide all certifications required by CUSTOMER/END USER regarding such programs. With respect to products purchased by CUSTOMER/END USER for use in federally funded transit projects, Contractor shall comply with all federal procurement laws and regulations with respect to such projects, including the Buy American provisions set forth in 49 U.S.C. Section 5323(j)(1), 49 C.F.R. Sections 661.6 or 661.12, to the extent applicable. Contractor agrees to provide all certifications required by CUSTOMER/END USER regarding such programs.

ARTICLE 22: DOMESTIC PREFERENCE

In accordance with 2 CFR 200.322, as appropriate and to the extent consistent with law, a CUSTOMER/END USER using federal grant award funds should, to the greatest extent practicable, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The CUSTOMER/END USER must include this requirement in all subawards including all contracts and purchase orders for work or products under the federal grant award. If Contractor intends to qualify for Purchase Orders using federal grant money, they shall work with the CUSTOMER/END USER to provide all required certifications and other documentation needed to show compliance.

ARTICLE 23: TITLE VI REQUIREMENTS

H-GAC in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any disadvantaged business enterprises will be afforded full and fair opportunity to submit in response to this Master Agreement and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

ARTICLE 24: EQUAL EMPLOYMENT OPPORTUNITY

Except as otherwise provided under 41 CFR Part 60, all Contracts and CUSTOMER/END USER Purchase Orders that meet the definition of “federally assisted construction contract” in 41 CFR Part 60-1.3 shall be deemed to include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, “Equal Employment Opportunity” (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., pg.339), as amended by Executive Order 11375, “Amending Executive Order 11246 Relating to Equal Employment Opportunity,” and implementing regulations at 41CFR Part 60, “Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor.”

The equal opportunity clause provided under 41 CFR 60-1.4(b) is hereby incorporated by reference. Contractor agrees that such provision applies to any contract that meets the definition of “federally assisted construction contract” in 41 CFR Part 60-1.3 and agrees that it will comply with such provision.

ARTICLE 25: CLEAN AIR AND WATER POLLUTION CONTROL ACT

CUSTOMER/END USER Purchase Orders using federal funds must contain a provision that requires the Contractor to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean

Docusign Envelope ID: 50E5BC2C-AE5C-4193-B9C8-21AAF617C8C1

Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

Pursuant to the Federal Rule above, Contractor certifies that it is in compliance with all applicable provisions of the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387) and will remain in compliance during the term of the Contract.

ARTICLE 26: PREVAILING WAGE

Contractor and any potential subcontractors have a duty to and shall pay the prevailing wage rate under the Davis-Bacon Act, 40 U.S.C. 276a – 276a-5, as amended, and the regulations adopted thereunder contained in 29 C.F.R. pt. 1 and 5.

ARTICLE 27: CONTRACT WORK HOURS AND SAFETY STANDARDS

As per the Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708), where applicable, all CUSTOMER/END USER Purchase Orders in excess of $100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer, on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

ARTICLE 28: PROFIT AS A SEPARATE ELEMENT OF PRICE

For purchases using federal funds more than the current Simplified Acquisition Threshold of $250,000, requires negotiation of profit as a separate element of the price. See, 2 CFR 200.324(b). Contractor agrees to provide information and negotiate regarding profit as a separate element of the price for the purchase. Contractor also agrees that the total price, including profit, charged by Contractor will not exceed the awarded pricing, including any applicable discount, under any awarded contract.

ARTICLE 29: BYRD ANTI-LOBBYING AMENDMENT

Byrd Anti-Lobbying Amendment (31U.S.C. 1352) – Contractors that apply or bid for an award exceeding $100,000 must file the required anti-lobbying certification. Each tier must certify to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier, up to the CUSTOMER/END USER. As applicable, Contractor agrees to file all certifications and disclosures required by, and otherwise comply with, the Byrd Anti-Lobbying Amendment (31 USC 1352). Contractor certifies that it is currently in compliance with all applicable provisions of the Byrd Anti-Lobbying Amendment (31 U.S.C. 1352) and will continue to be in compliance throughout the term of the Contract and further certifies that:

1. No Federal appropriated funds have been paid or will be paid by or on behalf of the Contractor, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection

Docusign Envelope ID: 50E5BC2C-AE5C-4193-B9C8-21AAF617C8C1

with the awarding of a Federal contract, the making of a Federal Grant, the making of a Federal Loan, the entering into a cooperative Master Agreement, and the extension, continuation, renewal, amendment, or modification of a Federal contract, grant, loan, or cooperative Master Agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing, or attempting to influence, an officer or employee of a Member of Congress in connection with a Federal contract, grant, loan, or cooperative Master Agreement, Contractor shall complete and submit Standard Form – LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.
3. Contractor shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative Master Agreements) and that all subcontractors shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certificate is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

ARTICLE 30: COMPLIANCE WITH EPA REGULATIONS APPLICABLE TO GRANTS, SUBGRANTS, COOPERATIVE MASTER AGREEMENTS, AND CONTRACTS

Contractor certifies compliance with all applicable standards, orders, regulations, and/or requirements issued pursuant to the Clean Air Act of 1970, as amended (42 U.S.C. 1857(h)), Section 508 of the Clean Water Act, as amended (13 U.S.C. 1368), Executive Order 117389 and Environmental Protection Agency Regulation, 40 CFR Part 15.

ARTICLE 31: COMPLIANCE WITH ENERGY POLICY AND CONSERVATION ACT

Contractor certifies that Contractor will be in compliance with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. L. 94-163, 89 Stat. 871).

Description of Service	Discounted HGAC Member Pricing (all-inclusive hourly bill rate)	Robert Half Practice Group
Administrative and Customer Support (ACS)		
Entry-Level Administrative Assistant	$36.76/hour	ACS
Administrative Assistant I	$42.97/hour	ACS
Administrative Assistant II	$49.18/hour	ACS
Sr. Administrative Assistant	$63.91/hour	ACS
Executive Assistant I	$58.43/hour	ACS
Executive Assistant II	$77.21/hour	ACS
Sr. Executive Assistant	$84.73/hour	ACS
Customer Service Representative I	$29.32/hour	ACS
Customer Service Representative II	$36.09/hour	ACS
Sr. Customer Service Representative	$52.69/hour	ACS
Data Entry Clerk I	$29.92/hour	ACS
Data Entry Clerk II	$32.65/hour	ACS
Sr. Data Entry Clerk	$47.42/hour	ACS
Office Assistant I	$29.32/hour	ACS
Office Assistant II	$32.84/hour	ACS
Office Assistant III	$45.66/hour	ACS
Receptionist I	$30.08/hour	ACS
Receptionist II	$32.65/hour	ACS
Receptionist III	$43.91/hour	ACS
Front Desk Coordinator I	$31.75/hour	ACS
Front Desk Coordinator II	$34.37/hour	ACS
Front Desk Coordinator III	$47.86/hour	ACS

Project Assistant I	$33.42/hour	ACS
Project Assistant II	$45.00/hour	ACS
Project Assistant III	$60.00/hour	ACS
Human Resources (HR) Assistant I	$36.76/hour	ACS
Human Resources (HR) Assistant II	$41.25/hour	ACS
Human Resources (HR) Assistant III	$47.42/hour	ACS
Human Resources (HR) Specialist I	$41.77/hour	ACS
Human Resources (HR) Specialist II	$60.15/hour	ACS
Human Resources (HR) Specialist III	$79.03/hour	ACS
Human Resources (HR) Manager I	$77.34/hour	ACS
Contract Finance and Accounting (CFA)		
Accounts Receivable Clerk I	$35.25/hour	CFA
Accounts Receivable Clerk II	$42.35/hour	CFA
Accounts Receivable Clerk III	$57.91/hour	CFA
Accounts Payable Clerk I	$34.63/hour	CFA
Accounts Payable Clerk II	$40.46/hour	CFA
Accounts Payable Clerk III	$54.29/hour	CFA
Staff Accountant I	$64.41/hour	CFA
Staff Accountant II	$78.49/hour	CFA
Staff Accountant III	$90.49/hour	CFA
Sr. Accountant I	$97.73/hour	CFA
Bookkeeper I	$44.21/hour	CFA
Bookkeeper II	$50.94/hour	CFA
Bookkeeper III	$60.03/hour	CFA
Collections Specialist I	$38.91/hour	CFA
Collections Specialist II	$47.59/hour	CFA

Collections Specialist III	$59.82/hour	CFA
Billing Clerk I	$33.82/hour	CFA
Billing Clerk II	$39.20/hour	CFA
Billing Clerk III	$50.67/hour	CFA
Payroll Specialist I	$41.97/hour	CFA
Payroll Specialist II	$49.89/hour	CFA
Payroll Specialist III	$65.47/hour	CFA
Entry-Level Financial Analyst	$49.51/hour	CFA
Financial Analyst I	$78.49/hour	CFA
Financial Analyst II	$90.49/hour	CFA
Auditor I	$56.81/hour	CFA
Auditor II	$86.73/hour	CFA
Purchasing Assistant I	$34.02/hour	CFA
Purchasing Assistant II	$43.60/hour	CFA
Purchasing Assistant III	$54.29/hour	CFA
Procurement Specialist I	$42.38/hour	CFA
Procurement Specialist II	$55.81/hour	CFA
Procurement Specialist III	$81.44/hour	CFA
Payroll Manager I	$81.44/hour	CFA
Compliance Analyst I	$57.86/hour	CFA
Compliance Analyst II	$72.22/hour	CFA
Management Resources (MR)		
Sr. Accountant II	$115/hour	MR
Sr. Financial Analyst I	$107.21/hour	MR
Sr. Financial Analyst II	$120.86/hour	MR
Sr. Financial Analyst III	$135.44/hour	MR

Sr. Auditor I	$91.84/hour	MR
Sr. Auditor II	$117.90/hour	MR
Audit Manager I	$131.99/hour	MR
Audit Manager II	$158.03/hour	MR
Purchasing Manager I	$87.72/hour	MR
Purchasing Manager II	$110.79/hour	MR
Purchasing Manager III	$135.44/hour	MR
Procurement Manager I	$87.72/hour	MR
Procurement Manager II	$110.79/hour	MR
Procurement Manager III	$135.44/hour	MR
Payroll Manager II	$130.93/hour	MR
Payroll Manager III	$145.86/hour	MR
Accounting Manager I	$116.96/hour	MR
Accounting Manager II	$130.93/hour	MR
Accounting Manager III	$145.86/hour	MR
Assistant Controller	$140.35/hour	MR
Controller I	$151.07/hour	MR
Controller II	$184.58/hour	MR
Finance Project Manager I	$136.45/hour	MR
Finance Project Manager II	$161.14/hour	MR
Finance Project Manager III	$187.54/hour	MR
Human Resources (HR) Manager II	$99.82/hour	MR
Human Resources (HR) Manager III	$135.74/hour	MR
Finance Director I	$126.71/hour	MR
Finance Director II	$151.07/hour	MR
Finance Director III	$177.12/hour	MR
Compliance Analyst III	$115.65/hour	MR

Compliance Manager II	$107.21/hour	MR
Compliance Manager III	$133.74/hour	MR
ERP System Business Analyst I	$126.71/hour	MR
ERP System Business Analyst II	$141.00/hour	MR
ERP System Business Analyst III	$156.28/hour	MR
ERP Project Manager System I	$126.71/hour	MR
ERP Project Manager System II	$151.07/hour	MR
ERP Project Manager System III	$187.54/hour	MR
Executive Consultant I	$183.12/hour	MR
Executive Consultant II	$283.26/hour	MR
Executive Consultant III	$377.68/hour	MR
Robert Half Technology (RHT)		
PC Technician I	$35.69/hour	RHT
PC Technician II	$44.22/hour	RHT
PC Technician III	$51.43/hour	RHT
Desktop Support Analyst I	$46.19/hour	RHT
Desktop Support Analyst II	$57.94/hour	RHT
Desktop Support Analyst III	$69.40/hour	RHT
Help Desk I	$41.15/hour	RHT
Help Desk II	$50.97/hour	RHT
Help Desk III	$65.40/hour	RHT
Software Engineer/Developer I	$92.10/hour	RHT
Software Engineer/Developer II	$117.46/hour	RHT
Sr. Software Engineer/Developer	$137.85/hour	RHT
ERP/CRM Developer I	$97.94/hour	RHT
ERP/CRM Developer II	$124.87/hour	RHT

ERP/CRM Developer III	$149.06/hour	RHT
ERP Integration Manager I	$113.07/hour	RHT
ERP Integration Manager II	$143.73/hour	RHT
ERP Integration Manager III	$184.67/hour	RHT
ERP Consultant I	$168.17/hour	RHT
ERP Consultant II	$233.27/hour	RHT
Project Manager/Sr. Consultant I	$88.21/hour	RHT
Project Manager/Sr. Consultant II	$140.14/hour	RHT
Project Manager/Sr. Consultant III	$174.95/hour	RHT
Systems Administrator I	$68.10/hour	RHT
Systems Administrator II	$93.43/hour	RHT
Systems Administrator III	$126.35/hour	RHT
Systems Analyst I	$74.81/hour	RHT
Systems Analyst II	$93.88/hour	RHT
Systems Analyst III	$121.03/hour	RHT
Business Analyst I	$79.78/hour	RHT
Business Analyst II	$99.94/hour	RHT
Business Analyst III	$124.76/hour	RHT
Data Analyst I	$80.64/hour	RHT
Data Analyst II	$101.96/hour	RHT
Data Analyst III	$125.46/hour	RHT
Database Developer I	$94.48/hour	RHT
Database Developer II	$119.25/hour	RHT
Database Developer III	$140.42/hour	RHT
Data Engineer I	$108.75/hour	RHT
Data Engineer II	$138.34/hour	RHT

Data Engineer III	$167.75/hour	RHT
Network/Cloud Administrator I	$75.24/hour	RHT
Network/Cloud Administrator II	$95.67/hour	RHT
Network/Cloud Administrator III	$116.82/hour	RHT
Network/Cloud Engineer I	$93.62/hour	RHT
Network/Cloud Engineer II	$116.56/hour	RHT
Network/Cloud Engineer III	$142.05/hour	RHT
Network/Cloud Architect I	$116.97/hour	RHT
Network/Cloud Architect II	$151.59/hour	RHT
Network/Cloud Architect III	$186.44/hour	RHT
Robert Half Creative (RHC)		
Graphic Designer I	$45.05/hour	RHC
Graphic Designer II	$61.47/hour	RHC
Graphic Designer III	$85.68/hour	RHC
Copywriter I	$55.87/hour	RHC
Copywriter II	$71.75/hour	RHC
Copywriter III	$85.66/hour	RHC
Production Artist I	$45.70/hour	RHC
Production Artist II	$56.90/hour	RHC
Production Artist III	$64.83/hour	RHC
User Experience (UX) Designer I	$82.95/hour	RHC
User Experience (UX) Designer II	$105.34/hour	RHC
User Experience (UX) Designer III	$131.29/hour	RHC
Proofreader I	$41.58/hour	RHC
Proofreader II	$52.10/hour	RHC
Proofreader III	$69.12/hour	RHC

Project Manager I – Marketing and Creative	$59.12/hour	RHC
Project Manager II – Marketing and Creative	$74.72/hour	RHC
Project Manager III – Marketing and Creative	$91.98/hour	RHC
Presentation Designer I	$52.19/hour	RHC
Presentation Designer II	$69.01/hour	RHC
Presentation Designer III	$81.21/hour	RHC
Web Designer I	$57.39/hour	RHC
Web Designer II	$72.44/hour	RHC
Web Designer III	$92.44/hour	RHC
Marketing Coordinator I	$42.01/hour	RHC
Marketing Coordinator II	$56.44/hour	RHC
Marketing Coordinator III	$70.44/hour	RHC
Marketing Manager I	$77.75/hour	RHC
Marketing Manager II	$98.26/hour	RHC
Marketing Manager III	$118.66/hour	RHC
Digital Marketing Specialist I	$49.16/hour	RHC
Digital Marketing Specialist II	$61.93/hour	RHC
Digital Marketing Specialist III	$75.36/hour	RHC
Front End Developer I	$73.63/hour	RHC
Front End Developer II	$94.14/hour	RHC
Front End Developer III	$114.91/hour	RHC
Robert Half Legal (RHL)		
Legal Assistant I	$42.44/hour	RHL
Legal Assistant II	$51.65/hour	RHL
Legal Assistant III	$62.09/hour	RHL
Sr. Legal Assistant	$68.41/hour	RHL

Entry/Junior Paralegal	$41.22/hour	RHL
Paralegal I	$51.86/hour	RHL
Paralegal II	$79.58/hour	RHL
Sr. Paralegal	$89.54/hour	RHL
Contracts Administrator I	$48.57/hour	RHL
Contracts Administrator II	$75.12/hour	RHL
Contracts Administrator III	$99.70/hour	RHL
Contracts Manager I	$68.56/hour	RHL
Contracts Manager II	$96.08/hour	RHL
Contracts Manager III	$126.89/hour	RHL
Compliance Manager I	$74.28/hour	RHL
Attorney/Lawyer I	$79.38/hour	RHL
Attorney/Lawyer II	$101.42/hour	RHL
Attorney/Lawyer III	$119.39/hour	RHL
Attorney/Lawyer IV	$147.28/hour	RHL
Attorney/Lawyer V	$170.37/hour	RHL

BAY AREA AIR DISTRICT
Memorandum

To: Chairperson Lynda Hopkins and Members of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: June 3, 2026

Re: Authorization to Execute Contract with Johns Hopkins University to Enhance Cumulative Health Impact Assessment

RECOMMENDED ACTION

Authorize the Executive Officer/APCO to execute a professional services contract with Johns Hopkins University, in the amount of $250,000, to develop a methodological application of the Multi-Effects Toxicity Database for air toxics risk assessment to enhance the Air District's understanding and practices for cumulative health impact assessment.

BACKGROUND

Multi-Effects Toxicity Database (METDB) is a curated toxicological evidence framework developed by researchers at Johns Hopkins University in response to long-standing limitations in conventional air toxics risk assessment methods used by air districts in the United States. Traditional regulatory tools typically assign a single toxicity value per chemical per exposure duration to the most sensitive target organ, which can obscure cumulative health risks across multiple organ systems.

The limitations of traditional approaches were explicitly discussed during the Air District's Advisory Council meeting on December 8, 2025, where METDB was presented as part of a broader agenda item on advancing cumulative risk assessment methodologies for air toxics regulation. Advisory Council members suggested the Air District consider using METDB as a scientifically credible research and screening framework to improve understanding of cumulative risks, inform future tool development, and evaluate where current air toxics risk assessments may fall short, especially in overburdened communities.

DISCUSSION

Air District staff evaluated the METDB through literature review, expert presentations, and consultation with the Advisory Council. As a supplemental, screening-level tool,

METDB has the potential to strengthen Air District's regulatory defensibility and improve communication of cumulative air toxics risks.

Developed by researchers at Johns Hopkins University, METDB addresses a key limitation in traditional approaches by evaluating risks across multiple target organ systems. It systematically identifies non-cancer health endpoints, derives toxicity values for chemical–organ combinations, and avoids collapsing impacts into a single endpoint. The framework is supported by peer-reviewed, transparent, and reproducible science, with detailed documentation published in Environmental Health Perspectives. METDB has also demonstrated practical applicability. In a real-world study using monitoring data, it expanded the number of chemicals included in cumulative risk analysis and identified risks across multiple health endpoints where conventional methods did not. Advisory Council members supported the application of METDB for Air District's non-regulatory purposes, including supplemental screening and sensitivity analyses. Such applications would not affect Air District's existing permitting or compliance determinations.

To further evaluate and develop METDB for Air District's use, the Johns Hopkins University research team has proposed a two-year effort to apply the framework to real-world permitting scenarios and assess its implications for risk estimates and management decisions. Given the technical complexity of cumulative risk evaluation, this work must be carried out by researchers with strong expertise in epidemiology, exposure science, and health risk assessment. The Johns Hopkins University research team has demonstrated unique qualifications with such expertise to ensure methodological rigor and defensible results. In addition, this work would be conducted with advisory support from the Office of Environmental Health Hazard Assessment and the California Air Resources Board.

Overall, the application of METDB in a supplemental capacity directly supports the Air District's Strategic Plan, including Strategy 2.11, by advancing methods to better characterize cumulative health impacts and support environmental justice objectives.

BUDGET CONSIDERATION/FINANCIAL IMPACT

Funding for the service contract amount of $250,000 is included in the Fiscal Year Ending 2026 budget under Programs 611 and 812.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Song Bai
Reviewed by: Andrea Polidori, Gregory Nudd

ATTACHMENT(S):

1. Draft Contract JHU METDB Application 2026.089

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

PROFESSIONAL SERVICES CONTRACT

CONTRACT NO. 2026.089

1. PARTIES – The parties to this Contract ("Contract") are the Bay Area Air Quality Management District ("DISTRICT") whose address is 375 Beale Street, Suite 600, San Francisco, CA 94105, and **Johns Hopkins University** ("CONTRACTOR") whose address is 3400 N. Charles Street, Baltimore, MD 21218.

2. RECITALS
   A. DISTRICT is the local agency with primary responsibility for regulating stationary source air pollution in the Bay Area Air Quality Management District in the State of California. DISTRICT is authorized to enter into this Contract under California Health and Safety Code Section 40701. DISTRICT desires to contract with CONTRACTOR for services described in the Scope of Work, attached hereto as Attachment A and made a part hereof by this reference. DISTRICT is entering into this Contract based on CONTRACTOR's stated qualifications to perform the services.
   B. All parties to this Contract have had the opportunity to have this contract reviewed by their attorney.

3. PERFORMANCE REQUIREMENTS
   A. CONTRACTOR is authorized to do business in the State of California. CONTRACTOR attests that it is in good tax standing with federal and state tax authorities.
   B. CONTRACTOR agrees to obtain any and all required licenses, permits, and all other appropriate legal authorizations from all applicable federal, state and local jurisdictions and to pay all applicable fees.
   C. CONTRACTOR shall comply with all laws and regulations that apply to its performance under this Contract, including any requirements to disclose potential conflicts of interest under DISTRICT's Conflict of Interest Code.
   D. CONTRACTOR shall not engage in any performance of work during the term of this contract that is in direct or indirect conflict with duties and responsibilities set forth in the Scope of Work.
   E. CONTRACTOR shall exercise the degree of skill and care customarily required by accepted professional practices and procedures.
   F. CONTRACTOR shall ensure that any subcontractors, employees and agents performing under this Contract comply with the performance standards set forth in paragraphs A-E above.

4. TERM – The term of this Contract is from the date of execution of the Contract and will continue for a period of twenty-four (24) months, unless further extended by amendment of this Contract in writing and signed by both parties, or terminated earlier. CONTRACTOR shall not submit any invoice for services performed under this Contract until the Contract is fully executed.

5. TERMINATION
   A. The DISTRICT may terminate this Contract at any time, at will, and without specifying any reason, by notifying CONTRACTOR in writing. The notice of termination shall specify the effective date of termination, which shall be no less than thirty (30) calendar days from the date of delivery of the notice of termination, as set forth in section 10, below, and shall be delivered in accordance with the provisions of section 10 below. Immediately upon receipt of the notice of termination, CONTRACTOR shall cease all work under this Contract, except such work as is specified in the notice of termination. CONTRACTOR shall deliver a final invoice for all remaining work performed but not billed, including any work specified in the termination notice, on or before ten (10) business days following the effective date of termination.
   B. Either party may terminate this Contract for breach by the other party.
      i) Failure to perform any agreement or obligation contained in this Contract or failure to perform the services in a satisfactory manner shall constitute a breach of the Contract.
      ii) The non-breaching party may terminate the Contract by delivery of a written notice of breach. The notice of breach shall specify the date of termination, which shall be no earlier than ten (10) business days from delivery of the notice of breach. In the alternative, at its sole discretion, the non-breaching party may require the breaching party to cure the breach. The notice of breach shall specify the nature of the breach and the date by which such breach must be cured.
      iii) If CONTRACTOR fails to perform any obligation under this Contract, DISTRICT, at its sole discretion, may perform, or cause the performance of, the obligation itself. In that event, DISTRICT shall deduct the costs to perform such obligation and any other costs to cure the breach from the payment otherwise due to CONTRACTOR for work performed under this Contract. DISTRICT's performance hereunder shall not be deemed a waiver or release of any obligation of, or default by, CONTRACTOR under this Contract.
      iv) The notice of breach shall be provided in accordance with the notice requirements set forth in section 10.
      v) The non-breaching party reserves all rights under law and equity to enforce this Contract and recover any damages.

6. INSURANCE
   A. CONTRACTOR shall maintain the following insurance:
      i) Workers' compensation and employers' liability insurance as required by California law or other applicable statutory requirements.
      ii) Occurrence-based commercial general liability insurance or equivalent form with a limit of not less than one million dollars ($1,000,000) each occurrence. Such insurance shall include DISTRICT and its officers, agents, and employees as additional insureds and shall be primary with respect to any insurance maintained by DISTRICT.
      iii) Business automobile liability insurance or equivalent form with a limit of not less than one million dollars ($1,000,000) each accident. Such insurance shall include coverage for owned, hired, and non-owned vehicles. If CONTRACTOR is a sole proprietor, CONTRACTOR may meet this insurance requirement with personal automobile liability insurance carrying a business use endorsement or by demonstrating to the satisfaction of DISTRICT that business use is covered under the CONTRACTOR's personal automobile liability insurance. A CONTRACTOR using only rental vehicles in performing

work under this Contract may meet this insurance requirement by purchasing automobile liability insurance in the required coverage amount from the rental agency.

B. All insurance shall be placed with insurers acceptable to DISTRICT.

C. Prior to commencement of work under this Contract, CONTRACTOR shall furnish properly-executed certificates of insurance for all required insurance. Upon request by DISTRICT, CONTRACTOR shall provide a complete copy of any required insurance policy. CONTRACTOR shall notify DISTRICT in writing thirty (30) days prior to cancellation or modification of any required insurance policy. Any such modifications are subject to pre-approval by DISTRICT.

D. If CONTRACTOR fails to maintain the required insurance coverage set forth above, DISTRICT reserves the right either to purchase such additional insurance and deduct the cost thereof from any payments owed to CONTRACTOR or to terminate this Contract for breach.

7. INDEMNIFICATION

A. CONTRACTOR shall indemnify and hold DISTRICT, its officers, employees and agents harmless from and against any and all liability, loss, expense, including reasonable attorneys' fees, or claims for injury or damages arising out of the performance of this Contract, but only in proportion to and to the extent such liability, loss, expense, attorneys' fees, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of CONTRACTOR, its officers, agents, or employees.

B. DISTRICT shall indemnify and hold CONTRACTOR, its officers, employees and agents harmless from and against any and all liability, loss, expense, including reasonable attorneys' fee, or claims for injury or damages arising out of the performance of this Contract, but only in proportion to and to the extent such liability, loss, expense, attorneys' fees, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of DISTRICT, its officers, agents, or employees.

8. PAYMENT

A. DISTRICT shall pay CONTRACTOR for services in accordance with the terms set forth in the Cost Schedule, which is attached hereto as Attachment B and incorporated herein by this reference.

B. CONTRACTOR shall submit invoice(s) to DISTRICT for services performed. Each invoice shall specify the total cost of the services for which the invoice is submitted, shall reference tasks shown in the Scope of Work, the hours associated with same, or percentage completion thereof, and the amount of charge claimed, and, as appropriate, shall list any charges for equipment, material, supplies, travel, and subcontractors' services.

C. DISTRICT's payment of invoices shall be subject to the following limitations and requirements:

i) Each invoice, including supporting documentation, shall be prepared on CONTRACTOR's letterhead; shall list DISTRICT's contract number, the period covered by the invoice; and shall be submitted to: Bay Area Air Quality Management District, 375 Beale Street, Suite 600, San Francisco, CA 94105, Attn: Song Bai.

ii) DISTRICT shall not pay interest, fees, handling charges, or the cost of money on the Contract.

iii) DISTRICT shall pay CONTRACTOR within thirty (30) calendar days after approval by

DISTRICT of an itemized invoice.

D. The total amount for which DISTRICT may be held liable for the performance of services specified in this Contract shall not exceed $250,000.

9. DISPUTE RESOLUTION – A party that disputes a notice of breach must first seek mediation to resolve the dispute in accordance with the provisions set forth below.
   A. Upon receipt of a notice of breach of contract, the party may submit a demand for mediation to resolve whether or not a breach occurred. The party must state the basis of the dispute and deliver the demand within ten (10) business days of the date of receipt of the notice of breach.
   B. The mediation shall take place at DISTRICT's office at 375 Beale Street, Suite 600, San Francisco, or at such other place as may be mutually agreed upon by the parties and the mediator.
   C. The parties shall make good faith efforts to hold the mediation within thirty (30) days after receipt of the demand for mediation.
   D. Each party shall bear its own mediation costs.
   E. In the event the parties are unable to resolve the dispute, either party may file an action in a court of competent jurisdiction to enforce the Contract.
   F. Maximum recovery under this section shall be limited to $250,000. The mediation costs shall not reduce the maximum amount recoverable under this section.

10. NOTICES – All notices that are required under this Contract shall be provided in the manner set forth herein, unless specified otherwise. Notice to a party shall be delivered to the attention of the person listed below, or to such other person or persons as may hereafter be designated by that party in writing. Notice shall be in writing sent by e-mail, facsimile, or regular first class mail. In the case of e-mail and facsimile communications, valid notice shall be deemed to have been delivered upon sending, provided the sender obtained an electronic confirmation of delivery. E-mail and facsimile communications shall be deemed to have been received on the date of such transmission, provided such date was a business day and delivered prior to 4:00 p.m. pacific time. Otherwise, receipt of e-mail and facsimile communications shall be deemed to have occurred on the following business day. In the case of regular mail notice, notice shall be deemed to have been delivered on the mailing date and received five (5) business days after the date of mailing.

    DISTRICT: Bay Area Air Quality Management District
    375 Beale Street, Suite 600
    San Francisco, CA 94105
    Attn: Song Bai

    CONTRACTOR: Johns Hopkins University
    3400 N. Charles Street
    Baltimore, MD 21218
    Attn:

11. ADDITIONAL PROVISIONS – All attachment(s) to this Contract are expressly incorporated herein by this reference and made a part hereof as though fully set forth.

12. EMPLOYEES OF CONTRACTOR
    A. CONTRACTOR shall be responsible for the cost of regular pay to its employees, as well as cost of vacation leave, vacation replacements, sick leave, severance pay, and pay for legal holidays.
    B. CONTRACTOR, its officers, employees, agents, or representatives shall not be considered employees or agents of DISTRICT, nor shall CONTRACTOR, its officers, employees, agents, or representatives be entitled to or eligible to participate in any benefits, privileges, or plans given or extended by DISTRICT to its employees.
    C. CONTRACTOR shall assign those employees listed in the Cost Schedule to perform work under this Contract. CONTRACTOR shall not assign different employees to perform this work without the express written permission of DISTRICT, which DISTRICT will not unreasonably withhold.
    D. DISTRICT reserves the right to review the credentials to perform the work of any of CONTRACTOR's employees assigned herein and to disapprove CONTRACTOR's assignments. CONTRACTOR warrants that it will not employ any subcontractor(s) without prior written approval from DISTRICT.

13. CONFIDENTIALITY – In order to carry out the purposes of this Contract, CONTRACTOR may require access to certain of DISTRICT's confidential information (including trade secrets, inventions, confidential know-how, confidential business information, and other information that DISTRICT considers confidential) (collectively, "Confidential Information"). It is expressly understood and agreed that DISTRICT may designate in a conspicuous manner Confidential Information that CONTRACTOR obtains from DISTRICT, and CONTRACTOR agrees to:
    A. Observe complete confidentiality with respect to such information, including, without limitation, agreeing not to disclose or otherwise permit access to such information by any other person or entity in any manner whatsoever, except that such disclosure or access shall be permitted to employees of CONTRACTOR requiring access in fulfillment of the services provided under this Contract.
    B. Ensure that CONTRACTOR's officers, employees, agents, representatives, and independent contractors are informed of the confidential nature of such information, and to assure by agreement or otherwise, that they are prohibited from copying or revealing, for any purpose whatsoever, the contents of such information or any part thereof, or from taking any action otherwise prohibited under this section.
    C. Not use such information or any part thereof in the performance of services to others or for the benefit of others in any form whatsoever, whether gratuitously or for valuable consideration, except as permitted under this Contract.
    D. Notify DISTRICT promptly and in writing of the circumstances surrounding any possession, use, or knowledge of such information, or any part thereof, by any person or entity other than those authorized by this section. Take, at CONTRACTOR's expense but at DISTRICT's option, and in any event under DISTRICT's control, any legal action necessary to prevent unauthorized use of such information by any third party or entity which has gained access to such information at least in part due to the fault of CONTRACTOR.
    E. Take any and all other actions necessary or desirable to assure such continued confidentiality and protection of such information during the term of this Contract and following expiration or termination of the Contract.
    F. Prevent access to such materials by a person or entity not authorized under this Contract.
    G. Establish specific procedures in order to fulfill the obligations of this section.

14. INTELLECTUAL PROPERTY RIGHTS – Title and full ownership rights to all intellectual property developed under this Contract shall at all times remain with DISTRICT, unless otherwise agreed to in writing.

15. PUBLICATION
    A. DISTRICT shall approve in writing any report or other document prepared by CONTRACTOR in connection with performance under this Contract prior to dissemination or publication of such report or document to a third party. DISTRICT may waive in writing its requirement for prior approval.
    B. Until approved by DISTRICT, any report or other document prepared by CONTRACTOR shall include on each page a conspicuous header, footer, or watermark stating "DRAFT – Not Reviewed or Approved by BAAQMD," unless DISTRICT has waived its requirement for prior approval pursuant to paragraph A of this section.
    C. Information, data, documents, or reports developed by CONTRACTOR for DISTRICT pursuant to this Contract shall be part of DISTRICT's public record, unless otherwise indicated. CONTRACTOR may use or publish, at its own expense, such information, provided DISTRICT approves use of such information in advance. The following acknowledgment of support and disclaimer must appear in each publication of materials, whether copyrighted or not, based upon or developed under this Contract:

       "This report was prepared as a result of work sponsored, paid for, in whole or in part, by the Bay Area Air Quality Management District (District). The opinions, findings, conclusions, and recommendations are those of the author and do not necessarily represent the views of the District. The District, its officers, employees, contractors, and subcontractors make no warranty, expressed or implied, and assume no legal liability for the information in this report."

    D. CONTRACTOR shall inform its officers, employees, and subcontractors involved in the performance of this Contract of the restrictions contained herein and shall require compliance with this section.

16. AUDIT / INSPECTION OF RECORDS – If this Contract exceeds $10,000, pursuant to California Government Code Section 8546.7, all records, documents, conditions and activities of CONTRACTOR, and its subcontractors, related to the services provided hereunder, shall be subject to the examination and audit of the California State Auditor and other duly authorized agents of the State of California for a period of three (3) years after final payment under this Contract. CONTRACTOR hereby agrees to make such records available during normal business hours for inspection, audit, and reproduction by any duly authorized agents of the State of California or DISTRICT. CONTRACTOR further agrees to allow interviews of any of its employees who might reasonably have information related to such records by any duly authorized agents of the State of California or DISTRICT. All examinations and audits conducted under this section shall be strictly confined to those matters connected with the performance of this Contract, including, but not limited to, the costs of administering this Contract.

17. NON-DISCRIMINATION – In the performance of this Contract, CONTRACTOR shall not discriminate in its recruitment, hiring, promotion, demotion, and termination practices on the

basis of race, religious creed, color, national origin, ancestry, sex, age, marital status, sexual orientation, medical condition, or physical or mental disability, and shall comply with the provisions of the California Fair Employment & Housing Act (Gov. Code, §§12900 et seq.), the Federal Civil Rights Act of 1964 (P.L. 88-352) and all amendments thereto, and all administrative rules and regulations issued pursuant to said Acts. CONTRACTOR shall also require each subcontractor performing work in connection with this Contract to comply with this section, and shall include in each contract with such subcontractor provisions to accomplish the requirements of this section.

18. PROPERTY AND SECURITY – Without limiting CONTRACTOR'S obligations with regard to security, CONTRACTOR shall comply with all the rules and regulations established by DISTRICT for access to and activity in and around DISTRICT's premises.

19. ASSIGNMENT – No party shall assign, sell, license, or otherwise transfer any rights or obligations under this Contract to a third party without the prior written consent of the other party, and any attempt to do so shall be void upon inception.

20. WAIVER – No waiver of a breach, of failure of any condition, or of any right or remedy contained in or granted by the provisions of this Contract shall be effective unless it is in writing and signed by the party waiving the breach, failure, right, or remedy. No waiver of any breach, failure, right, or remedy shall be deemed a waiver of any other breach, whether or not similar, nor shall any waiver constitute a continuing waiver unless the writing so specifies. Further, the failure of a party to enforce performance by the other party of any term, covenant, or condition of this Contract, and the failure of a party to exercise any rights or remedies hereunder, shall not be deemed a waiver or relinquishment by that party to enforce future performance of any such terms, covenants, or conditions, or to exercise any future rights or remedies.

21. ATTORNEYS' FEES – In the event any action is filed in connection with the enforcement or interpretation of this Contract, each party shall bear its own attorneys' fees and costs.

22. FORCE MAJEURE – Neither DISTRICT nor CONTRACTOR shall be liable for or deemed to be in default for any delay or failure in performance under this Contract or interruption of services resulting, directly or indirectly, from acts of God, enemy or hostile governmental action, civil commotion, strikes, lockouts, labor disputes, fire or other casualty, judicial orders, governmental controls, regulations or restrictions, inability to obtain labor or materials or reasonable substitutes for labor or materials necessary for performance of the services, or other causes, except financial, that are beyond the reasonable control of DISTRICT or CONTRACTOR, for a period of time equal to the period of such force majeure event, provided that the party failing to perform notifies the other party within fifteen calendar days of discovery of the force majeure event, and provided further that that party takes all reasonable action to mitigate the damages resulting from the failure to perform. Notwithstanding the above, if the cause of the force majeure event is due to a party's own action or inaction, then such cause shall not excuse that party from performance under this Contract.

23. SEVERABILITY – If a court of competent jurisdiction holds any provision of this Contract to be illegal, unenforceable or invalid, in whole or in part, for any reason, the validity and enforceability of the remaining provisions, or portions of them, will not be affected.

24. HEADINGS – Headings on the sections and paragraphs of this Contract are for convenience and reference only, and the words contained therein, shall in no way be held to explain, modify, amplify, or aid in the interpretation, construction, or meaning of the provisions of this Contract.

25. COUNTERPARTS/FACSIMILES/SCANS – This Contract may be executed and delivered in any number of counterparts, each of which, when executed and delivered, shall be deemed an original, and all of which together shall constitute the same contract. The parties may rely upon a facsimile copy or scanned copy of any party's signature as an original for all purposes.

26. GOVERNING LAW – Any dispute that arises under or relates to this Contract shall be governed by California law, excluding any laws that direct the application of another jurisdiction's laws. Venue for resolution of any dispute that arises under or relates to this Contract, including mediation, shall be San Francisco, California.

27. ENTIRE CONTRACT AND MODIFICATION – This Contract represents the final, complete, and exclusive statement of the agreement between the parties related to CONTRACTOR providing services to DISTRICT, and supersedes all prior and contemporaneous understandings and agreements of the parties. No party has been induced to enter into this Contract by, nor is any party relying upon, any representation or warranty outside those expressly set forth herein. This Contract may only be amended by mutual agreement of the parties in writing and signed by both parties.

28. SURVIVAL OF TERMS – The provisions of sections 7 (Indemnification), 13 (Confidentiality), 14 (Intellectual Property Rights), and 15 (Publication) shall survive the expiration or termination of this Contract.

DRAFT

IN WITNESS WHEREOF, the parties to this Contract have caused this Contract to be duly executed on their behalf by their authorized representatives.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT	JOHNS HOPKINS UNIVERSITY
By: _____	By: _____
Philip M. Fine Executive Officer/APCO	
Date: _____	Date: _____

Approved as to form:
General Counsel

By: _____

Alexander G. Crockett
General Counsel

DRAFT

ATTACHMENT A

SCOPE OF WORK

CONTRACTOR and its research team at the Johns Hopkins Bloomberg School of Public Health (JHSPH) will develop a methodological application of the Multi-Effects Toxicity Database (METDB) for air toxics risk assessment to enhance DISTRICT's understanding and practices for cumulative health impact assessment. The research team will focus on applying the METDB platform to real-world air permitting scenarios and assessing how its use may influence risk estimation and subsequent risk management decisions relative to current regulatory practice.

Principal Investigators (PI): Keeve Nachman (PI); Pete DeCarlo (Co-PI); Beth Riess (Co-PI)

Task 1: Identify case studies.
CONTRACTOR shall define case study selection criteria including rationale, research questions, and initial goals in consultation with DISTRICT and JHSPH. In collaboration with DISTRICT, CONTRACTOR will identify 2 to 3 case study facilities or sources, along with real or assumed receptors as applicable. CONTRACTOR will document any decision criteria that may be helpful in developing a general framework for identifying additional case studies. Initial case studies may include:

- A major petroleum refinery
- A cluster of smaller sources (e.g., autobody shops)
- A medium-sized facility in an overburdened community (identified using a screening tool such as CalEnviroScreen)

Deliverable:

1. Document describing case study selection criteria development and results of selection.

Task 2: Develop the METDB to align with selected case studies.
CONTRACTOR will compare the list of chemicals modeled at selected case study facility or sources to the chemicals available in the METDB. If a modeled chemical is not in the METDB, collect toxicity data and calculate target organ toxicity concentration (i.e., reference values) following a protocol for hierarchical data selection and uncertainty factor application to supplement the METDB. Toxicity data can be existing reference values from authoritative sources or may be points of departure (e.g., no observed adverse effect concentrations, benchmark concentrations) from toxicity studies reviewed by domestic or international agencies (e.g., ATSDR). CONTRACTOR will consult with DISTRICT as needed to create DISTRICT-specific METDB using preferred reference value derivation protocols, e.g., reference value selection hierarchies or application of uncertainty factors. CONTRACTOR will identify chemicals and exposure durations for each case study and ensure METDB contains appropriate reference values, when available.

Deliverable:

1. Updated METDB spreadsheet.

Task 3. Compare risk estimates and draft case study reports.
CONTRACTOR will compare METDB-derived cumulative risk estimates to existing DISTRICT's risk estimates or baseline risk assessment approached and will describe DISTRICT's approach to health

risk assessment for case study facility, modeled exposure estimates, and relevant policy and permitting requirements. CONTRACTOR will identify any other risk management or decision criteria useful for characterizing differences in risk estimates and will report any existing risk estimates or calculate risk using DISTRICT's baseline approach, and report risk estimates from application of the METDB. CONTRACTOR will characterize differences in risk estimates and describe implications for prioritization scoring for pollutants or sources and how differences may impact permitting decisions or other risk management decisions for each case study. Reports can be tailored to the case study but should include methods, results, discussion, recommendations and exploration of policy implications.

Deliverable:

1. Draft report for each case study.

Task 4. Review and finalize case study reports.

CONTRACTOR will coordinate team review process and update case study reports as suggested by DISTRICT, the California Office of Environmental Health Hazard Assessment (OEHHA) and the California Air Resources Board (CARB). CONTRACTOR will incorporate partner comments and finalize case study reports.

Deliverable:

1. Final case study reports.

Task 5. Prepare additional project products.

CONTRACTOR will prepare case study manuscript(s) for publication in selected journals. As feasible, CONTRACTOR will develop recommendations for expansion of the METDB, addressing identified gaps in endpoints, chemical groups, exposure contexts, population groups, or extensions beyond additivity. If requested by DISTRICT, CONTRACTOR will prepare presentations, conference abstracts, public meeting materials, technical documents, or other guidance materials that support implementation of METDB-driven cumulative risk assessment approaches.

Deliverable:

1. Journal manuscripts, technical briefs, other documents as needed.

<u>Roles and Responsibilities:</u>

DISTRICT Staff:

- Provide regulatory context, technical guidance, and access to relevant data, e.g., exposure estimates, documentation, and supporting details and explanations for case studies
- Provide feedback on methods development and applicability
- Review methods, results, and key deliverables
- Participate in dissemination and stakeholder engagement (including coordination with OEHHA, CARB, and DISTRICT's Advisory Council)
- Attend monthly coordination meetings

JHSPH Mentor/Principal Investigator:

- Provide scientific oversight and mentorship
- Provide feedback on methods development

DRAFT

- Participate in review of deliverables, support publication and dissemination activities
- Meet regularly with postdoc to discuss progress on deliverables and expected time to completion, adjust timelines as needed
- Advise on use of case study materials in partner communications
- Attend monthly coordination meetings

JHSPH Postdoctoral Fellow:

- Lead execution of case studies and analyses
- Conduct METDB applications and comparative assessments
- As feasible, develop methodological extensions and/or case study framework
- Prepare written reports, publications, and presentation materials
- Keep mentor and partners up to date on deliverable status and schedule meetings as needed to discuss issues, adjustments needed to scope of work or any timeline revisions.
- Provide interpretive guidance to partners on use of case study products in presentations and other communication material as needed
- Attend monthly coordination meetings

Timeline/Schedule

Task	Description	Anticipated Completion
Task 1	Develop case study prioritization framework and identify case studies	Months 1-3
Task 2	Develop the METDB	Months 3-4
Task 3	Prepare draft case study reports for review and comment	Months 5-12
Task 4	Finalize case study reports	Months 13-24
Task 5	Prepare additional project products	Months 13-24

DRAFT

ATTACHMENT B

COST SCHEDULE

DISTRICT will pay CONTRACTOR in accordance with the payment schedule outlined in Table 1 below. Payments will be made in accordance with Section 8, Payment, of this Contract.

Table 1: Payment Schedule

Description	Payment
Within thirty (30) calendar days following execution of Contract	$100,000
Within thirty (30) calendar days following completion of the twelfth (12th) month of the Contract	$100,000
Upon completion of all tasks and deliverables	$50,000

Total Cost of Contract Not to Exceed $250,000.

DRAFT

BAY AREA AIR DISTRICT
Memorandum

To: Chairperson Lynda Hopkins and Members of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: June 3, 2026

Re: Authorization to Accept Community Air Protection Program Implementation Funds for Fiscal Year 2025-2026

RECOMMENDED ACTION

Adopt a resolution to:

1. Authorize the Air District's participation in the Community Air Protection Program Implementation Funds and acceptance of Fiscal Year 2025-2026 program funds from the California Air Resources Board; and
2. Authorize the Executive Officer/APCO to execute all necessary agreements with the California Air Resources Board to accept the funding and implement the program.

BACKGROUND

The Budget Act of 2025 provides funds for the California Air Resources Board (CARB) to allocate to local air quality districts for expenses related to implementation of Assembly Bill (AB) 617 (C. Garcia, Chapter 136, Statutes of 2017). The Air District has been approved by CARB for a grant award of $8,105,806.00 under the Community Air Protection Program for Fiscal Year 2025-2026 (25CAPP). This grant award is consistent with the allocation recommended by the California Air Pollution Control Officers Association (CAPCOA) and was approved by CARB. These grant funds are for the previous fiscal year, due to delays between CARB and CAPCOA in their negotiations on the final allocations across districts statewide for Fiscal Year Ending (FYE) 2026 funds.

DISCUSSION

CARB has requested that the Air District's Board of Directors adopt a resolution (see Attachment) to accept this funding. Implementation funds are used to cover Air District staff costs related to AB 617 implementation, related professional services, facilitation and language access services, community monitoring, and community stipends and support for community organizations. This funding also covers the agency's administrative and indirect costs associated with administering the AB 617 Program.

In accordance with Assembly Bill (AB) 107, section 15.14, 25 percent of the Fiscal Year 2025-2026 Clean Air Protection Greenhouse Gas Reduction Funds allocated under this grant shall be withheld. Upon determination of the final amount of auction proceeds after the fourth cap and trade auction and approval from the Department of Finance, the remaining funds may be encumbered and available for disbursement.

BUDGET CONSIDERATION/FINANCIAL IMPACT

The 25CAPP funds, $8,105,806.00, will support the Air District's ongoing AB 617 implementation program and will be included in the Air District's FYE 2027 approved budget.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Diana Ruiz
Reviewed by: Arsenio Mataka

ATTACHMENT(S):

1. 25CAPP Grant Executive Board Resolution

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
RESOLUTION No. 2026 - XX
A Resolution Accepting Community Air Protection Program Implementation Funds from the California Air Resources Board

WHEREAS, The California Legislature provides funds for the California Air Resources Board (CARB) to allocate to local air quality districts;

WHEREAS, Assembly Bill 617 (C. Garcia, Chapter 136, Statutes of 2017) directs air districts to implement a Community Air Protection Program;

WHEREAS, the Bay Area Air Quality Management District (Air District) has been approved by CARB for a grant under the Community Air Protection Program for Fiscal Year 2025-2026;

WHEREAS, CARB requires the local air districts to accept Community Air Protection Program implementation funds via approval by the Board of Directors to accept such grant of funds;

WHEREAS, CARB will award a grant to the Air District in the amount of $8,105,806.00 for Fiscal Year 2025- 2026;

WHEREAS, Assembly Bill (AB) 107, section 15.14, requires that 25 percent of the Greenhouse Gas Reduction Funds that make up the Fiscal Year 2025-2026, Community Air Protection Program Implementation funds, or $2,026,451.50, be withheld until the fourth quarter Cap-and-Trade auction and approval from the Department of Finance.

NOW, THEREFORE, BE IT RESOLVED, the Board of Directors hereby authorizes the Air District's acceptance of the Fiscal Year 2025-2026 Community Air Protection Program Implementation funds, for implementation of the Air District's AB 617 Program.

BE IT FURTHER RESOLVED, the Board of Directors hereby authorizes and empowers the Executive Officer/Air Pollution Control Officer to execute on behalf of the Air District all necessary agreements with CARB to implement and carry out the purposes of this Resolution.

* * * * *

DRAFT

The foregoing Resolution was duly and regularly introduced, passed and adopted at a public meeting of the Board of Directors of the Bay Area Air Quality Management District, on the Motion of Director _____, seconded by Director _____, on the ____ day of _____, 2026 by the following vote of the Board:

AYES:

NOES:

ABSENT:

Lynda Hopkins
Chairperson of the Board of Directors

ATTEST:

Marcy Hiratzka
Clerk of the Board of Directors

DRAFT

BAY AREA AIR DISTRICT
Memorandum

To: Chairperson Lynda Hopkins and Members of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: June 3, 2026

Re: Consideration of State Legislation

RECOMMENDED ACTION

Adopt positions on pending state legislative bills where appropriate, including, but not limited to the following bills as recommended by the Policy, Grants, and Technology Committee at its meeting on May 20, 2026:

SUPPORT	**OPPOSE UNLESS AMENDED**
Senate Bill 899 (Grove)	Assembly Bill 2635 (C. Rodriguez)

BACKGROUND

The Policy, Grants, and Technology Committee (Committee) met on May 20, 2026, to discuss and consider Air District staff recommendations for two (2) bills – Assembly Bill (AB) 2635 (C. Rodriguez) and Senate Bill (SB) 899 (Grove). The Committee recommended that the Board of Directors adopt the Air District staff recommendations for all the identified bills.

DISCUSSION

The Board will consider adopting positions on pending state legislative bills where appropriate, including, but not limited to the following bills, as presented to the Policy, Grants, and Technology Committee on May 20, 2026. The Committee recommended that the Board of Directors adopt the Air District staff recommendations for all the identified bills.

- *AB 2635 (C. Rodriguez) – Air Pollution: Small Off-Road Engines: Voucher Programs: Local Regulation*

  CapitolTrack Summary: Existing law requires the State Air Resources Board, by July 1, 2022, consistent with federal law, to adopt cost-effective and technologically feasible regulations to prohibit engine exhaust and evaporative emissions from new small off-road engines, as defined by the state board.

Existing law requires those regulations to apply to engines produced on or after January 1, 2024, or as soon as the state board determines is feasible, whichever is later, and requires the state board to identify, and, to the extent feasible, make available, funding for commercial rebates or similar incentive funding, as specified. This bill would require, to the extent that funding is available, each large and medium air pollution control and air quality management district, no later than January 1, 2028, to implement and maintain a commercial voucher program to support the transition to zero-emission small off-road equipment consistent with specified requirements. By requiring districts to establish a new program, the bill would impose a state-mandated local program. The bill would also require a small rural district or local government that chooses to adopt such a program to comply with specified requirements in administering the program. (Based on 05/18/2026 text)

Currently, the Air District implements a pilot incentive program in AB 617 communities to replace commercial lawn and garden equipment. This bill however, would expand the program District-wide with requirements that conflict with the current pilot requirements and Carl Moyer Program Guidelines for these types of incentive programs. In addition, the expansion would be unfunded, so the District would likely have to reduce incentives provided to other District-implemented programs. Amendments to the bill should instead direct the California Air Resources Board (CARB) to update Carl Moyer Guidelines for lawn and garden equipment replacement to meet the author's goals. Also, the mandatory expansion should be contingent on additional funding.

Committee Recommendation: Oppose Unless Amended

- *SB 899 (Grove) – Fire Prevention: Wildfire and Forest Resilience Task Force: Wildfire Smoke*

  CapitolTrack Summary: Existing law requires the Wildfire and Forest Resilience Task Force to develop a comprehensive implementation strategy to track and ensure the achievement of the goals and key actions identified in the state's "Wildfire and Forest Resilience Action Plan," as provided. Existing law requires, on or before March 1, 2026, and every 5 years thereafter, the task force to update the action plan. This bill would require the task force, on or before July 1, 2028, and in cooperation with the Office of Environmental Health Hazard Assessment, the State Air Resources Board, and the State Department of Public Health, to assess the health costs and impacts of wildfire smoke using existing wildfire smoke and health data, as provided. The bill would require the task force, in developing this assessment, to, among other things, develop a model to determine the approximate health benefits of achieving the goals identified in the action plan and make recommendations on how the action plan can increase its health benefits. (Based on 05/14/2026 text)

Air District staff recommends supporting this bill, as the bill would direct the Office of Environmental Health Hazard Assessment (OEHHA) and California Department of Public Health (CDPH) to further research the public health costs and impacts of smoke from wildfire events, and develop models to determine benefit of various wildfire-reducing activities.

Committee Recommendation: Support

Additional bill information may be found on the California Legislative Information website.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Alan Abbs
Reviewed by: Viet Tran

ATTACHMENT(S):

1. AB 2635 (C. Rodriguez) - Bill Text - As Amended on May 18, 2026
2. SB 899 (Grove) - Bill Text - As Amended on May 14, 2026

AMENDED IN ASSEMBLY MAY 18, 2026

AMENDED IN ASSEMBLY APRIL 22, 2026

AMENDED IN ASSEMBLY APRIL 13, 2026

CALIFORNIA LEGISLATURE—2025–26 REGULAR SESSION

ASSEMBLY BILL No. 2635

Introduced by Assembly Member Celeste Rodriguez

February 20, 2026

An act to add Section 43018.12 to the Health and Safety Code, relating to air pollution.

LEGISLATIVE COUNSEL'S DIGEST

AB 2635, as amended, Celeste Rodriguez. Air pollution: small off-road engines: voucher programs: local regulation.

Existing law requires the State Air Resources Board, by July 1, 2022, consistent with federal law, to adopt cost-effective and technologically feasible regulations to prohibit engine exhaust and evaporative emissions from new small off-road engines, as defined by the state board. Existing law requires those regulations to apply to engines produced on or after January 1, 2024, or as soon as the state board determines is feasible, whichever is later, and requires the state board to identify, and, to the extent feasible, make available, funding for commercial rebates or similar incentive funding, as specified.

This bill would ~~require~~ *require, to the extent that funding is available,* each large and medium air pollution control and air quality management district, no later than January 1, 2028, to implement and maintain a commercial voucher program to support the transition to zero-emission small off-road equipment consistent with specified requirements. By requiring districts to establish a new program, the bill would impose a

state-mandated local program. The bill would also require a small rural district or local government that chooses to adopt such a program to comply with specified requirements in administering the program.

This bill would prohibit a local ~~government~~ *government, until January 31, 2032,* from adopting or enforcing an ordinance that prohibits the use of small off-road engine landscaping equipment unless the district in which the local government is located offers commercial vouchers pursuant to the above-described program or the local government implements an incentive voucher program that complies with specified requirements. The bill would prohibit the punishment of a violation of an ordinance adopted by a local government governing the use of any small off-road engine landscaping equipment as an infraction or misdemeanor, and would provide that the ordinance is only punishable by an administrative fine imposed in accordance with specified requirements.

Existing constitutional provisions require that a statute that limits the right of access to the meetings of public bodies or the writings of public officials and agencies be adopted with findings demonstrating the interest protected by the limitation and the need for protecting that interest.

This bill would make legislative findings to that effect.

The bill would include findings that changes proposed by this bill address a matter of statewide concern rather than a municipal affair and, therefore, apply to all cities, including charter cities.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that, if the Commission on State Mandates determines that the bill contains costs mandated by the state, reimbursement for those costs shall be made pursuant to the statutory provisions noted above.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

The people of the State of California do enact as follows:

SECTION 1. This act shall be known, and may be cited, as the Just Transition for Landscapers Act.

SEC. 2. (a) The Legislature finds and declares all of the following:

(1) Hundreds of thousands of Californians earn their livelihoods as landscapers, providing essential services that maintain and beautify residential, commercial, and public spaces throughout the state. The landscaping industry encompasses a wide variety of jobs, including, but not limited to, mowing, blowing, fertilization, weed control, aeration, and tree trimming. This includes everything from residential gardens to larger commercial grounds.

(2) A majority of landscapers are immigrants or informal workers who often decide to enter the landscaping industry after being excluded from other sectors of the economy. These workers contribute significantly to the state's economy and environmental stewardship while supporting their families and communities. Landscapers experience persistent and overlapping challenges, including unsafe working conditions, wage theft, exploitative employment arrangements, language barriers, and criminalization associated with informal work status. These challenges are compounded by fear of interaction with government agencies and heightened risks of immigration enforcement, resulting in increased economic and employment instability.

(3) Gas-powered small off-road engines (SOREs) are often used in landscaping equipment and are a significant source of localized air pollution. They emit nitrogen oxides, particulate matter, and greenhouse gases, which contribute to climate change and disproportionately impact low-income communities and communities of color that are already overburdened by environmental pollution.

(4) In 2021, the Legislature enacted Assembly Bill 1346 (Chapter 753 of the Statutes of 2021), which phases out the sale of new gas-powered SOREs beginning in 2024 and directs the State Air Resources Board to develop incentive programs that, to the extent feasible, make available funding for commercial rebates to support the transition to zero-emission small off-road equipment.

(5) Existing rebate programs are insufficient, unevenly implemented, and inaccessible to many immigrant landscapers due to requirements such as business licensing, language barriers, fear of interacting with government agencies, and significant upfront costs. As a result, this leaves many workers without a viable pathway to a full and just transition that allows them to support their families and communities.

(6) Some local jurisdictions have implemented ordinances restricting or prohibiting the use of gas-powered equipment to cut pollution and noise. Without adequate access to transition assistance, these enforcement mechanisms impose fines and fees that disproportionately impact immigrant and informal landscapers, creating cycles of debt, worsening economic instability, and slowing the transition to zero-emission equipment.

(7) Premature enforcement through fines and penalties, in the absence of accessible transition assistance, risks discouraging compliance, increasing informal economic activity, prolonging pollution, and delaying the replacement of gas equipment.

(8) This act applies to any city, county, or city and county, including a charter city. The fines and penalties imposed on landscapers and the challenges these workers face as a result of their informal work status, including challenges resulting from licensing requirements, are matters of statewide concern. Furthermore, unnecessary barriers that prevent landscapers from accessing vouchers and incentives to transition to zero-emission equipment interfere with the achievement of California's climate goals and disrupt the regulation of business, which are matters of statewide concern. Moreover, California has an interest in the regulation of emissions, air quality, and public health, all matters of statewide concern, because they affect landscapers and residents across all communities.

(9) California's climate and air quality goals are best achieved through policies that promote widespread, sustained adoption of zero-emission technologies. Ensuring that landscapers who rely on small off-road equipment have sufficient time, resources, and support to transition to zero-emission alternatives is essential to achieving meaningful and lasting emissions reductions.

(b) It is the intent of the Legislature to promote environmental protection, public health, economic stability and mobility, and support immigrant and informal landscapers in accessing the resources necessary to transition to zero-emission landscaping equipment.

SEC. 3. Section 43018.12 is added to the Health and Safety Code, to read:

43018.12. (a) For purposes of this section, the following definitions apply:

(1) "Large district" means a district with a population of 1,000,000 or more.

(2) "Local government" means a chartered or general law city, county, or city and county.

(3) "Medium district" means a district with a population of less than 1,000,000 that is not a small rural district.

(4) "Personally identifiable information" means an individual's name, business name, home address, business address, birth date, telephone number, business location, California driver's license or identification number, individual taxpayer identification number, municipal identification number, government-issued identification number, consular identification, social media identifiers, employer identification number, business license number, social security number, known place of work, income and tax information, and any other information that would identify the individual.

(5) "Small off-road engine equipment" means off-road spark-ignition engines that produce 19 kilowatts gross power or less (25 horsepower or less).

(6) "Small off-road engine landscaping equipment" means small off-road engine equipment commonly used in landscaping operations, including lawn and garden equipment such as lawn mowers, leaf blowers, trimmers, weed whackers, aerators, chainsaws, edgers, and other turf care tools. Small off-road engine landscaping equipment does not include golf carts, specialty vehicles, generators, pumps, and logging, airport ground support, and other small utility equipment.

(7) "Small rural district" means a district with a population of less than 1,000,000 and that is designated as rural by the California Air Pollution Control Officers Association consistent with the following criteria:

(A) A small rural district is typically characterized by a smaller population base relative to medium and large districts.

(B) A small rural district has limited staffing and administrative capacity relative to medium and large districts.

(8) "Worker center" means a nonprofit or community-based organization that serves workers through outreach, education, training, and workforce development, and has demonstrated a history of working with individuals employed or self-employed in landscaping.

(b) (1) No later than January 1, 2028, *to the extent that funding is available,* each large and medium district shall implement and maintain a commercial voucher program to support the transition to zero-emission small off-road equipment consistent with all of the following:

(A) The district shall recognize and accept alternative forms of documentation in place of a business license for eligibility verification. Acceptable documentation may include, but is not limited to, a letter from a worker center confirming the applicant's employment or self-employment in landscaping, or self-attestation stating the applicant's work in commercial and residential landscaping.

(B) The district shall not require that a business hold a business license for a minimum period before submitting an application.

(C) The district shall establish low-burden procedures to review and verify any required documentation in a manner that is equitable for landscapers, and shall provide language assistance when requested.

~~(D) The district shall offer vouchers covering not less than 85 percent, and up to 100 percent, of eligible costs for landscapers to transition to zero-emission equipment.~~

~~(E)~~

(D) The district shall not inquire into or collect information about an individual's immigration or citizenship status or place of birth.

~~(F)~~

(E) The district shall not inquire into or collect information or documentation regarding an individual's criminal history, and shall not require an applicant to submit fingerprints, complete a LiveScan fingerprinting, or submit to a background check as part of an application for a voucher.

~~(G)~~

(F) Unless the district is using funds appropriated specifically for purposes of implementing this section, the district shall ensure that any existing district incentive funds used to implement this subdivision achieve emissions reductions that are cost effective relative to other allowable uses of those funds.

(2) Except as otherwise required by state or federal law, a district shall not provide voluntary consent to any individual to access, review, or obtain any of the records obtained in connection with

a program described in paragraph (1) that include personally identifiable information of any voucher participants without a subpoena or judicial warrant. This paragraph does not prohibit a district from challenging the validity of a subpoena or judicial warrant in a federal district court.

(3) A district shall not disclose or provide in writing, verbally, or in any other manner, personally identifiable information of any voucher participant obtained in connection with a program described in paragraph (1), except pursuant to a subpoena or a valid judicial warrant.

(4) If a small rural district or local government adopts a program described in paragraph (1), it shall comply with subparagraph (A) of paragraph (1) in administering the program.

(5) On and after January 1, 2028, a contract between a nonpublic entity and a large or medium district for the purpose of administering a program pursuant to paragraph (1) shall require the nonpublic entity to explicitly agree to adhere to the requirements of this subdivision, and shall be immediately terminated if it is found that the nonpublic entity has violated this subdivision.

(c) (1) *(A)* On and after January 1, 2027, a local government shall not adopt or enforce an ordinance that prohibits the use of small off-road engine landscaping equipment unless the district in which the local government is located offers commercial vouchers pursuant to subdivision (b) or the local government implements an incentive voucher program ~~that provides vouchers covering not less than 85 percent, and up to 100 percent, of eligible costs~~ for landscapers to transition to zero-emission small off-road equipment.

(B) This paragraph shall become inoperative on January 31, 2032.

(2) (A) A violation of an ordinance adopted by a local government governing the use of any small off-road engine landscaping equipment shall not be punishable as an infraction or misdemeanor, and a person shall not be subject to arrest for an alleged violation of the ordinance.

(B) A violation of an ordinance described in subparagraph (A) is punishable only by the following:

(i) A written warning for a first violation.

(ii) An administrative fine not exceeding one hundred dollars ($100) for a second violation within one year of the first violation.

(iii) An administrative fine not exceeding two hundred dollars ($200) for each additional violation within one year of the first violation.

(C) When assessing an administrative fine pursuant to subparagraph (B), the adjudicator shall take into consideration the person's ability to pay the fine. The local government shall provide the person with notice of their right to request an ability-to-pay determination and shall make available instructions or other materials for requesting an ability-to-pay determination. The person may request an ability-to-pay determination at adjudication or while the judgment remains unpaid, including when a case is delinquent or has been referred to a comprehensive collection program.

(D) If the person meets the criteria described in subdivision (a) or (b) of Section 68632 of the Government Code, the local government shall accept, in full satisfaction, 20 percent of the administrative fine imposed pursuant to subparagraph (B).

(E) The local government may allow the person to complete community service in lieu of paying the total administrative fine, may waive the administrative fine, or may offer an alternative disposition.

SEC. 4. The Legislature finds and declares that Section 3 of this act, which adds Section 43018.12 to the Health and Safety Code, imposes a limitation on the public's right of access to the meetings of public bodies or the writings of public officials and agencies within the meaning of Section 3 of Article I of the California Constitution. Pursuant to that constitutional provision, the Legislature makes the following findings to demonstrate the interest protected by this limitation and the need for protecting that interest:

In order to protect the privacy of participants in the voucher programs described in Section 3 of this act, the limitations on the public's right of access imposed by Section 3 of this act are necessary.

SEC. 5. The Legislature finds and declares that, for the reasons described in paragraph (8) of subdivision (a) of Section 2 of this act, the regulation of the use of gas-powered landscaping equipment is a matter of statewide concern and is not a municipal affair as that term is used in Section 5 of Article XI of the California Constitution. Therefore, Section 3 of this act adding Section

43018.12 to the Health and Safety Code applies to all cities, including charter cities.

SEC. 6. If the Commission on State Mandates determines that this act contains costs mandated by the state, reimbursement to local agencies and school districts for those costs shall be made pursuant to Part 7 (commencing with Section 17500) of Division 4 of Title 2 of the Government Code.

O

AMENDED IN SENATE MAY 14, 2026

AMENDED IN SENATE MARCH 18, 2026

AMENDED IN SENATE MARCH 2, 2026

SENATE BILL No. 899

Introduced by Senator Grove
(Coauthors: Senators Alvarado-Gil, Dahle, Jones, Niello, Ochoa Bogh, Richardson, Seyarto, and Valladares)
(Coauthor: Assembly Member Alanis)

January 20, 2026

An act to add Section 4772 to the Public Resources Code, relating to fire prevention.

LEGISLATIVE COUNSEL'S DIGEST

SB 899, as amended, Grove. Fire prevention: Wildfire and Forest Resilience Task Force: wildfire smoke.

Existing law requires the Wildfire and Forest Resilience Task Force to develop a comprehensive implementation strategy to track and ensure the achievement of the goals and key actions identified in the state's "Wildfire and Forest Resilience Action Plan," as provided. Existing law requires, on or before March 1, 2026, and every 5 years thereafter, the task force to update the action plan.

This bill would require the task force, on or before July 1, 2028, and in cooperation with the Office of Environmental Health Hazard ~~Assessment~~ *Assessment, the State Air Resources Board,* and the State Department of Public Health, to assess the health costs and impacts of wildfire smoke using existing wildfire smoke and health data, as provided. The bill would require the task force, in developing this assessment, to, among other things, develop a model to determine the

approximate health benefits of achieving the goals identified in the action plan and make recommendations on how the action plan can increase its health benefits. The bill would authorize the task force to enter into contracts with an independent group to assist with this assessment. The bill would require the task force to include this assessment and additional actions to reduce the health impact of *wildfire* smoke in the next update to the action plan, as provided.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: no.

The people of the State of California do enact as follows:

SECTION 1. (a) The Legislature finds and declares all of the following:

(1) The Office of Environmental Health Hazard Assessment has published several studies that consistently indicated that exposure to wildfire PM 2.5 increased the risk of emergency room visits and hospital admissions related to respiratory issues, particularly among people of color, elderly populations, outdoor workers, children, and other vulnerable populations.

(2) Rural and tribal populations, who are generally physically closest to wildfires, often lack resources such as easy access to health care, food and emergency supply centers, and multiple means of transportation that can help them escape fire more quickly.

(3) Findings suggested that PM 2.5 during the wildfire periods may contain more toxic chemical constituents than during nonwildfire periods. For instance, wildfire often straddles the wildland-urban interface, meaning plastics, finished wood products, and other human-made materials from homes can burn and let off volatile organic compounds that are especially toxic to humans.

(4) According to the Bay Area Council, wildfires across California in 2018 produced $7,800,000,000 in estimated health costs in the San Francisco Bay area, a rise in hospital admissions, and an increase in polluted air.

(5) According to the Wildfire and Forest Resilience Task Force, by some measures, increased wildfire smoke has reversed gains in air quality created by improved emission standards in transportation and other sectors in parts of California. Evidence also suggests that smoke's public health effects are even more

significant than the tragic burns and deaths caused directly by wildfire in California.

(b) It is the intent of the Legislature to better understand the health costs and impacts associated with wildfire smoke to better value the importance of investing in achievement of the California Wildfire and Forest Resilience Action Plan goals established pursuant to Article 11 (commencing with Section 4770) of Chapter 10 of Part 2 of Division 4 of the Public Resources Code.

SEC. 2. Section 4772 is added to the Public Resources Code, immediately following Section 4771.6, to read:

4772. (a) On or before July 1, 2028, the task force, in cooperation with the Office of Environmental Health Hazard ~~Assessment~~ *Assessment, the State Air Resources Board,* and the State Department of Public Health, shall assess the health costs and impacts of wildfire smoke using existing wildfire smoke and health data, including, but not limited to, data from local, state, federal, and academic sources. In developing the assessment, the task force shall do all of the following:

(1) Estimate the number of emergency room visits and deaths from the smoke of wildfires in California since July 1, 2018.

(2) Develop a cost estimate for the health care costs of the smoke of wildfires in California since July 1, 2018.

(3) Develop a model to determine the approximate health benefits, both for cost and human health impacts, of achieving the goals identified in the state's "Wildfire and Forest Resilience Action Plan."

(4) Make recommendations on how the "Wildfire and Forest Resilience Action Plan" can increase its health benefits.

(b) The task force may enter into contracts with an independent group to assist with the assessment required pursuant to subdivision (a).

(c) The task force shall include the assessment required in subdivision (a) and additional actions to reduce the health impact of wildfire smoke in the first update, pursuant to Section 4771, to the state's "Wildfire and Forest Resilience Action Plan" that occurs after the completion of the assessment.

O

AGENDA: 19

BOARD MEETING DATE: June 3, 2026

REPORT: Community Equity, Health, and Justice Committee

SYNOPSIS: The Community Equity, Health, and Justice Committee (Committee) held a meeting on Wednesday, May 13, 2026. The following is a summary of the meeting.

RECOMMENDED ACTION:

This item is provided for the Board's information and awareness; no action is requested at this time.

John Gioia, Chair
Community Equity, Health, and Justice Committee

JG:mh

Community Equity, Health, and Justice (Committee) Chairperson, John Gioia, called the meeting to order at 1:00 p.m.

Roll Call:

Present, In-Person (Bay Area Metro Center, 375 Beale Street, 1st Yerba Buena Room, San Francisco, CA, 94105): Directors Linda Sell and Steve Young.

Present, In-Person Satellite Location: (Solano County Administration Building, 675 N. Texas St. Room A168, Fairfield, CA, 94533): Director Monica Brown.

Present, In-Person Satellite Location: (Office of Contra Costa County Supervisor John Gioia, Conference Room, 11780 San Pablo Ave., Suite D, El Cerrito, CA 94530): Chairperson Gioia.

Present, In-Person Satellite Location: (Pittsburg City Hall, 65 Civic Ave., Room, 301A, Pittsburg, CA 94565): Vice Chairperson Dionne Adams.

Present, In-Person Satellite Location: Napa County Administration Building, 1195 Third Street, Suite 310, Crystal Conference Room, Napa, CA 94559): Director Joelle Gallagher.

Absent: Director Shamann Walton.

For additional details of the Community Equity, Health, and Justice Committee Meeting, please refer to the webcast, which can be found here. Please use the webcast's index to view specific agenda items.

CONSENT CALENDAR

3. APPROVAL OF THE DRAFT MINUTES OF THE COMMUNITY EQUITY, HEALTH, AND JUSTICE COMMITTEE MEETING OF APRIL 8, 2026

Public Comments

No requests received.

Committee Comments

None.

Committee Action

Director Gallagher made a motion, seconded by Director Brown, to approve the Draft Minutes of the Community Equity, Health, and Justice Committee Meeting of April 8, 2026; and the motion carried by the following vote of the Committee:

AYES:	Adams, Brown, Gioia, Gallagher, Sell, Young.
NOES:	None.
ABSTAIN:	None.
ABSENT:	Walton.

INFORMATIONAL ITEMS

4. BAY REINVESTING PENALTIES FOR AIR IMPROVEMENT AND RESILIENCE (REPAIR) PROGRESS UPDATE

Emi Wang, Community Investments Officer, gave the staff presentation *Bay Reinvesting Penalties for Air Improvement and Resilience (REPAIR) Progress Update,* including: background; penalty allocation breakdown; overview of available funds; Local Community Benefits Fund; grant awards from Benicia and Richmond and their surrounding communities; grant support; grant support webinars; networking sessions; technical assistance services; technical assistance progress as of April 24, 2026; and what's ahead.

Public Comments

Public comments were given by Arieann Harrison, Marie Harrison Community Foundation.

Committee Comments

The Committee and staff discussed what value prospective applicants may have gained from attending the networking sessions; whether applications are predominantly coming from individual organizations versus collaborative partnerships; whether the $3.25 million dollars that the Air District fined the Valero Benicia refinery (in April 2026) will be added

to the available funds for Round 1 of the Local Community Benefits Fund allocated to Benicia and surrounding communities, and which grant award types qualify for the supplemental funding; the anticipated application scoring information that staff will share with the Board, once staff recommendations are ready for the Board's consideration; the number of Benicia residents that applied to serve on the application review panel; concerns regarding; the belief that nonprofit organizations were discouraged from applying due to limited administrative capacity and the significant bureaucratic burden associated with the application process; and whether grant writers are allowed to be part of the application process.

Committee Action

No action taken.

5. AIR DISTRICT SCHOLARSHIP PROGRAM

Tim Williams, Diversity, Equity, and Inclusion Officer, gave the staff presentation *Air District Scholarship Program,* including: purpose and vision; overview; selection criteria; cohort model - scholar visibility and community engagement; review process for scholarship; timeline; outreach and equity strategy; success measures; pathway of success – student to employee; building early access and awareness; developing skills and experience; and creating a workforce pipeline.

Public Comments

Public comments were given by Patrick Messac.

Committee Comments

The Committee and staff discussed whether this opportunity would be extended to community colleges and colleges outside the nine Bay Area counties; whether Board members will be allowed to participate in the application review process or have opportunities to interact with the selected candidates; and the suggestion of holding informational sessions for perspective applicants.

Committee Action

No action taken.

OTHER BUSINESS

6. PUBLIC COMMENT ON NON-AGENDA MATTERS

Public comments were given by Meya, Center for Biological Diversity; Roger Lin, Center for Biological Diversity; Jenna Rafla-Yuan, San Francisco resident; Kaitlin Alcontin, Communities for a Better Environment; Patrick Messac; and Danny, Media Justice.

7. **COMMITTEE MEMBER COMMENTS**

None.

8. **REPORT OF THE DEPUTY EXECUTIVE OFFICER OF EQUITY AND COMMUNITY PROGRAMS**

Arsenio Mataka, Deputy Executive Officer of Equity and Community Programs, reported that, in response to public comments regarding data transparency, the Committee may wish to receive an update on the Open Air Community Data Portal Software Project, which is currently underway and aims to modernize the Air District's public air quality data-sharing platform.

9. **TIME AND PLACE OF NEXT MEETING**

Wednesday, June 10, 2026, at 1:00 p.m. The meeting will be held in-person at the Bay Area Metro Center and at satellite locations as may be specified on the meeting agenda using a remote teleconferencing link. Members of the Community Equity, Health, and Justice Committee and the public may attend at any of those in-person locations, and members of the public may also attend virtually via webcast.

The meeting was adjourned at 2:00 p.m.

Attachments

#3 – Approval of the Draft Minutes of the Community Equity, Health, and Justice Committee Meeting of April 8, 2026
#4 – Bay Reinvesting Penalties for Air Improvement and Resilience (Repair) Progress Update
#5 – Air District Scholarship Program

AGENDA: 20

BOARD MEETING DATE: June 3, 2026

REPORT: Policy, Grants, and Technology Committee

SYNOPSIS: The Policy, Grants, and Technology Committee (Committee) held a meeting on Wednesday, May 20, 2026. The following is a summary of the meeting.

RECOMMENDED ACTION:

This item is provided for the Board's information and awareness; no action is requested at this time.

Vicki Veenker, Chair
Policy, Grants, and Technology Committee

VV:mh

Policy, Grants, and Technology Committee (Committee) Vice Chairperson, Juan González III, called the meeting to order at 10:00 a.m.

Roll Call:

Present, In-Person (Bay Area Metro Center, 375 Beale Street, 1st Floor Board Room, San Francisco, CA, 94105): Vice Chairperson Juan González III; and Directors Ken Carlson, Brian Colbert, and Mark Salinas.

Present, In-Person Satellite Location: (Alameda County Board of Supervisors District 3, 101 Callan Ave., Suite 103, San Leandro, CA 94577): Director Lena Tam.

Present, In-Person Satellite Location: (City of San Bruno, 567 El Camino Real, Room 138, San Bruno, CA 94066): Directors Noelia Corzo and Rico E. Medina.

Absent: Chairperson Vicki Veenker; and Directors Joelle Gallagher and Ray Mueller.

For additional details of the Policy, Grants, and Technology Committee Meeting, please refer to the webcast, which can be found here. Please use the webcast's index to view specific agenda items.

CONSENT CALENDAR

3. **APPROVAL OF THE DRAFT MINUTES OF THE POLICY, GRANTS, AND TECHNOLOGY COMMITTEE MEETING OF APRIL 15, 2026**

NOTED PRESENT: Director Corzo was noted present at 10:01 a.m.

Public Comments

No requests received.

Committee Comments

None

Committee Action

Director Salinas made a motion, seconded by Director Carlson, to **approve** the Draft Minutes of the Policy, Grants, and Technology Committee Meeting of April 15, 2026; and the motion carried by the following vote of the Committee:

AYES:	Carlson, Colbert, Corzo, González, Medina, Salinas, Tam.
NOES:	None.
ABSTAIN:	None.
ABSENT:	Gallagher, Mueller, Veenker.

ACTION ITEMS

4. STATE LEGISLATIVE UPDATES

Alan Abbs, Legislative Officer, gave the staff presentation *State Legislative Updates,* including: abbreviations; recommended action; 2026 Legislative Session Bills: 2026 Legislative Session, Board-Adopted Position Bills – Senate Bill (SB) 222 (Wiener), Assembly Bill (AB) 907 (Chen), AB 1777 (Garcia), SB 954 (Blakespear), AB 1791 (Sanchez), AB 2057 (DeMaio), AB 2102 (DeMaio), AB 2349 (Solache), AB 2313 (Berman), AB 2752 (Avila Farias), SB 299 (Cabaldon), SB 1039 (Grove), SB 1075 (Reyes), SB 1159 (Cabaldon), SB 1392 (Cortese and Grove); Air District staff recommendations – AB 2635 (C. Rodriguez), and SB 899 (Grove); additional bills for discussion – AB 1577 (Bauer-Kahan), and AB 2170 (Boerner); State Budget Update Fiscal Year 2026-2027: 2026 State Budget Dates and Deadlines, State Budget Update; and recommended action.

Public Comments

No requests received.

Committee Comments

The Committee and Air District staff discussed the following points regarding the following bills:

- AB 2635 (C. Rodriguez) – whether this bill has been amended to make its implementation contingent upon the availability of state funding; and, as written, whether constraints on the Air District's future budgets may result, were this bill to be passed.

- SB 299 (Cabaldon) – how the bill language, across successive drafts, related to air quality considerations; and whether day care centers are typically located in industrially-zoned areas.
- SB 1392 (Cortese and Grove) - what the new requirement will be; and whether the bill's author has considered regulation on lowrider vehicles.

Committee Action

Director Carlson made a motion, seconded by Director Colbert, to recommend the Board adopt positions on pending state legislative bills where appropriate, including but not limited to the following Air District staff recommendations:

SUPPORT	***OPPOSE UNLESS AMENDED***
Senate Bill 899 (Grove)	*Assembly Bill 2635 (C. Rodriguez)*

AYES: Carlson, Colbert, Corzo, González, Medina, Salinas, Tam.
NOES: None.
ABSTAIN: None.
ABSENT: Gallagher, Mueller, Veenker.

INFORMATIONAL ITEM

5. **OVERVIEW OF AIR DISTRICT'S HEAVY-DUTY EQUIPMENT GRANT PROGRAMS AND SUMMARY OF RESULTS FOR CALENDAR YEAR 2025**

Adam Shapiro, Strategic Incentives Division Manager, and Daniel Anderson, Senior Staff Specialist, gave the staff presentation*, Overview of Air District's Heavy-Duty Equipment Grant Programs and Summary of Results for Calendar Year 2025,* including: background: heavy-duty equipment grants, primary funding sources, project types, cost-effectiveness, priority areas, and Strategic Plan; 2025 project summary – contracted projects and emissions reduced; 2025 highlight – greatest emissions reduced, most cost-effective projects, zero-emission funding, and priority communities; 2025 program summary; and Strategic Plan – improving grant implementation, and new programs and tools.

Public Comments

No requests received.

Committee Comments

The Committee and Air District staff discussed the request for cumulative emissions reductions (in tons) achieved over the past 30 years by Air District grant-funded, heavy-duty equipment projects; Hayward Rides, a municipal initiative that provides free bicycles to low-income residents and high school students, and whether a similar program could be implemented in the four designated Bay Area AB 617 communities; concerns regarding the new pilot program in AB 617 Communities, called the Commercial Electric

Lawn and Garden Equipment Exchange (eL&G), and the request that the Air District recognizes the current and future needs of landscaping and lawn maintenance companies who may be impacted by such a program; whether the cost-effective limits for conventional fuel and zero-emission equipment may be adjusted; and how the Air District should account for health impacts on smaller populations, compared to broader community impacts, within its analysis.

Committee Action

No action taken.

OTHER BUSINESS

6. PUBLIC COMMENT ON NON-AGENDA MATTERS

Public comments were given by Jasmine Lozano, 1-888-Heat-Pumps.

7. COMMITTEE MEMBER COMMENTS

None.

8. TIME AND PLACE OF NEXT MEETING

Wednesday, June 17, 2026, at 10:00 a.m. The meeting will be held in-person at the Bay Area Metro Center and at satellite locations as may be specified on the meeting agenda using a remote teleconferencing link. Members of the Policy, Grants, and Technology Committee and the public may attend at any of those in-person locations, and members of the public may also attend virtually via webcast.

Adjournment
The meeting was adjourned at 11:12 a.m.

Attachments
#3 - Approval of the Draft Minutes of the Policy, Grants, and Technology Committee Meeting of April 15, 2026
#4 – State Legislative Updates
#5 – Overview of Air District's Heavy-Duty Equipment Grant Programs and Summary of Results for Calendar Year 2025

AGENDA: 21

BOARD MEETING DATE: June 3, 2026

REPORT: Community Advisory Council

SYNOPSIS: The Community Advisory Council (CAC) held a meeting on Thursday, May 21, 2026. The following is a summary of the meeting.

RECOMMENDED ACTION:

This item is provided for the Board's information and awareness; no action is requested at this time.

William Goodwin, Co-Chair
Patrick Messac, Co-Chair
Latasha Washington, Co-Chair
Community Advisory Council

WG/PM/LW:mh

CALL TO ORDER - ROLL CALL

The meeting Facilitator, Randolph Belle of Randolph Belle, Artist (RBA) Creative, called the Community Advisory Council in-person meeting to order at 6:07 p.m.

Roll Call:

Present, In Person: (Bay Area Metro Center, 375 Beale Street, Yerba Buena Room, San Francisco, CA, 94105): Co-Chairperson William Goodwin; and Council Members Sejal Babaria, Dominique Brooks, Adriana Fernandez-Arriaga, Ms. Margaret Gordon, Cynthia Prieto-Diaz, Dominick Ramirez, Saidy Reyes Mazariegos, Kevin G. Ruano Hernandez, Violet Saena, Harsheet Subedi, and Ken Szutu.

Participated Remotely, via Zoom via Section 54953.8.3 of the Ralph M. Brown Act Open Meeting Act (Cal. Gov't Code § 54953.8.3). Remote presence does not count for quorum, but votes are counted for all action items): Co-Chairperson Latasha Washington; and Council Member Azjargal Tsogtsaikhan.

Absent: Co-Chairperson Patrick Messac; and Council Members Arieann Harrison, and Jeff Sanchez.

For additional details of the Community Advisory Council Meeting, please refer to the webcast, which can be found here. Please use the webcast's index to view specific agenda items.

2. PUBLIC COMMENT ON NON-AGENDA MATTERS

Public comments were given by Masheika Allgood, Center for Biological Diversity; Ellina Yin; and Roger Lin, Center for Biological Diversity.

3. REPORT OF THE EXECUTIVE OFFICER/AIR POLLUTION CONTROL OFFICER (APCO)

Arsenio Mataka, Deputy Executive Officer for Equity & Community Programs, announced the following:

- **Bay REPAIR Program (Reinvesting Penalties for Air Improvement and Resilience):** The Air District is halfway through our application solicitation process for the Local Community Benefits Fund Round 1—the grant deadline for Benicia Catalyst Grants passed on May 1, and the grant deadline for all other grants across Benicia, Richmond and surrounding communities closes on May 29. The Air District will convene technical and community reviewers to score the grant applications over summer 2026.
- **Update on Water Heater Appliance Rule at May 6 Board meeting:** The Board of Directors discussed the status of the development of amendments to the Air District's water heater rule. As you may know, the Board adopted amendments to both the water heater rule, Rule 9-6, and the furnace rule, Rule 9-4, in March 2023. The adopted amendments would phase out natural gas-fueled water heaters and furnaces over time. The Board also instructed staff to provide updates to them two years before the requirements compliance dates.
- **Legislative News:** The Governor released the May revisions to next year's state budget on May 14, and we are reviewing it to determine the impacts on the AB 617 program, as well as incentives such as Clean Cars 4 All.

Council Comments

Council Member Ms. Margaret Gordon expressed her belief that the Air District's Permitting process is unclear and cumbersome.

CONSENT CALENDAR (ITEMS 4 – 5)

4. APPROVAL OF THE DRAFT MINUTES OF THE COMMUNITY ADVISORY COUNCIL MEETING OF MARCH 19, 2026

The Council considered approving the Draft Minutes of the Community Advisory Council meeting of March 19, 2026.

5. EXTENSION OF COMMUNITY ADVISORY COUNCIL MEMBERS' TERMS ENDING IN FALL 2026

The Council considered recommending to the Board of Directors that the Board extend the terms of Co-Chair Patrick Messac, Council member Sejal Babaria, and Council

member Dominick Ramirez, from September 4, 2026, to December 3, 2027, and extending the end of the term of Council member Cynthia Prieto-Diaz from November 6, 2026, to December 3, 2027 to align these four seats' terms with current Community Advisory Council members serving 2-year terms.

Public Comments on Items 4 – 5

No requests received.

Council Comments on Items 4 – 5

The Council and staff discussed whether individuals under consideration for the vote should recuse themselves from voting; and whether quorum and voting thresholds will still be met for approval of the motion when affected individuals abstain from voting on their own appointments.

NOTED PRESENT: Council Member Ruano Hernandez was noted present at 6:33 p.m.

Council Action on Items 4 – 5

Council Member Reyes Mazariegos made a motion, seconded by Council Member Gordon, to **approve** the Consent Calendar, Items 4 through 5, inclusive; and the motion **carried** by the following vote of the Council:

AYES:	Brooks, Fernandez-Arriaga, Goodwin, Gordon, Reyes Mazariegos, Saena, Subedi, Szutu, Tsogtsaikhan, Washington.
NOES:	None.
ABSTAIN:	None.
ABSENT:	Messac, Sanchez, Harrison
RECUSED:	Babaria, Prieto-Diaz, Ramirez, Ruano Hernandez

Motion Approved.

INFORMATIONAL ITEMS

6. RULES 6-1 AND 6-6: PREVIEW OF UPCOMING DRAFT AMENDMENTS

NOTED PRESENT: Council Member Saena was noted present at 6:36 p.m.

Eric Lara, Senior Air Quality Specialist in the Regulatory Development Division, gave the staff presentation *Rules 6-1 and 6-6: Preview of Upcoming Draft Amendments*, including: abbreviations; outline; who develops air quality regulations; what other regulations are relevant besides air quality; rule development and public engagement; why are we amending the rule; current dust effort public engagement; main sites of concern; issues of concern; complaint and violation history; particulate matter (PM) emissions in the Bay Area; number of potentially impacted sites; categories for upcoming staff

recommendations; focus on material handling and movement; focus on site controls; focus on tracking and accountability; fenceline air monitoring; potential improvements to reduce dust; examples of activities and controls; compliance options for controls at all sites; additional focus areas for dust control; addressing Council recommendations; and timeline and next steps.

Public Comments

Public comments were given by Tyler Szeto, Earth Justice.

Council Comments

The Council and staff discussed whether amendments to Regulation 6, Rules 1 and 6 would include asbestos; potential sources of fugitive dust in San Jose that the Air District may need to regulate; a request for a geographic mapping of complaints across the nine Bay Area counties, including the proximity of complainant locations to the alleged source; which authority regulates the activities of the Oakland Bulk and Oversized Coal Terminal and piles of dirt and cement in West Oakland; the minimum number of air monitors required; the distance between the property line from the monitor and polluting facility; whether the community is invited to provide input on where the monitors should be located; precluding smaller facilities from circumventing regulatory intent; the desire for enforcement mechanisms and inspection prioritization for unpermitted sources operating in violation of Air District regulations; concerns regarding soil contamination; the processing time associated with registering a new facility with the Air District, and fines for failing to do so properly; whether there is interagency collaboration between the Air District and other California air districts or regulatory agencies for the purpose of sharing best practices; whether the Air District utilizes video monitors in areas with stockpiles and other sources of fugitive dust; factors that may account for Alameda County having significantly more complaints than Contra Costa County, but fewer resulting Notices of Violation; the desire for a formal follow-up step in the Air District's complaint system procedure, to inform complainants of investigation outcomes and case resolution; the desire for the community's input earlier in the Air District's rulemaking process; offsite impacts; best management practices; the request for a list of enforceable actions over which the Air District has authority; which entities are required to implement dust control plans; whether the Air District applies industry-specific regulatory requirements across different sectors; what mechanisms are in place to verify that fugitive dust emissions are being effectively mitigated; the suggestion of exercising discretion in the use of water for fugitive dust control measures, particularly given current drought conditions; whether the Council is being engaged to assist the Air District to identify the most appropriate locations for new air monitoring stations; the Council's desire for being able to bring impactful recommendations to the Board; the manner in which public input on these regulations is being solicited; whether clear guidance on how residents' documentation may be used when investigating complaints will be established; and the tools used by Air District inspectors to determine fugitive dust.

Council Actions

No action taken.

THE COUNCIL RECESSED AT 7:57 P.M, AND RESUMED AT 8:08 P.M.

OTHER BUSINESS

7. GOVERNANCE AD HOC COMMITTEE UPDATE

Council Member Ruano Hernandez, a Co-Chair for the Council's Governance Ad Hoc Committee, reported that the Council's Governance Ad Hoc Committee has met four times since April 2026, and has been making proposed edits to the Council's charter (sections regarding membership, leadership, ad hoc committees, and agenda settings).The Governance Ad Hoc Committee plans to bring proposed edits to the Charter before the Council in July 2026 and then hold a public comment period.

Public Comments

No requests received.

Council Comments

None.

Council Action

No action taken.

8. ACTION PLAN AD HOC COMMITTEE UPDATE

Action Plan Ad Hoc Committee Co-Chairs, Council Members Brooks and Szutu, explained that, to inform the Ad Hoc Committee's work, Council members were asked to provide input on the following questions about local environmental justice updates and community concerns:

- *What are the most significant air quality or environmental justice concerns in your communities?*
- *What are the biggest gaps in Air District response, communication, or enforcement?*
- *What actions or changes would most effectively address these issues?*

Public Comments

No requests received.

Council Comments

In response to the bulleted quesitons above, Council Members responded with the following:

- *What are the most significant air quality or environmental justice concerns in your communities?*
    - extreme heat in Contra Costa County and insufficient tree canopy coverage to adequately protect communities
    - sea level rise adaptation and the desire for solutions integrated with air quality considerations
    - strategies for reducing reliance on fossil fuels should include measures to support workforce needs and ensure an equitable transition for affected workers and communities
    - proximity of new residential developments to industrial areas raises important land use and public health considerations
    - multiple recent discoveries of unauthorized radiological materials at the former Hunters Point Naval Shipyard in Bayview-Hunters Point
    - community advocates are monitoring potential pollution sources such as San José Mineta International Airport, junk yards, tire shops, and former gas station sites; however, there is limited public access to the associated monitoring data
    - Rodeo's Bayo Vista housing is exposed to multiple pollution sources and funding equity is a major issue. Residents want to see more initiatives like the People's Air Grant because they often struggle to secure funding for local air quality concerns (inequitable distribution of grant funding across the geographic area)
    - environmental and public health impacts posed by data centers (in Santa Clara County)
    - desire for increased enforcement, fines, and additional monitoring at Chevron's Richmond refinery

- *What are the biggest gaps in Air District response, communication, or enforcement?*
    - desire for a status update on the Air District's investigation of the fire that occurred in March 2026 at the Radius Recycling facility in Oakland
    - concerns regarding the perceived disconnect between resident experiences and agency response
    - desire for a formal follow-up step in the Air District's complaint system procedure, to inform complainants of investigation outcomes and case resolution
    - Bay Area communities that are not designated as AB 617 communities feel excluded from funding opportunities, community capacity-building resources, and meaningful engagement and support from the Air District
    - concerns of a perceived lack of communication and community engagement from the Air District in general

- belief that expanding the allotted time of three minutes to Council Members (at Council meetings) would support the Council's desire for meaningful dialogue discussion, engagement, and collaboration between agency staff and Council Members

- *What actions or changes would most effectively address these issues?*
  - allow the Council to assist the Air District develop its Public Participation Plan
  - hold Council meetings in various disadvantaged Bay Area communities (and additional town hall-style meetings) to engage with the community more effectively. Allow the Council Members help identify locations in their communities
  - the Air District develops an improved process for investigating and processing odor complaints
  - the Air District considers partnering with the organizations affiliated with individual Council members to strengthen community engagement and outreach in communities, especially outside of AB 617-designated areas
  - the Air District identifies the top air pollution community concerns in each of the nine Bay Area counties, and makes a better effort to agendize issues that public wishes to discuss
  - the Air District considers providing technical assistance to municipalities to support updates to local zoning regulations that better address air quality and public health considerations

Council Action

No action taken.

9. **COUNCIL MEMBER COMMENTS**

Council Member Ruano Hernandez reported that he attended a meeting of the Community-Led Environmental Air Research (CLEAR) project, in Bayview-Hunters Point. This is a localized, participatory science initiative that empowers local residents, often high school-aged youth, to monitor hyper-local air pollution, educate the public on environmental health, and advocate for actionable clean air policies. He thanked the Air District for sending its Community Air Quality Investigations Mobile Air Monitoring Van to the event.

Co-Chair Goodwin gave a status update on the East Contra Costa Healthy Homes Collaborative – a home electrification and retrofit initiative in Antioch and Pittsburg. He asked, after the Air District awards project grants, whether it conducts any follow-up with awardees to evaluate the findings, outcomes, and benefits achieved upon project completion.

Council Member Fernandez-Arriaga announced that the Climate Ready Ambassadors of North San Mateo County were a selected grantee for Cycle 2 of the James Cary Smith

Community Grant Program, and the second cohort of the Climate Ready Ambassadors just graduated. A new cohort will begin in the Fall of 2026.

Council Member Tsogtsaikhan announced the following:

- The Global Commission on Healthy Indoor Air recently launched a new global framework to establish universal indoor air quality standards
- The California Air Resources Board (CARB) awarded Aclima a contract to execute the Statewide Mobile Monitoring Initiative, mapping block-by-block air quality in 64 designated communities in California, and the data is forthcoming
- She requested that environmental and public health impacts posed by data centers (in Santa Clara County) are agendized for a future Council meeting

Council Member Szutu announced that on May 9, James Cary Smith Community Grant Program grantee, Citizen Air Monitoring Network, celebrated the newest graduates of their Clean Air Ambassador program. This is a growing network of local clean air advocates working to advance community driven air monitoring and environmental health protections in the communities of Vallejo, Crockett, and Rodeo.

Council Member Saena urged everyone to support and follow the efforts of Brightline Defense, an environmental justice nonprofit, that has been advocating to ensure the state's official mapping tool, CalEnviroScreen 5.0, accurately reflects the needs of under-resourced Bay Area communities.

10. TIME AND PLACE OF NEXT MEETING

Thursday, July 16, 2026, at 6:00 p.m. The meeting will be held in-person at the Bay Area Metro Center and at satellite locations as may be specified on the meeting agenda using a remote teleconferencing link. Members of the Community Advisory Council and the public may attend at any of those in-person locations, and members of the public may also attend virtually via webcast.

Adjournment
The meeting was adjourned at 9:20 p.m.

Attachments
#4 – Approval Of The Draft Minutes Of The Community Advisory Council Meeting Of March 19, 2026
#5 – Extension Of Community Advisory Council Members' Terms Ending In Fall 2026
#6 – Rules 6-1 And 6-6: Preview Of Upcoming Draft Amendments

BAY AREA AIR DISTRICT
Memorandum

To: Chairperson Lynda Hopkins and Members of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: June 3, 2026

Re: Assembly Bill 2561 Vacancy Reporting

RECOMMENDED ACTION

No recommended action. Informational item only.

BACKGROUND

Effective January 1, 2025, Assembly Bill (AB) 2561 amends the Meyers-Milias-Brown Act (MMBA) and requires public agencies to annually present job vacancy data and recruitment efforts to enhance transparency, accountability, and workforce stability. Prior to adoption of the annual budget, agencies must report on vacancy status, identify hiring obstacles, and outline opportunities to improve recruitment processes. For any bargaining unit with vacancy rates at or above 20% of authorized full-time equivalent positions, additional reporting is required, including the total number of applicants, average time to hire, and potential strategies to improve compensation and working conditions to support recruitment and retention.

DISCUSSION

The Board will consider and discuss an informational presentation on workforce data and recruiting efforts for Air District-wide and bargaining units including Technical/General Unit, Professional Unit, and Attorney Management Unit. The presentation will highlight hiring activity, vacancy rate, including positions filled through promotion, key drivers of vacancies such as internal promotions and new positions, and ongoing recruitment efforts to improve hiring efficiency and retention. Discussion will also address strategies to mitigate vacancies, including expanded recruitment outreach, process improvements, and organizational support enhancements in Human Resources. In addition to the presentation by staff, AB 2561 entitles the Employee Association to present at this public hearing.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Clif Brady
Reviewed by: Lisa Baker and Hyacinth Hinojosa

ATTACHMENT(S):

1. Attachment 4.1.2025 to 3.31.2026 Air District AB2561 Vacancy Reporting Data
2. AB 2561 Air District Vacancy and Recruitment Reporting Presentation

Bay Area Air District

June 3, 2026

AB2561 Vacancy and Recruitment Data

Reporting Period:

April 1, 2025, to March 31, 2026

Air District: Vacancy Data

Summary of Vacancies (as of March 31, 2026)

Employee Group	Budgeted FTE*	Filled Positions	Open Positions	Vacancy Rate (Open/Budgeted FTE)
Total	538	468	70	13.01%
Represented: Professional/Technical	414	354	60	14.49%
Attorney Management Unit (AMU)	10	10	0	0%
Management and Confidential	114	104	10	8%

**FTE = Full Time Equivalent*

Air District: Recruitment Data

4/1/2025 to 3/31/2026	REPRESENTED	MGMT & CONF	Total
Total Positions Filled	82	20	102
Filled by Promotion	43	6	49
Recruitments Initiated	51	22	73
Source of Vacancies			
FY25/26 New Authorized FTE	30	8	38
Separations (all inclusive)	23	7	30

Air District: Attrition Data

	Apr '25	May '25	Jun '25	Jul '25	Aug '25	Sep '25	Oct '25	Nov '25	Dec '25	Jan '26	Feb '26	Mar '26	Total
Total # of Separations	2	3	1	5	3	4	4	0	7	1	0	0	30
Retirement	1	3	-	3	2	2	3	-	6	-	-	-	**20**
Resignation	1	-	-	-	1	1	1	-	-	1	-	-	**5**
Involuntary Separation	-	-	1	2	-	1	-	-	1	-	-	-	**5**

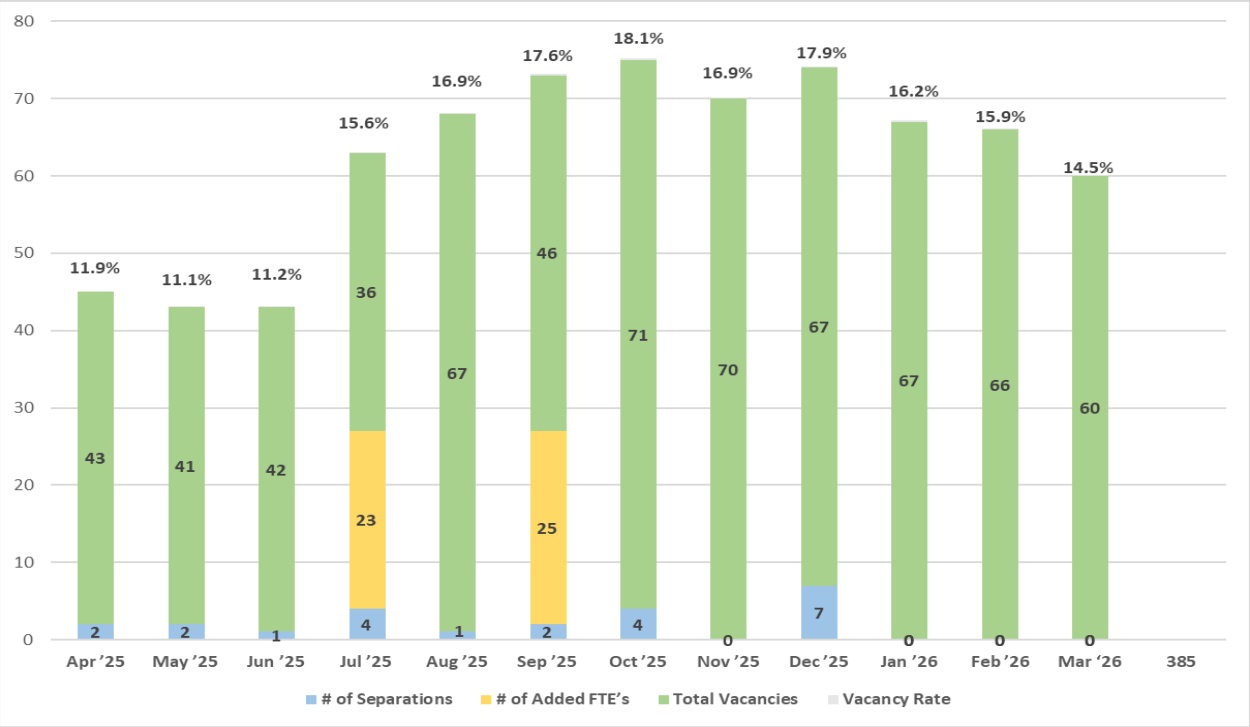
Air District: Workforce Information

	Apr '25	May '25	Jun '25	Jul '25	Aug '25	Sep '25	Oct '25	Nov '25	Dec '25	Jan '26	Feb '26	Mar '26	Total
# of Vacancies	2	3	1	28	3	19	4	0	7	1	0	0	68
# of Separations	2	3	1	5	3	4	4	0	7	1	0	0	30
# of Added FTE's	0	0	0	23	0	15	0	0	0	0	0	0	38
# of Vacancies Filled	11	8	2	7	4	5	5	12	10	16	4	17	102
# of Promotions	8	3	1	5	1	3	0	3	3	8	2	12	49
# of New Hires	3	5	1	2	3	2	5	9	7	8	3	5	53
Total Vacancies	54	51	51	75	78	93	90	82	86	79	76	70	
# of Budgeted FTEs	500	500	500	523	523	538	538	538	538	538	538	538	
Vacancy Rate	10.8%	10.2%	10.2%	14.3%	14.9%	17.3%	16.7%	15.2%	15.9%	14.6%	14.1%	13.0%	

Air District-Wide Trends



Tech./Prof. Unit Workforce Trends



Bay Area Air District

Attorney Mgmt. Workforce Information

	Apr '25	May '25	Jun '25	Jul '25	Aug '25	Sep '25	Oct '25	Nov '25	Dec '25	Jan '26	Feb '26	Mar '26	Total
# of Vacancies Created	0	0	0	0	0	1	0	0	0	0	0	0	1
# of Separations	0	0	0	0	0	0	0	0	0	0	0	0	0
# of Added FTE's	0	0	0	0	0	1	0	0	0	0	0	0	1
# of Vacancies Filled	0	0	0	0	0	0	0	0	0	0	1	0	1
# of Promotions	0	0	0	0	0	0	0	0	0	0	0	0	0
# of New Hires	0	0	0	0	0	0	0	0	0	0	1	0	1
Total Vacancies	0	0	0	0	0	1	1	1	1	1	0	0	
# of Budgeted FTEs	9	9	9	9	9	10	10	10	10	10	10	10	
Vacancy Rate	0%	0%	0%	0%	0%	10%	10%	10%	10%	10%	0%	0%	

Recruitment Trends: Year over Year Comparison

Data as of:	March 31, 2025	March 31, 2026	% Change
Represented			
Recruitments Initiated	43	51	+18.6%
Promotions	26	43	+65%
Total Positions Filled	36	82	+128%
New Authorized FTE	24	30	+25%
Management/Confidential			
Recruitments Initiated	20	22	+10%
Promotions	4	6	+50%
Total Positions Filled	9	20	+122%
New Authorized FTE	4	8	+100%

Bay Area Air District

Assembly Bill 2561 Vacancy Reporting

Board of Directors Meeting

June 3, 2026

Clif Brady, Human Resources Manager
Judy Yu, Human Resources Manager
Human Resources Division

Overview

- Air District-Wide - Workforce Data
- Represented Units - Workforce Data
- Recruitment Information

Air District: Vacancy Data

Summary of Vacancies (as of March 31, 2026)

Employee Group	Budgeted FTE*	Filled Positions	Open Positions	Vacancy Rate (Open/Budgeted FTE)
Total	538	468	70	13.01%
Represented: Professional/Technical	414	354	60	14.49%
Attorney Management Unit (AMU)	10	10	0	0%
Management and Confidential	114	104	10	8%

**FTE = Full Time Equivalent*

Air District: Recruitment Data

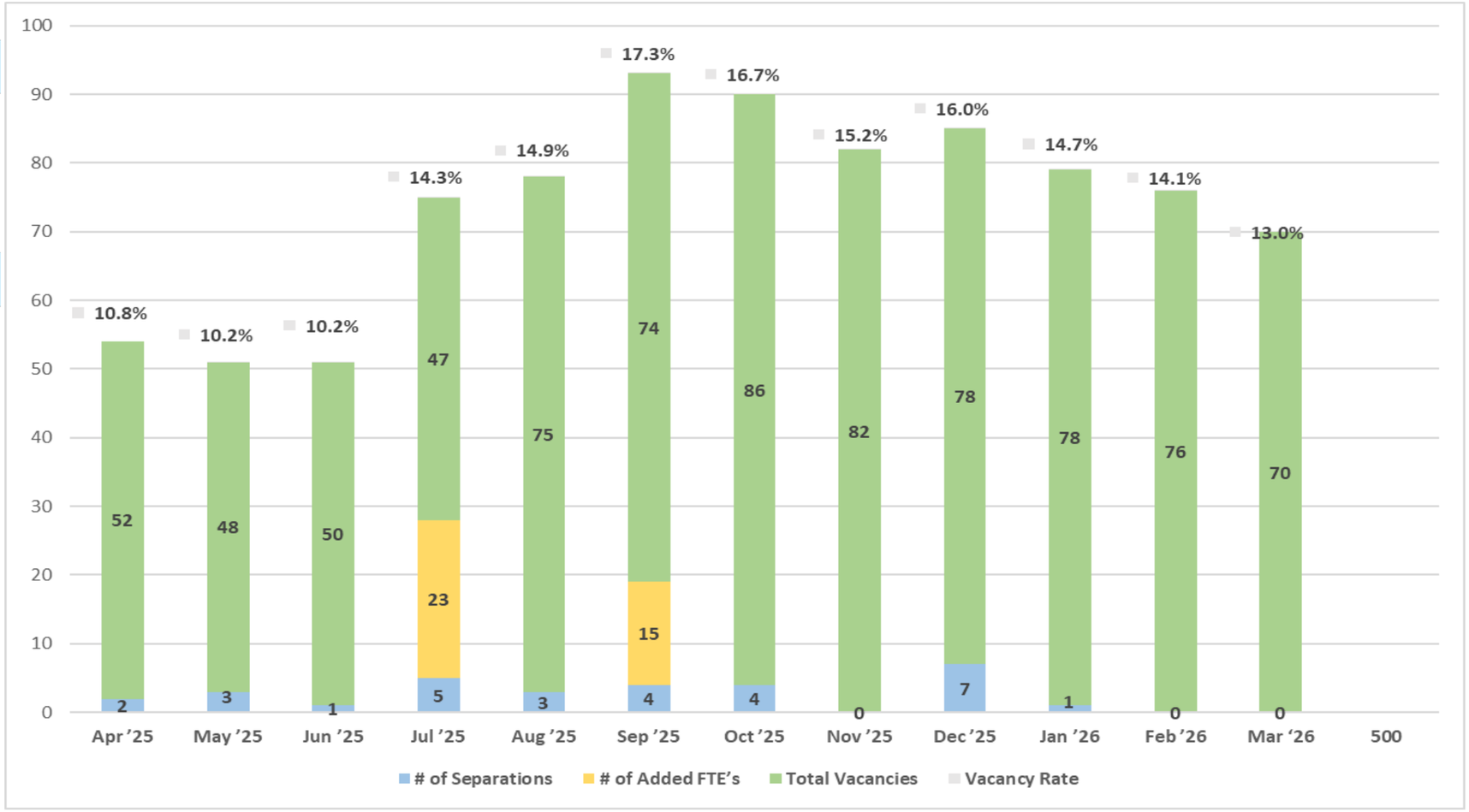
4/1/2025 to 3/31/2026	REPRESENTED	MANAGEMENT & CONFIDENTIAL	Total
Total Positions Filled	82	20	102
Filled by Promotion	43	6	49
Recruitments Initiated	51	22	73
Source of Vacancies			
FY25/26 New Authorized FTE	30	8	38
Separations (all inclusive)	23	7	30

**FY = Fiscal Year*

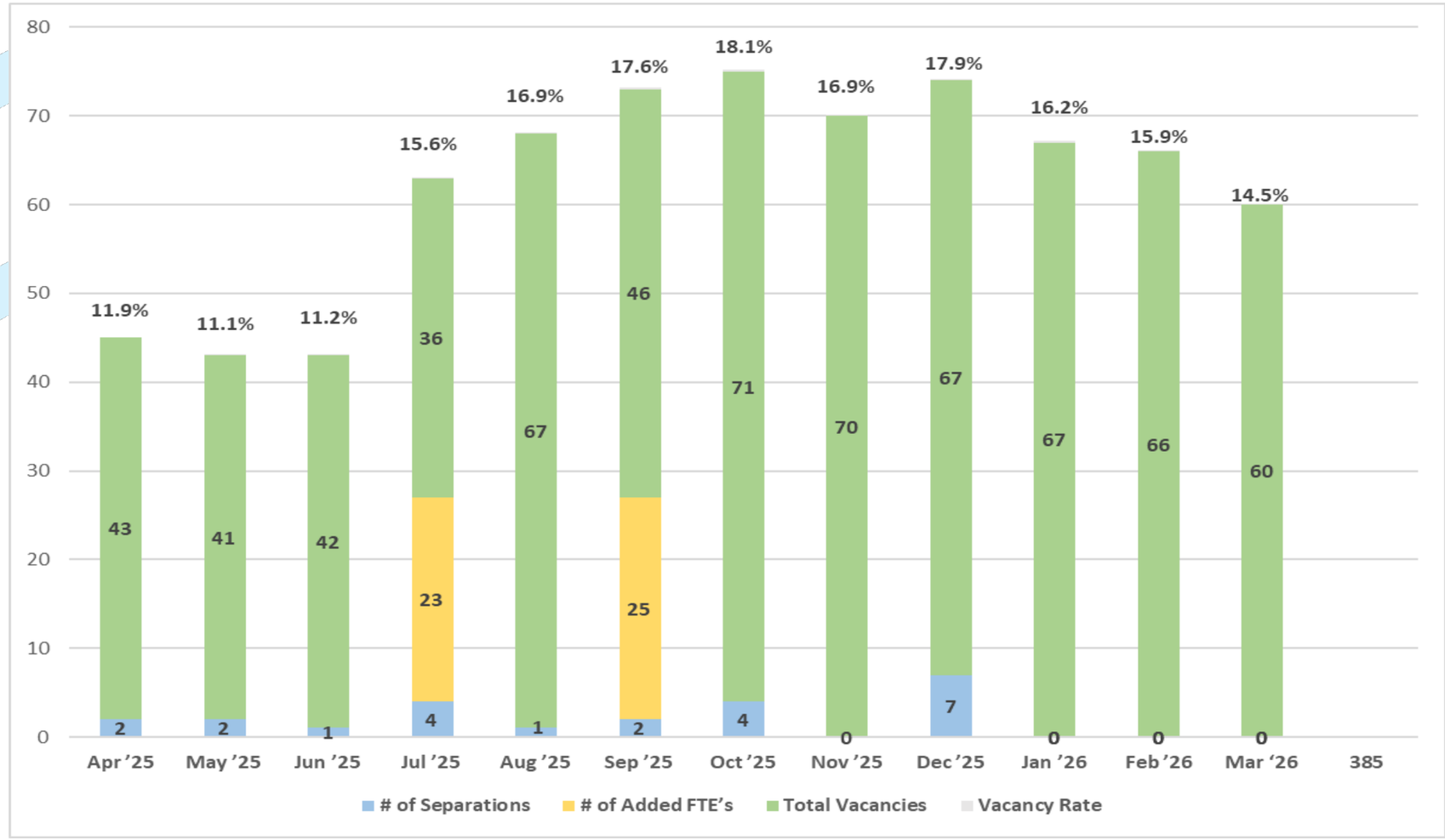
Air District: Attrition Data

	Apr ’25	May ’25	Jun ’25	Jul ’25	Aug ’25	Sep ’25	Oct ’25	Nov ’25	Dec ’25	Jan ’26	Feb ’26	Mar ‘26	Total
Total # of Separations	2	3	1	5	3	4	4	0	7	1	0	0	30
Retirement	1	3	-	3	2	2	3	-	6	-	-	-	**20**
Resignation	1	-	-	-	1	1	1	-	-	1	-	-	**5**
Involuntary Separation	-	-	1	2	-	1	-	-	1	-	-	-	**5**

Air District-Wide Trends



Technical/Professional Unit Workforce Trends



Bay Area Air District

Recruitment Information

Recruitment Process: Represented Staff

MOU Steps	Description
Vacancy	Approved via Budget and/or created by separations/backfill for promotions
Preparation	Recruitment planning meetings and job posting development
Job posting	Advertisement and applications accepted
Minimum Qualifications Review	Human Resources (HR) screens applicants for eligibility; coordinates internal candidate appeals (if applicable)
Screening*	Panel of 3 employees score applications per hiring manager criteria
Panel interview	Panel of 3 employees conduct interviews for 12 top scoring candidates from screening
Hiring interview	Hiring manager interviews top 10 candidates from panel interview
Recommendation	Hiring manager recommends candidate(s); internal approvals obtained
Placement	Conditional job offer; Background and Reference checks completed

**Internal represented candidates automatically proceed to the Hiring Interviews*

FYE 2026 Recruitment Efforts and Successes

- HR realignment to increase recruitment efficiencies
  - 2 HR Analyst positions (1 FTE, 1 Limited Term Contract Employee) added in FY25-26 budget for recruiting support focusing on permitting backlog
- Engineering: 35 engineering positions filled by leveraging single, continuous job posting to fill multiple vacancies
- Increased outreach on recruiting and industry association websites
- Promotions: 49 Air District staff promoted to higher level positions

FYE = Fiscal Year Ending

Recruitment Opportunities

- Backfilling of Promotions
  - Despite a 128% year-over-year increase in represented positions filled, the overall vacancy rate increased only slightly from12.3% to 14.5%
  - Promotions increased significantly year over year, creating additional recruitment demand at lower levels in the classification series

Recruitment Trends: Year over Year Comparison

Data as of:	March 31, 2025	March 31, 2026	% Change
Represented			
Recruitments Initiated	43	51	+18.6%
Promotions	26	43	+65%
Total Positions Filled	36	82	+128%
New Authorized FTE	24	30	+25%
Management/Confidential			
Recruitments Initiated	20	22	+10%
Promotions	4	6	+50%
Total Positions Filled	9	20	+122%
New Authorized FTE	4	8	+100%

Questions & Discussion

For more information:

HR_staff@baaqmd.gov

BAY AREA AIR DISTRICT
Memorandum

To: Chairperson Lynda Hopkins and Members of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: June 3, 2026

Re: Adoption of Proposed Budget for Fiscal Year 2026-2027 and Amendments to Air District Regulation 3: Fees

RECOMMENDED ACTION

1. Adopt the attached Resolution adopting the proposed Fiscal Year 2026-2027 Budget, including proposed staffing recommendations, salary schedule and benefits, and other budget-related actions; and
2. Adopt the attached Resolution amending Air District Regulation 3 (Fees), to become effective on July 1, 2026.

BACKGROUND

Under Section 9.3 of the Air District's Administrative Code, the Executive Officer or their designee is required to present the Fiscal Year (FY) 2026-2027 Proposed Budget to the Finance and Administration Committee at its March meeting to receive direction.

On March 18, 2026, the Finance and Administration Committee took action to recommend the proposed budget to the Board of Directors. On April 29, 2026, the Board of Directors conducted the first of two required public hearings on the proposed budget.

On April 15, 2026, the Finance and Administration Committee took action to recommend the proposed fee amendments to the Board of Directors.

On December 7, 2022, the Board of Directors adopted an updated Cost Recovery and Containment Policy for fee-based activity that established a goal of increasing fee revenue sufficient to achieve 100 percent recovery of regulatory program costs. On December 18, 2024, the Finance and Administration Committee provided direction on the cost recovery strategy for Regulation 3 amendments. Progress towards this target is reported to the Board annually by Air District staff and is periodically reviewed by outside consultants.

The Finance and Administration Committee considered the proposed amendments to Regulation 3 that were prepared consistent with this Cost Recovery and Containment Policy at its April 15, 2026, meeting and took action to recommend the proposed fee amendments to the Board of Directors for adoption. The Board of Directors held the first of two required public hearings on these proposed fee amendments on April 29, 2026.

At today's meeting, the Board of Directors will hold a public hearing to (i) consider adoption of the FY 2026-2027 Proposed Budget and (ii) consider adoption of the proposed amendments to Regulation 3 impacting fee schedules A, B, C, D, E, F, G-1 through G-5, H, I, M, K, P, R, S, V and W, along with other related changes. This will be the second public hearing on both items, consistent with applicable statutory requirements. This item will be presented by Hyacinth Hinojosa, Deputy Executive Officer of Finance & Administration, Stephanie Osaze, Director of Finance, Fred Tanaka, Senior Manager of the Engineering Division and Mark Gage, Principal Air Quality Engineer of the Engineering Division.

DISCUSSION

At least two weeks before adopting a budget, the Board of Directors is required to hold a public hearing for the exclusive purpose of reviewing the proposed budget and providing the public with an opportunity to comment on it. At the April 29, 2026 hearing, Air District staff presented the FY 2026-2027 Proposed Budget for the Board's discussion and consideration and provided an opportunity for public comment.

The FY 2026–2027 Proposed Budget includes $274.2 million from the General Fund and $205.8 million from Special Funds, for a total of $480.1 million, which represents an overall increase of $167.8 million compared to the prior fiscal year. This proposed budget continues to advance key initiatives aligned with the Air District's strategic goals and long-term financial policies. The $274.2 million in the proposed General Fund Budget includes $96 million in penalty assessment in grant distributions for the Bay Reinvestment Penalties for Air Improvement and Resilience (Bay REPAIR) program, leaving $178.2 million in net operating General Fund Budget.

Key recommendations included in the proposed budget are as follows:

- Use of undesignated reserves to:

    a. Support ongoing investment for the Permit Reduction Backlog Plan approved by the Board of Directors in September 2025. This plan adds twenty-nine (29) positions consisting of fourteen (14) Full-Time Equivalent (FTE) positions and fifteen (15) Limited-Term Contract Employees (LTCEs). This temporary investment provides essential staffing capacity until cost-recovery revenues increase sufficiently to sustain these positions on an ongoing basis.
    b. Allocation of $10.4 million for one-time investments to support essential

services and purchase critical capital assets.

- Implementation of fee increases consistent with the Air District's Cost Recovery Policy to maintain sustainable funding for core operations.
- A 2.5% increase in salaries and benefits for Air District employees to help offset the effects of economic inflation.
- An average 10% vacancy rate assumption to account for recruitment timelines and anticipated retirements.
- Continued pre-funding of pension and Other Post-Employment Benefit (OPEB) liabilities in accordance with the Air District's adopted funding policy.
- Maintain reserve levels in line with the Air District's reserve policy to ensure sufficient resources for economic uncertainties and operational cash flow needs.
- Ongoing investments in grant incentive programs and projects serving communities across the nine Bay Area counties.

While the proposed budget does not include any new staffing positions, it does include reclassification of management and confidential positions approved by the Board of Directors in November 2025 based on the recent classification study. It also includes a series of proposed Add/Delete, reclassifications, and transfers of existing positions to better align resources with operational needs. Table 1 summarizes the twenty-six (26) requested position reclassifications (add/delete). The total annual budget impact of these adjustments is $494,019. See Attachment A for additional information.

Division/Office	**Add/Delete Reclassifications**	**Annual Impact**
Assessment Inventory & Monitoring	1	$0
Administrative Resources	2	$86,201
Communications	1	$19,655
Compliance & Enforcement	4	$207,719

Engineering	2	($8,244)
Enterprise Technology Solutions	7	$101,115
Environmental Justice	2	$26,925
Information Services	3	$13,240
Meteorology & Measurements	1	$90,033
Strategic Incentives	1	$90,033
Technology Implementation Office	2	($132,668)
Total	**26**	**$494,019**

The staffing roster of the Air District has been revised to incorporate all staffing recommendations, which are outlined in Appendix F of the FY 2026-2027 Proposed Budget (see Attachment B).

Consistent with the Cost Recovery and Containment Policy, draft amendments to specific fee schedules were made using our authority to better recover costs as allowed by the California Health and Safety Code. Consistent with the Cost Recovery and Containment Policy, draft amendments to specific fee schedules were made in consideration of the 2021 Cost Recovery and Containment Study, the 2026 Cost Recovery Report and Board direction. Analyzing at the fee schedule-level, staff recommends.

- A 2.3% increase (equal to the Consumer Price Index for Bay Area Urban Wage Earners and Clerical Workers (CPIw) for the most recent year) is proposed for Schedule M (Major Stationary Source Fees) and Schedule I: Dry Cleaners (not registered)
- A 3.6% increase is proposed for the following schedule:
    - Schedule G5: Miscellaneous Sources

- An 8.8% increase is proposed for the following schedule:
    - Schedule E: Solvent Evaporating Sources
- A 15% increase is proposed for the following schedules:
    - Schedule A: Hearing Board Fees
    - Schedule F: Miscellaneous Sources
    - Schedule G1: Miscellaneous Sources
    - Schedule G2: Miscellaneous Sources
    - Schedule G3: Miscellaneous Sources
    - Schedule G4: Miscellaneous Sources
    - Schedule H: Semiconductor and Related Operations
    - Schedule K: Solid Waste Disposal Sites
    - Schedule P: Major Facility Review Fees
    - Schedule S: Naturally Occurring Asbestos Operations
    - Schedule V: Open Burning: Open Burning Operation Fee and Stubble Burn Operation Fee only
    - Schedule W: Refining Emissions Tracking Fees
- Fees that are administrative in nature are proposed to be increased by CPIw (2.3%)
- In addition, staff propose:
    - A 20% reduction of fees in Schedule R (Equipment Registration Fees)
    - Specific changes to the risk assessment fees in Schedules B (Combustion of Fuel), C (Stationary Containers for the Storage of Organic Liquids), and D (Gasoline Transfer at Gasoline Dispensing Facilities, Bulk Plants and Terminals)
    - Section 3-304: Add specificity to the existing initial fee requirement for clarity
    - Subsection 311.6: Create a new Emission Reduction Credit Certificate Reissuance Fee
    - Subsection 3-405.1: Revise the language relating to failure to pay invoices for renewal of Authorities to Construct (AC) to indicate that the AC will be cancelled
    - Subsection 3-405.2: Remove late fee provisions in Subsection 3-405.2.1 and 3-405.2.2
    - Subsection 3-405.4.1.2: Remove the 25% reinstatement fee if a Permit Renewal (Permit to Operate) invoice is not paid 30 days from the invoice due date
    - Section 3-405.5: Remove the 25% additional late fee if a Permit Renewal invoice (Registration and Other Fees) is not paid 30 days from the invoice due date
    - Reclassify gasification/pyrolysis sources from Schedule F (General miscellaneous) to Schedule G1
    - General language clean-up

A copy of the changes to Regulation 3 (Fees) is provided in Appendix B of Attachment F, Regulation 3 Staff Report – May 2026. The Board of Directors will consider adopting the attached Resolution making these changes to Regulation 3. These proposed amendments would take effect on July 1, 2026, to coincide with the beginning of the new FY.

BUDGET CONSIDERATION/FINANCIAL IMPACT

The total consolidated FY 2026-2027 proposed budget is $480.1 million, which includes $274.2 million for the General Fund Budget and $205.8 million for the Special Fund Budget.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Stephanie Osaze and Fred Tanaka
Reviewed by: Hyacinth Hinojosa and Kelly Crawford

ATTACHMENT(S):

1. Attachment A FY 2026_2027 Proposed Staffing Justification
2. Attachment B Appendix F FY 2026-2027 Authorized Staffing
3. Attachment C Budget-in-Brief
4. Attachment C1 FY 2026-2027 Proposed Budget
5. Attachment D FY 2026-2027 Proposed Budget Resolution
6. Attachment D1 FY 2026-2027 Salary Schedule
7. Attachment D2 FY 2026-2027 Air District Management and Confidential Benefits Program
8. Attachment E April 29 2026 Proposed Fiscal Year 2026-2027 Budget Presentation
9. Attachment F Regulation 3 Staff Report – May 2026 DRAFT FINAL
10. Attachment F1 SocioeconomicReport_RG0300 - April 2026
11. Attachment G Regulation 3 Fees Draft Board Resolution
12. Attachment H April 29 2026 Proposed Fiscal Year 2026-2027 Fees Presentation
13. Attachment I Path to 2029 - Strategic Plan Report
14. Proposed Fiscal Year 2026-2027 Budget and Fee Presentation 20260603 FINAL

Add/Delete Requests FYE 2026-2027		
AIM Division		
Current Position	**Proposed Position**	**Justification**
Principal Air Quality Engineer	Senior Atmospheric Modeler	Under the Strategic Plan, AIM's focus has shifted to supporting the development of the new Clean Air Plan, with increasing need for both regional and local air quality modeling assessments. Additional modeling expertise is required to meet this need.
Administrative Resources Division		
Current Position	**Proposed Position**	**Justification**
Staff Specialist II	Senior Staff Specialist	This is a reclassification because of a position audit. There is a need for a senior level employee to perform more complex contract work and to implement the compliance of new policies and regulations related to contracts.
Compliance & Enforcement Division		
Current Position	**Proposed Position**	**Justification**
Air Quality Technician I/II	Supervising Air Quality Specialist	This position is needed to provide supervisory oversight to a new EJ Inspection Group, a dedicated group of AQS/Inspectors in the field to conduct compliance inspections in the four AB 617 communities (West Oakland, East Oakland, Richmond/North Richmond and Bayview Hunters Point). The Supervising Air Quality Specialist will ensure comprehensive compliance inspections are prioritized and conducted across the four communities, review compliance and violation reports, provide guidance on enforcement cases, and work closely with the Legal and Engineering Divisions to expedite resolutions.
Assistant Air Quality Specialist I/II	Supervising Air Quality Specialist	Supervising Air Quality Specialist will be focusing on data review and analyses for determining inspection prioritization, developing new tools and enhancements to current data systems and integrating new business processes, guidance and training materials for the program. Implementing the Targeted Inspection Program requires a supervisory level position with a strong understanding of the scope of enforcement activities across the division, technical skillset utilizing different tools to track, monitor and pinpoint compliance problems and trends (e.g., Microsoft Excel, Power BI,

		etc.), strengths in verbal and written communication for the purposes of creating training and public outreach materials, collaborating with staff across divisions, and presenting program and compliance updates to impacted communities and the general public.
Manager II	Senior Manager	The proposed changes were based on the findings and recommendations of a comprehensive review of classification structure at the Air District. The board memo stated that the effort stems from the 2023 Human Resources Audit aimed at modernizing classification standards and aligning roles with operational needs.
Manager II	Senior Manager	The proposed changes were based on the findings and recommendations of a comprehensive review of classification structure at the Air District. The board memo stated that the effort stems from the 2023 Human Resources Audit aimed at modernizing classification standards and aligning roles with operational needs.
Engineering Division		
Current Position	**Proposed Position**	**Justification**
Air Quality Specialist I/II	Air Quality Engineer I/II	After reviewing the staffing levels, an Air Quality Engineer is the greater need and fit for the current work. The section has been recently tasked to lead initiatives to improve permitting consistency external communication with various audiences while continuing work to develop system functionality, maintain the database, support the division staff, lead rule development and improve online system adoption. This work requires more engineer resources to understand industry principles and emissions.
Air Quality Specialist I/II	Senior Air Quality Technician	This position is proposed to be reclassified from an air quality specialist to senior air quality technician to align the classification more appropriately with the current responsibilities and programmatic functions
Enterprise Technology Solutions		
Current Position	**Proposed Position**	**Justification**
(3) System Analyst (FTE)	(3) Senior System Analyst (FTE)	Enterprise Data Architect. These 3 roles will be responsible for all database architecture and maintenance at the Air District. An Enterprise Data Architect, responsible for developing all data architectures, standards, policies, and procedures requires the background and experience commensurate with a senior and possible principal level analyst

(2) System Analyst (LTCE)	(2) Senior System Analyst (LTCE)	This role is responsible for advanced technical leadership with outside vendors on significant projects. The level of technical leadership would be commensurate with a senior classification.
Manager I	Manager II	This role directs all in-house software development for the agency, including enterprise architecture, system resiliency, cybersecurity integration, business process analysis, and quality assurance. It carries agency-wide impact and significant independent decision-making authority. The position also manages multiple senior direct reports, substantial annual program budgets and oversees large technology contracts. The scope, fiscal responsibility, and strategic leadership responsibilities are consistent with a Manager II classification rather than Manager I.
Manager I (LTCE)	Manager II (LTCE)	This role is responsible for agency-wide portfolio management and enterprise technology project governance, establishing standards and oversight across all major initiatives. It provides strategic guidance to all project managers agency-wide, influencing prioritization, resource allocation, and execution. The scope, authority, and cross-divisional impact are consistent with a Manager II classification.
Environmental Justice		
Current Position	**Proposed Position**	**Justification**
Staff Specialist I/II	Senior Staff Specialist	The responsibilities and workload within the Environmental Justice Division have significantly increased due to expanding community engagement needs, new program requirements, and growing coordination with internal divisions and external partners. The current Staff Specialist role no longer reflects the level of complexity, decision-making, or leadership required to manage these functions effectively.
Senior Air Quality Engineer	Senior Staff Specialist	This position is proposed to be reclassified from an engineer to staff specialist to align the classification more appropriately with the current responsibilities and programmatic functions.
Information Services		
Current Position	**Proposed Position**	**Justification**
Manager I	Manager II	This role serves as the agency's Information and Cybersecurity Officer, with enterprise-wide responsibility for cybersecurity strategy, policy development, regulatory compliance, audits, and risk management. The

		position establishes and enforces security standards, oversees incident response and threat mitigation, and advises executive leadership on organizational risk posture. The scope of authority, regulatory accountability, and agency-wide impact are consistent with a Manager II classification.
Meteorology & Measurements		
Current Position	**Proposed Position**	**Justification**
Assistant Air Quality Specialist I/II	Principal Air Quality Specialist	A Principal Air Quality Specialist (PAQS) is essential because the transfer of a Principal Air and Meteorological Measurements Specialist from AAQA to AMO to improve operational efficiency and fulfill a Strategic Plan commitment leaves certain core responsibilities and Strategic Plan commitments in AAQA without staff resources.
Strategic Incentives		
Current Position	**Proposed Position**	**Justification**
Assistant Staff Specialist I/II	Supervising Staff Specialist	There has been a shift in complexity of work toward more program-development and higher-level program administration work that can only be accomplished by senior staff, including supervisors. Currently, we have an immediate need for staff supervision and program oversight in the Port, Freight, and Marine (PFM) section as that team works to meet its needs around administration of both the VW Mitigation Trust statewide program for Zero-Emission Freight and Marine, and at the same time works locally to engage port tenants in electrifying polluting equipment at the Ports nearest to AB 617 communities.
Technology Implementation Office		
Current Position	**Proposed Position**	**Justification**
Staff Specialist I/II	Supervising Staff Specialist	This position will add a layer of oversight into TIO operations, build programmatic resiliency, increase the quality of work, strengthen our ability to train and develop staff, allow the Manager to focus on higher-level functions, and help ensure we continue to meet the standards expected of programs administering public funding.

Communication		
Current Position	**Proposed Position**	**Justification**
Public Information Officer II	Senior Public Information Officer	This new Senior Public Information Officer position is essential to meet growing workload demands, staff retention, communications program continuity and creates a path for staff to gain leadership experience. This position would be responsible for developing and overseeing new and/or existing programs, projects, and tasks, along with providing support to our management team in administrative processes.
Information Services Transfer to Enterprise Technology Solutions		
Current Position	**Proposed Position**	**Justification**
System Analyst (LTCE)	Senior System Analyst (LTCE)	This role is responsible for advanced technical leadership with outside vendors on significant projects. The level of technical leadership would be commensurate with a senior classification.
Planning & Climate Protection Transfer to Administrative Resources		
Current Position	**Proposed Position**	**Justification**
Senior Environmental Planner (LTCE)	Manager II (LTCE)	The LTCE Manager II will provide direct oversight for the Fleet and Facilities units and lead to major initiatives related to these functions. This added capacity will allow the existing Manager to concentrate on Procurement and the Business Office, including accelerating the new procurement system rollout and improving agency-wide administrative processes.

Position Transfer Requests FYE2026-2027	
Engineering to Enterprise Technology Solutions:	
Current Department	**Proposed Department**
Engineering – Supervising Systems Analyst	Enterprise Technology Solutions – Supervising Systems Analyst
Engineering – Manager I	Enterprise Technology Solutions – Manager I
Enterprise Technology Solutions to Information Services:	
Current Department	**Proposed Department**
Enterprise Technology Solutions – Systems Analyst	Information Services – Systems Analyst
Enterprise Technology Solutions – Manager I	Information Services – Manager I
Enterprise Technology Solutions – Assistant Staff Specialist I	Information Services – Assistant Staff Specialist I
Enterprise Technology Solutions – Systems Analyst	Information Services – Systems Analyst
Information Services to Enterprise Technology Solutions:	
Current Department	**Proposed Department**
Information Services – Supervising Staff Specialist	Enterprise Technology Solutions – Supervising Staff Specialist
Information Services – Systems Analyst	Enterprise Technology Solutions – Systems Analyst
Information Services – Systems Analyst	Enterprise Technology Solutions - Systems Analyst
Information Services – Systems Analyst	Enterprise Technology Solutions – Systems Analyst
Environmental Justice to Civil Rights:	
Current Department	**Proposed Department**
Environmental Justice – Staff Specialist I/II (LTCE)	Civil Rights - Staff Specialist I/II (LTCE)
Environmental Justice – Senior Staff Specialist	Civil Rights - Senior Staff Specialist
Finance to Regulatory Development:	
Current Department	**Proposed Department**
Finance – Senior Advanced Project Advisor	Regulatory Development – Senior Advanced Project Advisor
Planning & Climate Protection to Executive Office:	
Current Department	**Proposed Department**
Planning & Climate Protection – Senior Environmental Planner (LTCE)	Administrative Resources - Manager II (LTCE)

Planning & Climate Protection – Principal Environmental Planner	Executive Office - Principal Environmental Planner
Information Services to Science Services Area:	
Current Department	**Proposed Department**
Information Services – Deputy Air Pollution Control Officer	Science Services Area - Assistant Deputy Executive Officer (Reclassification)
Science Services Area to Information Services:	
Current Department	**Proposed Department**
Science Services Area – Public Health Officer	Information Services - Director

Approved Reclassification FYE2026-2027	
Administrative Resources:	
Current Position	**New Position**
Director/Officer	Director
Manager	Manager II
Assessment, Inventory & Modeling:	
Current Position	**New Position**
Director/Officer	Director
Director/Officer	Officer
(2) Manager	(2) Manager II
Civil Rights Office:	
Current Position	**New Position**
Director/Officer	Officer
Communication:	
Current Position	**New Position**
Director/Officer	Director
(2) Manager	(2) Manager II

Community Investments:	
Current Position	**New Position**
Director/Officer	Officer
Manager	Manager II
Compliance & Enforcement:	
Current Position	**New Position**
Director/Officer	Director
(5) Manager	(5) Manager II
Diversity, Equity & Inclusion:	
Current Position	**New Position**
Director/Officer	Officer
Engineering:	
Current Position	**New Position**
Director/Officer	Director
(2) Manager	(2) Senior Manager
(3) Manager	(3) Manager II
(2) Manager	(2) Manager I
Enterprise Technology Solutions:	
Current Position	**New Position**
Director/Officer	Director
Manager	Manager I
(4) Assistant Manager	(4) Manager I
Environmental Justice:	
Current Position	**New Position**
Director/Officer	Director
(3) Manager	(3) Manager II
Assistant Manager	Manager I
Senior Policy Advisor	Manager I

Executive:	
Current Position	**New Position**
(2) Manager	(2) Manager II
External Affairs:	
Current Position	**New Position**
Director/Officer	Officer
Manager	Manager I
Finance:	
Current Position	**New Position**
Director/Officer	Director
(3) Manager	(3) Manager II
Human Resources Analyst II	Analyst II
Senior Payroll Analyst	Senior Analyst
Human Resources:	
Current Position	**New Position**
Director/Officer	Director
(2) Manager	(2) Manager II
(3) Human Resources Analyst II	(3) Analyst II
(3) Senior Human Resources Analyst	(3) Senior Analyst
(2) Principal Human Resources Analyst	(2) Principal Analyst
Human Resources Analyst II (LTCE)	Analyst II (LTCE)
Senior Human Resources Analyst	Senior Analyst (LTCE)
Human Resources Technician II	Technician
Information Services:	
Current Position	**New Position**
(2) Manager	(2) Manager II
Manager	Manager I

Legal:	
Current Position	**New Position**
Legel Office Services Specialist	Executive Assistant I
Legislative:	
Current Position	**New Position**
Director/Officer	Officer
Meteorology & Measurement:	
Current Position	**New Position**
Director/Officer	Director
(5) Manager	(5) Manager II
Assistant Manager	Manager II
Planning & Climate Protection:	
Current Position	**New Position**
Director/Officer	Director
(3) Manager	(3) Manager II
(1) Assistant Manager	Manager II
Regulatory Development:	
Current Position	**New Position**
Director/Officer	Director
(2) Manager	(2) Manager II
Assistant Manager	Manager II
Source Test	
Current Position	**New Position**
Manager II	Senior Manager
Strategic Incentives:	
Current Position	**New Position**

Director/Officer	Director
(4) Manager	(4) Manager II
Technology Implementation Office:	
Current Position	**New Position**
Director/Officer	Director
Manager	Manager II

APPENDIX F Table 1 - Fiscal Year 2027 Full Time Equivalent (FTE)

The positions listed in Table 1, below, constitute the entirety of authorized permanent full-time positions and Division assignments at the designated classifications presented in the "FYE 26 Mid-Yr APPROVED" column. The "FYE 27 PROPOSED" column represents proposed changes to the designated classifications and/or Division assignments, if any, which is reflected in the "DIFF" column. The total proposed staffing for FYE 2027 is 538 FTEs.

Service Area / Division	Position Classification	Salary Range ID	FYE 26 APPROVED	FYE 26 Mid-Yr APPROVED	FYE 27 PROPOSED	DIFF
Engineering & Compliance Service Area						
	Deputy Executive Officer	169	1	1	1	
Compliance & Enforcement						
	Administrative Assistant I/II	114/118	2	2	2	
	Air Quality Specialist I/II	130/134	49	49	49	
Add/Del	Air Quality Technician I/II	122/126	6	6	5	**-1**
Add/Del	Assistant Air Quality Specialist I/II	122/126	1	1		**-1**
Reclassification	Director/Officer	156	1	1		**-1**
Reclassification	Director	156			1	**1**
Reclassification/Add/Del	Manager II	148	5	5	3	**-2**
	Principal Air Quality Engineer	144	1	1	1	
	Principal Air Quality Specialist	142	2	2	2	
	Radio/Telephone Operator	113	4	4	4	
	Senior Advanced Projects Advisor	148	1	1	1	
	Senior Air Quality Engineer	140	2	2	2	
	Senior Air Quality Specialist	138	13	13	13	
	Senior Air Quality Technician	130	2	2	2	
Add/Del	Senior Manager	152			2	**2**
Add/Del	Supervising Air Quality Specialist	142	10	10	12	**2**
Compliance & Enforcement Total			99	99	99	
Engineering						
	Administrative Assistant I/II	114/118	4	4	4	
Add/Del	Air Quality Engineer I/II	132/136	21	23	24	**1**
Add/Del	Air Quality Permit Technician I/II	122/126	2	2	1	**-1**
Add/Del	Air Quality Specialist I/II	130/134	4	9	7	**-2**
Add/Del	Air Quality Technician I/II	122/126	5	4	5	**1**
Reclassification/Transfer	Assistant Manager	147	1	1		**-1**
Reclassification	Director/Officer	156	1	1		**-1**
Reclassification	Director	156			1	**1**
Reclassification	Manager I	146		1	1	
Reclassification	Manager II	148	5	3	3	
	Principal Air Quality Engineer	144	6	7	7	
	Senior Advanced Projects Advisor	148	1	1	1	
	Senior Air Quality Engineer	140	14	15	15	
	Senior Air Quality Specialist	138		1	1	
Add/Del	Senior Air Quality Technician	130	1		1	**1**
	Supervising Air Quality Engineer	144	12	13	13	
	Supervising Air Quality Specialist	142	1	1	1	
	Senior Manager	152		2	2	
Transfer	Supervising Systems Analyst	139	1	1		**-1**
	Toxicologist	144	1	1	1	
Engineering Total			80	90	88	**-2**
Source Test						
	Air Quality Engineer I/II	132/136	3	3	3	
	Air Quality Specialist I/II	130/134	4	4	4	
	Assistant Staff Specialist I/II	122/126	1	1	1	
Reclassification	Manager II	148	1	1		**-1**
	Principal Air Quality Engineer	144	1	1	1	
	Principal Air Quality Specialist	142	1	1	1	
	Senior Air Quality Engineer	140	2	2	2	
	Senior Air Quality Specialist	138	1	1	1	
	Supervising Air Quality Engineer	144	1	1	1	
	Supervising Air Quality Specialist	142	1	1	1	
Reclassification	Senior Manager	152			1	**1**
Source Test Total			16	16	16	
Engineering & Compliance Service Area Total			**196**	**206**	**204**	**-2**

APPENDIX F Table 1 - Fiscal Year 2027 Full Time Equivalent (FTE)

Service Area / Division		Position Classification	Salary Range ID	FYE 26 APPROVED	FYE 26 Mid-Yr APPROVED	FYE 27 PROPOSED	DIFF
Equity & Community Programs Service Area							
		Deputy Executive Officer	169	1	1	1	
Civil Rights							
	Reclassification	Director/Officer	156	1	1		**-1**
	Reclassification	Officer	156			1	**1**
	Transfer	Senior Staff Specialist	138			1	**1**
		Staff Specialist I/II	130/134	1	1	1	
Civil Rights Total				2	2	3	**1**
Community Investments							
		Assistant Staff Specialist I/II	122/126	1	1	1	
	Reclassification	Director/Officer	156	1	1		**-1**
	Reclassification	Officer	156			1	**1**
		Manager II	148	1	1	1	
		Staff Specialist I/II	130/134	1	1	1	
		Supervising Staff Specialist	142	1	1	1	
Community Investments Total				5	5	5	
Environmental Justice							
		Administrative Assistant I/II	114/118	1	1	1	
	Reclassification	Assistant Manager	147	1	1		**-1**
		Assistant Staff Specialist I/II	122/126	1	1	1	
	Reclassification	Director/Officer	156	1	1		**-1**
	Reclassification	Director	156			1	**1**
	Reclassification	Manager I	146			1	**1**
	Reclassification	Manager II	148	3	3	3	
		Public Information Officer II	130/134	1	1	1	
		Senior Advanced Projects Advisor	148	1	1	1	
	Add/Del	Senior Air Quality Engineer	140	1	1		**-1**
		Senior Policy Advisor	148	1	1	1	
	Add/Del/Transfer	Senior Staff Specialist	138	7	7	8	**1**
	Add/Del	Staff Specialist I/II	130/134	6	6	5	**-1**
Environmental Justice Total				24	24	23	**-1**
Diversity, Equity & Inclusion							
	Reclassification	Director/Officer	156	1	1		**-1**
	Reclassification	Officer	156			1	**1**
		Senior Staff Specialist	138	1	1	1	
		Staff Specialist I/II	130/134	1	1	1	
		Supervising Staff Specialist	142	1	1	1	
Diversity, Equity & Inclusion Total				4	4	4	
Strategic Incentives							
		Administrative Assistant I/II	114/118	1	1	1	
	Add/Del	Assistant Staff Specialist I/II	122/126	7	7	6	**-1**
	Reclassification	Director/Officer	156	1	1		**-1**
	Reclassification	Director	156			1	**1**
	Reclassification	Manager II	148	4	4	4	
		Principal Staff Specialist	142	1	1	1	
		Senior Staff Specialist	138	6	6	6	
		Staff Specialist I/II	130/134	10	10	10	
	Add/Del	Supervising Staff Specialist	142	5	5	6	**1**
Strategic Incentives Total				35	35	35	
Technology Implementation							
		Assistant Staff Specialist I/II	122/126	2	2	2	
	Reclassification	Director/Officer	156	1	1		**-1**
	Reclassification	Director	156			1	**1**
	Reclassification	Manager II	148	1	1	1	
		Senior Staff Specialist	138	2	2	2	
	Add/Del	Staff Specialist I/II	130/134	4	4	3	**-1**
	Add/Del	Supervising Staff Specialist	142	1	1	2	**1**
Technology Implementation Total				11	11	11	
Equity & Community Programs Service Area Total				**82**	**82**	**82**	

APPENDIX F Table 1 - Fiscal Year 2027 Full Time Equivalent (FTE)

Service Area / Division		Position Classification	Salary Range ID	FYE 26 APPROVED	FYE 26 Mid-Yr APPROVED	FYE 27 PROPOSED	DIFF
Finance & Administration Service Area							
		Deputy Executive Officer	169	1	1	1	
Administrative Resources							
	Reclassification	Director/Officer	156	1	1		**-1**
	Reclassification	Director	156			1	**1**
		Facilities Maintenance Worker	108	1	1	1	
	Reclassification	Manager II	148	1	1	1	
		Senior Executive Assistant	134	1	1	1	
	Add/Del	Senior Staff Specialist	138	1	1	2	**1**
	Add/Del	Staff Specialist I/II	130/134	9	9	8	**-1**
		Supervising Staff Specialist	142	2	2	2	
	Administrative Resources Total			16	16	16	
Executive							
		Administrative Assistant I/II	114/118	1	1	1	
		Clerk of the Boards	132	1	1	1	
		Deputy Air Pollution Control Officer	160	1			
		Executive Assistant I/II	128/132	3	4	4	
		Executive Officer/Air Pollution Control Officer	Contract	1	1	1	
		Manager II	148	2	2	2	
		Principal Deputy Executive Officer/COO	173		1	1	
	Transfer	Principal Environmental Planner	142			1	**1**
		Senior Executive Assistant	134	3	3	3	
	Executive Total			12	13	14	**1**
Finance							
		Accountant I/II	130/134	4	4	4	
		Accounting Assistant I/II	122/126	4	4	4	
	Reclassification	Analyst II	134			1	**1**
	Reclassification	Director/Officer	156	1	1		**-1**
	Reclassification	Director	156			1	**1**
		Fiscal Services Supervisor	142	1	1	1	
	Reclassification	Human Resources Analyst I/II	130/134	1	1		**-1**
	Reclassification	Manager II	148	3	3	3	
		Senior Accountant	138	1	1	1	
	Transfer	Senior Advanced Projects Advisor	148	1	1		**-1**
	Reclassification	Senior Payroll Analyst	138	1	1		**-1**
	Reclassification	Senior Analyst	138			1	**1**
		Senior Staff Specialist	138	1	1	1	
		Staff Specialist I/II	130/134	1	1	1	
	Finance Total			19	19	18	**-1**
Human Resources							
	Reclassification	Analyst II	134			3	**3**
	Reclassification	Director/Officer	156	1	1		**-1**
	Reclassification	Director	156			1	**1**
	Reclassification	Human Resources Analyst I/II to Analyst I/II	130/134	3	3		**-3**
		Human Resources Technician	122/126	1	1		**-1**
		Manager II	148	2	2	2	
	Reclassification	Principal Human Resources Analyst	142	2	2		**-2**
	Reclassification	Principal Analyst	142			2	**2**
	Reclassification	Technician	122/126			1	**1**
	Reclassification	Senior Human Resources Analyst	138	3	3		**-3**
	Reclassification	Senior Analyst	138			3	**3**
	Human Resources Total			12	12	12	
Finance & Administration Service Area Total				**60**	**61**	**61**	

APPENDIX F Table 1 - Fiscal Year 2027 Full Time Equivalent (FTE)

Service Area / Division	Position Classification	Salary Range ID	FYE 26 APPROVED	FYE 26 Mid-Yr APPROVED	FYE 27 PROPOSED	DIFF
Information Management Service Area						
	Deputy Executive Officer	169	1	1	1	
Transfer/reclassification	Deputy Air Pollution Control Officer	160	1	1		**-1**
Enterprise Technology Solutions						
Reclassification	Assistant Manager	147	4	4		**-4**
Transfer	Assistant Staff Specialist I/II	122/126	1	1		**-1**
Reclassification	Director/Officer	156	1	1		**-1**
Reclassification	Director	156			1	**1**
Reclassification/Add/Del	Manager I	146	1	1	4	**3**
Reclassification/Add/Del	Manager II	148			1	**1**
Pending reclassification	Principal Analyst	142		1	1	
Pending Reclassification/Add/Del	Senior Systems Analyst	139		3	4	**1**
Transfer	Supervising Staff Specialist	142			1	**1**
Pending Reclass/Transfer/Add/Del	Supervising Systems Analyst	143	1	1	2	**1**
Reclassification/Transfer/Add/Del	Systems Analyst	135	4	3	2	**-1**
	Web Master	135	1	1	1	
Enterprise Technology Solutions Total			13	16	17	**1**
Information Services						
	Air Quality Specialist I/II	130/134	1	1	1	
Transfer	Assistant Staff Specialist I/II	122/126			1	**1**
	Assistant Air Quality Specialist I/II	122/126	1	1	1	
Transfer/Add/Del	Director	156			1	**1**
Reclassification/Transfer	Manager I	146			1	**1**
Reclassification	Manager II	148	3	3	3	
	Principal Cybersecurity Analyst	142	1	1	1	
	Programmer Analyst I/II	127/131	1	1	1	
Transfer	Supervising Staff Specialist	142	1	1		**-1**
Pending Reclassification	Supervising Systems Analyst	143	2	2	2	
Pending Reclassification/Add/Del	Senior Systems Analyst	139			2	**2**
Reclassification/Transfer/Add/Del	Systems Analyst	135	4	4	2	**-2**
Information Services Total			14	14	16	**2**
Information Management Service Area Total			**29**	**32**	**34**	**2**
General Counsel Service Area						
Legal						
	Assistant Counsel I/II	149/153	10	10	10	
Reclassification	Executive Assistant I/II	128/132			1	**1**
	General Counsel	Contract	1	1	1	
Reclassification	Legal Office Services Specialist	124	1	1		**-1**
	Senior Assistant Counsel	157	2	2	2	
	Staff Attorney	145	1	1	1	
	Staff Specialist I/II	130/134	4	4	4	
Legal Total			19	19	19	
General Counsel Service Area Total			**19**	**19**	**19**	

APPENDIX F Table 1 - Fiscal Year 2027 Full Time Equivalent (FTE)

Service Area / Division		Position Classification	Salary Range ID	FYE 26 APPROVED	FYE 26 Mid-Yr APPROVED	FYE 27 PROPOSED	DIFF
Public Affairs Service Area							
		Deputy Executive Officer	169	1	1	1	
Communications							
		Assistant Staff Specialist I/II	122/126	2	2	2	
	Reclassification	Director/Officer	156	1	1		**-1**
	Reclassification	Director	156			1	**1**
	Reclassification	Manager II	148	2	2	2	
	Add/Del	Public Information Officer I/II	130/134	7	7	6	**-1**
	Add/Del	Senior Public Information Officer	138	1	1	2	**1**
Communications Total				13	13	13	
External Affairs							
		Assistant Staff Specialist I/II	122/126	1	1	1	
	Reclassification	Director/Officer	156	1	1		**-1**
	Reclassification	Officer	156			1	**1**
	Reclassification	Manager II	148	1	1		**-1**
	Reclassification	Manager I	146			1	**1**
		Staff Specialist I/II	130/134	2	2	2	
External Affairs Total				5	5	5	
Legislative and Government Affairs							
	Reclassification	Director/Officer	156	1	1		**-1**
	Reclassification	Officer	156			1	**1**
		Staff Specialist I/II	130/134	1	1	1	
Legislative and Government Affairs Total				2	2	2	
Public Affairs Service Area Total				**21**	**21**	**21**	
Policy Service Area							
		Deputy Executive Officer	169	1	1	1	
Planning & Climate Protection							
		Advanced Projects Advisor	144	1	1	1	
	Reclassification	Assistant Manager	147	1	1		**-1**
		Assistant Staff Specialist I/II	122/126	1	1	1	
	Reclassification	Director/Officer	156	1	1		**-1**
	Reclassification	Director	156			1	**1**
		Environmental Planner I/II	130/134	3	3	3	
	Reclassification	Manager II	148	3	3	4	**1**
	Transfer	Principal Environmental Planner	142	4	4	3	**-1**
		Senior Advanced Projects Advisor	148	1	1	1	
		Senior Air Quality Engineer	140	1	1	1	
		Senior Air Quality Specialist	138	1	1	1	
		Senior Environmental Planner	138	5	5	5	
Planning & Climate Protection Total				22	22	21	**-1**
Regulatory Development							
	Reclassification	Assistant Manager	147	1	1		**-1**
	Reclassification	Director/Officer	156	1	1		**-1**
	Reclassification	Director	156			1	**1**
	Reclassification	Manager II	148	2	2	3	**1**
		Principal Air Quality Engineer	144	1	1	1	
		Principal Air Quality Specialist	142	1	1	1	
	Transfer	Senior Advanced Projects Advisor	148			1	**1**
		Senior Air Quality Engineer	140	3	3	3	
		Senior Air Quality Specialist	138	5	5	5	
		Staff Specialist I/II	130/134	1	1	1	
Regulatory Development Total				15	15	16	**1**
Policy Service Area Total				**38**	**38**	**38**	

APPENDIX F Table 1 - Fiscal Year 2027 Full Time Equivalent (FTE)

Service Area / Division	Position Classification	Salary Range ID	FYE 26 APPROVED	FYE 26 Mid-Yr APPROVED	FYE 27 PROPOSED	DIFF
Science Service Area						
	Deputy Executive Officer	169		1	1	
Transfer/reclassification	Assistant Deputy Executive Officer	160			1	**1**
Assessment, Inventory & Modeling						
	Advanced Projects Advisor	144	1	1	1	
	Air Quality Engineer I/II	132/136	2	2	2	
	Air Quality Meteorologist I/II	131/135	1	1	1	
	Atmospheric Modeler	140	1	1	1	
Reclassification/Transfer	Director/Officer	156	2	2		**-2**
Reclassification	Director	156			1	**1**
	Manager II	148	2	2	2	
Add/Del	Principal Air Quality Engineer	144	3	3	2	**-1**
	Research Analyst	130	1	1	1	
	Senior Advanced Projects Advisor	148	2	2	2	
	Senior Air Quality Engineer	140	2	2	2	
Add/Del	Senior Atmospheric Modeler	144	1	1	2	**1**
	Statistician	137	1	1	1	
Assessment, Inventory & Modeling Total			19	19	18	**-1**
Meteorology & Measurement						
	Advanced Projects Advisor	144	1	1	1	
	Air Quality Chemist I/II	130/134	1	1	1	
	Air Quality Laboratory Technician I/II	122/126	1	1	1	
	Air Quality Meteorologist I/II	131/135	2	2	2	
	Air Quality Specialist I/II	130/134	11	11	11	
Add/Del	Assistant Air Quality Specialist I/II	122/126	4	4	3	**-1**
Reclassification	Assistant Manager	147	1	1		**-1**
Add/Del	Assistant Staff Specialist I/II	122/126	2	2	2	
Reclassification	Director/Officer	156	1	1		**-1**
Reclassification	Director	156			1	**1**
Reclassification	Manager II	148	5	5	6	**1**
	Principal Air and Meteorological Monitoring Spe	143	1	1	1	
	Principal Air Quality Chemist	142	3	3	3	
	Principal Air Quality Meteorologist	143	1	1	1	
Add/Del	Principal Air Quality Specialist	142	6	6	7	**1**
	Senior Air Quality Chemist	138	1	1	1	
	Senior Air Quality Specialist	138	11	11	11	
	Staff Specialist I/II	130/134	1	1	1	
	Supervising Air Quality Specialist	142	4	4	4	
	Systems Analyst	135	2	2	2	
Meteorology & Measurement Total			59	59	59	
Science Service Area Total			**78**	**79**	**79**	
Grand Total			**523**	**538**	**538**	

APPENDIX F Table 2 - Fiscal Year 2027 Limited Term Contract Employee (LTCE)

The positions listed in Table 2, below, constitute the entirety of limited term contract employee positions and Division assignments at the designated classifications presented in the "FYE 26 Mid-Yr APPROVED" column. The "FYE 27 PROPOSED" column represents proposed changes to the designated classifications and/or Division assignments, if any, which is reflected in the "DIFF" column. The total proposed staffing for FYE 2027 is 36 LTCEs.

Service Area / Division		Position Classification	Salary Range ID	FYE 26 APPROVED	FYE 26 Mid-Yr APPROVED	FYE 27 PROPOSED	DIFF
Engineering & Compliance Service Area							
Engineering							
		Air Quality Technician I/II	122/126		2	2	
		Air Quality Engineer I/II	132/136		8	8	
		Manager II	148	2	3	3	
		Supervising Air Quality Engineer	144		1	1	
Engineering Total				**2**	**14**	**14**	
Engineering & Compliance Service Area Total				**2**	**14**	**14**	
Equity & Community Service Area							
Community Investment Office							
		Senior Staff Specialist	138	1	1	1	
		Senior Staff Specialist	138	1	1	1	
		Assistant Staff Specialist I/II	122/126	1	1	1	
Community Investment Office Total				**3**	**3**	**3**	
Civil Rights							
	Transfer	Staff Specialist I/II	134			1	**1**
Civil Rights Total						**1**	**1**
Environmental Justice							
	Transfer	Staff Specialist I/II	130/134	3	3	2	**-1**
Environmental Justice Total				**3**	**3**	**2**	**-1**
Technology Implementation							
		Assistant Staff Specialist I/II	122/126	2	2	2	
	Del	Staff Specialist I/II	130/134	1	1		**-1**
Technology Implementation Total				**3**	**3**	**2**	**-1**
Strategic Incentives							
	Transfer	Systems Analyst	135		1		**-1**
		Principal Staff Specialist (*)	142	1			
Strategic Incentives Total				**1**	**1**		**-1**
Equity & Community Service Area Total				**10**	**10**	**8**	**-2**
Finance & Administration Service Area							
Human Resources							
	Reclassification	Human Resources Analyst I/II	130/134		**1**		**-1**
	Reclassification	Analyst I/II	130/134			**1**	**1**
	Reclassification	Senior Analyst	138			**1**	**1**
	Reclassification	Senior Human Resources Analyst	138	1	1		**-1**
Human Resources Total				**1**	**2**	**2**	
Administrative Resources							
	Transfer/Add/Del	Manager II	148			1	**1**
Administrative Resources Total						1	**1**
Finance & Administration Service Area Total				**1**	**2**	**3**	**1**

APPENDIX F Table 2 - Fiscal Year 2027 Limited Term Contract Employee (LTCE)

Service Area / Division	Position Classification	Salary Range ID	FYE 26 APPROVED	FYE 26 Mid-Yr APPROVED	FYE 27 PROPOSED	DIFF
Information Management Service Area						
Enterprise Technology Solutions						
	Senior Systems Analyst	139			2	**2**
Enterprise Technology Solutions Total					**2**	**2**
Information Services						
Transfer	Systems Analyst	135	1	1		**-1**
Reclassification	Manager II	148	1	1	1	
Information Services Total			**2**	**2**	**1**	**-1**
Information Management Service Area			**2**	**2**	**3**	**1**
Public Affairs Service Area						
External Affairs						
	Staff Specialist I/II	130/134	1	1	1	
External Affairs Total			**1**	**1**	**1**	
Public Affairs Service Area			**1**	**1**	**1**	
Policy Service Area						
Planning & Climate Protection						
	Environmental Planner	134	1	1	1	
Transfer/Add/Del	Senior Environmental Planner	138	2	2	1	**-1**
Planning & Climate Protection Total			**3**	**3**	**2**	**-1**
Regulatory Development						
	Air Quality Specialist I/II	130/134	2	2	2	
	Senior Air Quality Engineer	140		1	1	
Regulatory Development Total			**2**	**3**	**3**	
Policy Service Area Total			**5**	**6**	**5**	**-1**
Science Service Area						
Meteorology & Measurement						
	Air Quality Specialist I/II	130/134	1	1	1	
	Senior Air Quality Specialist	138	1	1	1	
Meteorology & Measurement Total			**2**	**2**	**2**	
Science Service Area Total			**2**	**2**	**2**	
Grand Total			**23**	**37**	**36**	**-1**

(*) Reclassed by Executive Officer to Systems Analyst

Bay Area Air District

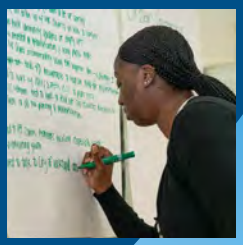
FY 2026–2027

Proposed Budget

June 3, 2026











Executive Officer Message

DEAR MEMBERS OF THE AIR DISTRICT COMMUNITY,

I am pleased to present the Fiscal Year (FY) 2026–27 Proposed Budget totaling $480 million. This budget has been thoughtfully developed to align with the Air District's 2024–2029 Strategic Plan and to advance the priorities of the Air District, our Board of Directors, and the communities we serve.

While the region faces mixed economic indicators and continued uncertainty in the state's fiscal outlook, this budget reflects a balanced and responsible approach that remains firmly grounded in our core mission and commitments. It makes targeted, prudent investments that further advance our goals to improve air quality, enhance public health, and strengthen community partnerships, consistent with the Air District's Strategic Plan. Additionally, the Air District continues to maintain healthy reserves to help mitigate potential future impacts related to state funding and other economic uncertainties.

While the balanced budget has no new staffing, it does include using operating surplus and reserves to continue investments in limited term contract employees (LTCE) and to support additional staffing needed for the Permit Backlog Reduction Plan approved by the Board of Directors in September 2025.

In order to effectively implement programs and policies that promote fiscal transparency and responsibility, the Air District is conducting assessments on two important topics related to permit fees: (1) cost recovery and containment, and (2) socioeconomic review of rules, including Regulation 3: Fees. These important studies will enable informed and thoughtful adjustments to Air District permit fees and cost recovery strategies.

The FY 2026-2027 budget continues to strengthen alignment with the 2024–2029 Strategic Plan. Building on the foundation established in FY 2025–2026, this budget further connects resources to our four strategic goals:

1. Achieve Impact – Strengthen enforcement, modernize regulations, and reduce health impacts from air pollution.
2. Advance Environmental Justice – Prioritize resources for overburdened communities, increase community-driven investments and partnerships, and improve air monitoring at local scales.
3. Foster Cohesion and Inclusion – Build a diverse workforce, enhance internal collaboration, and expand training to embed environmental justice into all aspects of our work.

4. Be Effective, Accountable and Customer-Oriented – Improve permitting and enforcement processes, increase transparency, and ensure fiscal responsibility.

To further align operations with Strategic Plan goals, the Air District's organizational structure has been refined into eight service areas, each playing a critical role in advancing the agency's mission. These service areas include Engineering and Compliance, Equity and Community Programs, Finance and Administration, General Counsel, Public Affairs, Information Management, and the newly restructured Science and Policy functions, which have been separated into two distinct service areas, each led by a Deputy Executive Officer.

KEY BUDGET RECOMMENDATIONS AND INVESTMENTS

The proposed FY 2026–2027 budget includes $274 million from the General Fund and $206 million from the Special Fund, for a combined total of $480 million. This budget also provides $116 million for new community grants under the Bay Reinvesting Penalties for Air Improvement and Resilience Program (Bay REPAIR). The Bay REPAIR program will reinvest penalty funds directly into communities most impacted by air pollution.

This year's budget strategically invests in limited-term staffing resources, infrastructure, and program enhancements to support the Air District's evolving role in protecting public health and addressing environmental disparities. Key recommendations include:

Environmental Justice and Community Engagement

- Direct investment in environmental justice initiatives, ensuring that overburdened communities receive targeted resources to address air pollution disparities.
- Expansion of community-driven funding programs, including penalty reinvestment strategies, so that fines from air quality violations directly benefit impacted communities.
- Enhanced transparency and accountability, ensuring that communities have clear access to air monitoring data, permitting and enforcement actions, and regulatory development.

Infrastructure and Capital Investments

- Allocation of $6 million for one-time investments to modernize operations by upgrading IT and monitoring systems, improving governance, expanding online access, and enhancing support to boost efficiency, transparency, and data quality.

Sustainable Revenue Strategies and Fiscal Responsibility

- Implementation of fee increases consistent with the Cost Recovery Policy, ensuring sustainable funding for Air District operations.
- General wage adjustment to help mitigate economic inflation and support workforce retention.

- Provision for an average 10% vacancy savings to accommodate recruitment timelines and attrition due to retirements.
- Commitment to pre-funding pension and Other Post-Employment Benefit (OPEB) includes $5 million in ongoing discretionary contributions to proactively reduce unfunded liabilities, supporting the Air District strategy of reaching 90% funding target.

A TRANSPARENT AND ACCOUNTABLE BUDGET

This year's budget advances alignment between the Strategic Plan and fiscal decision-making by connecting program budgets to the Strategic Plan strategies and goals, thereby strengthening accountability and transparency. This approach ensures that every dollar invested advances the Air District's commitment to environmental stewardship, public trust, and equity.

As we move forward, I encourage you to review the Budget in Brief to better understand how each service area contributes to implementing these priorities. Your continued support and engagement are essential as we work together to create a future with cleaner air, healthier communities, and a stronger, more inclusive Air District.

Sincerely,



DR. PHILLIP M. FINE

EXECUTIVE OFFICER/AIR POLLUTION CONTROL OFFICER

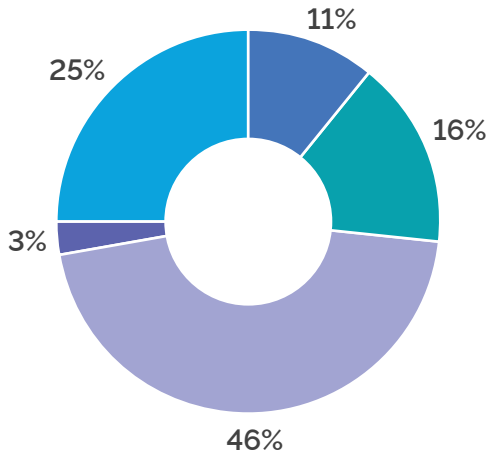
Table of Contents

All Fund Revenue and Expenditure by Type	06
All Fund Expenditure by Service Area	07
General Fund Revenue and Expenditure by Type	08
General Fund Expenditure by Service Area	09
Year to Year Comparison	10
Engineering and Compliance	11
Equity and Community Programs	14
Finance and Administration	18
General Counsel	22
Information Management	24
Policy	27
Public Affairs	30
Science	34

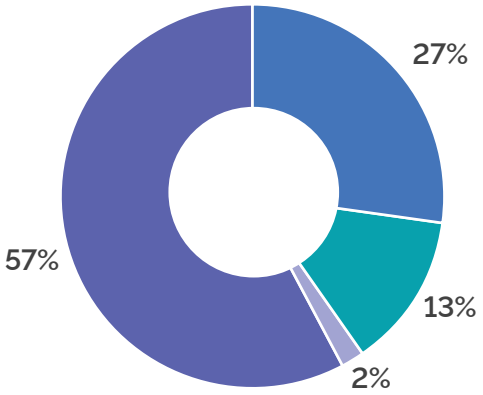
All Fund Revenue and Expenditure by Type

FY 2026-27 REVENUE AND EXPENDITURE ($ MILLIONS)

Revenue	($ Millions)	
Property Taxes	$51.3	11%
Permits/Fees	$75.6	16%
Grants	$219.3	46%
Other Revenue	$12.0	3%
Transfer From Reserves	$121.9	25%
Total Revenue	**$480.1**	

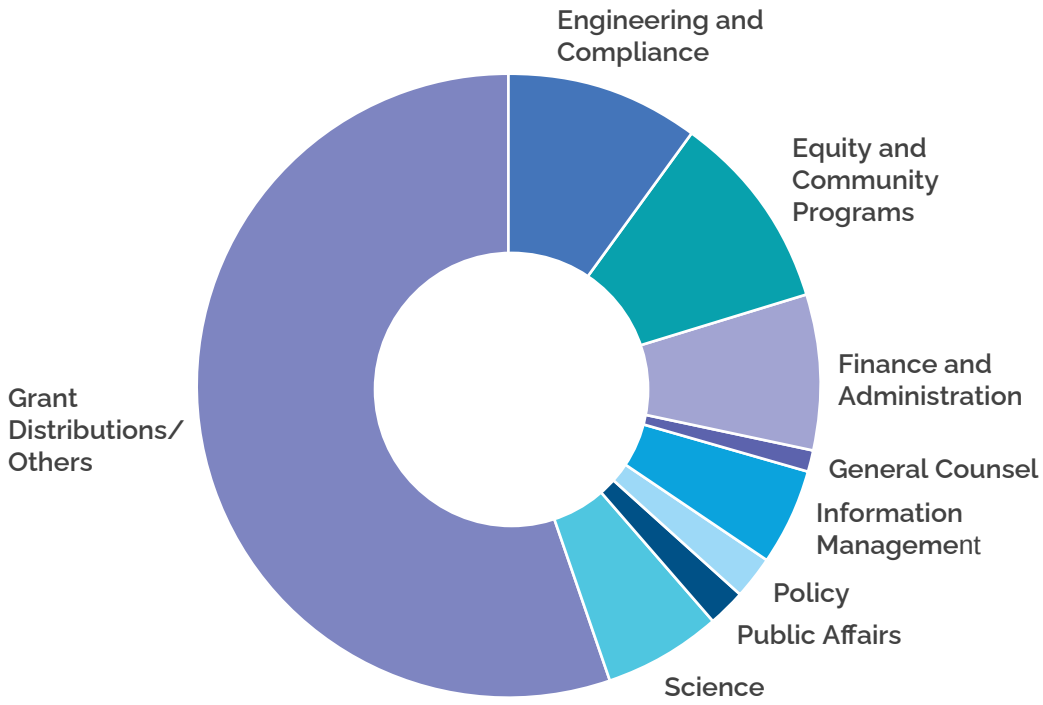


Expenditure		
Salaries and Benefits	$130.5	27%
Services and Supplies	$63.0	13%
Capital	$11.0	2%
Distributions and Transfers	$275.5	57%
Total Expenditure	**$480.1**	



All Fund Expenditure by Service Area

FY 2026-27 EXPENDITURE ($ MILLIONS)

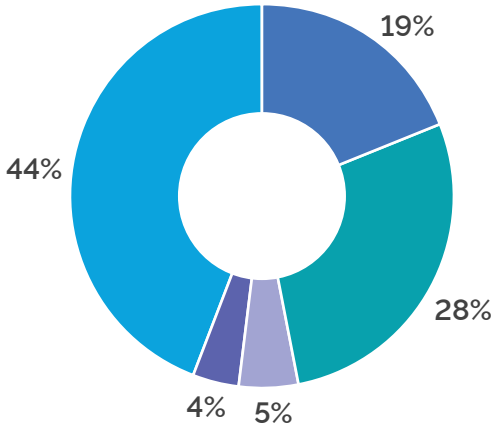


Expenditure	($ Millions)	
Engineering and Compliance	$50.4	10%
Equity and Community Programs	$49.2	10%
Finance and Administration	$38.8	8%
General Counsel	$7.0	1%
Information Management	$24.5	5%
Policy	$10.7	2%
Public Affairs	$11.8	2%
Science	$26.9	6%
Grant Distributions/Others	$260.8	54%
Total Expenditure	**$480.1**	

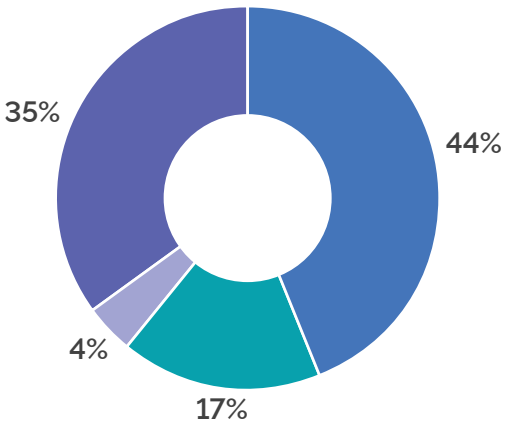
General Fund Revenue and Expenditure by Type

FY 2026-27 REVENUE AND EXPENDITURE ($ MILLIONS)

Revenue	($ Millions)	
Property Taxes	$51.3	19%
Permits/Fees	$75.6	28%
Grants	$13.4	5%
Other Revenue	$12.0	4%
Transfer From Reserves	$121.9	44%
Total Revenue	**$274.2**	

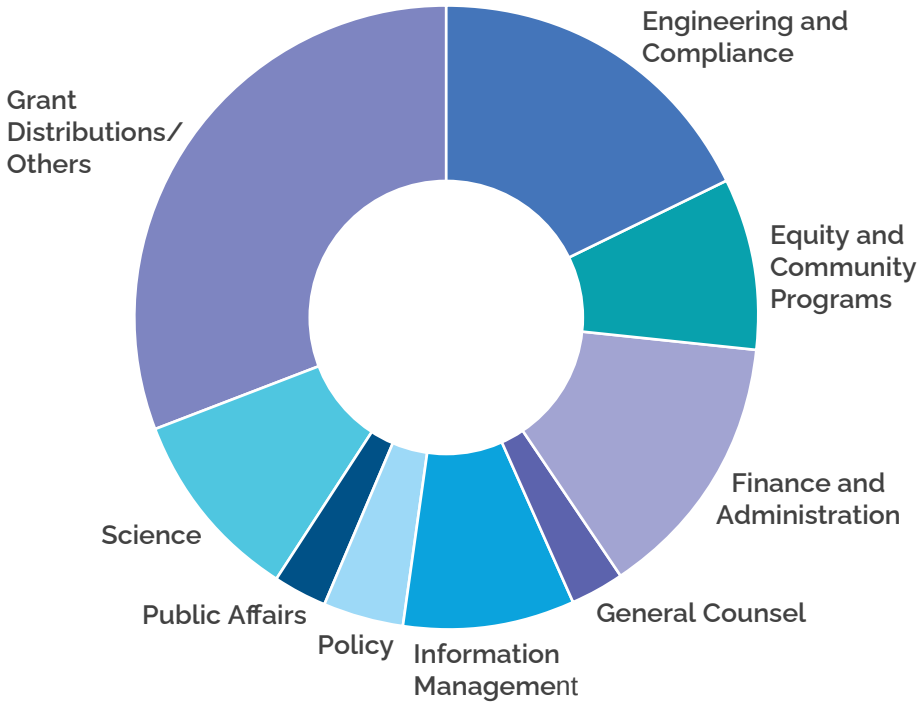


Expenditure		
Salaries and Benefits	$120.6	44%
Services and Supplies	$45.7	17%
Capital	$10.7	4%
Distributions and Transfers	$97.3	35%
Total Expenditure	**$274.2**	



General Fund Expenditure by Service Area

FY 2026-27 EXPENDITURE ($ MILLIONS)



Expenditure	($ Millions)	
Engineering and Compliance	$50.4	18%
Equity and Community Programs	$24.0	9%
Finance and Administration	$38.8	14%
General Counsel	$7.0	3%
Information Management	$24.5	9%
Policy	$10.7	4%
Public Affairs	$7.5	3%
Science	$26.9	10%
Grant Distributions/Others	$84.5	31%
Total Expenditure	**$274.2**	

Year to Year Comparison

FYE 2026 AND FYE 2027 REVENUE AND EXPENDITURE ($ MILLIONS)

	FYE 2026	FYE 2027	$ Δ	% Δ
All Fund Revenue by Type	$312.3	$480.1	$167.8	54%
Property Taxes	$47.6	$51.3	$3.7	8%
Permits/Fees	$68.7	$75.6	$6.9	10%
Grants	$165.7	$219.3	$53.6	32%
Other Revenue	$11.8	$12.0	$.3	2%
Transfer From Reserves	$18.5	$121.9	$103.3	558%
All Fund Expenditure by Type	$312.3	$480.1	$167.8	54%
Salaries and Benefits	$120.7	$130.5	$9.8	8%
Services and Supplies	$60.4	$63.0	$2.5	4%
Capital	$6.9	$11.0	$4.1	60%
Distributions and Transfers	$124.2	$275.5	$151.3	122%

	FYE 2026	FYE 2027	$ Δ	% Δ
General Fund Revenue by Type	$165.0	$274.2	$109.2	66%
Property Taxes	$47.6	$51.3	$3.7	8%
Permits/Fees	$68.7	$75.6	$6.9	10%
Grants	$18.5	$13.4	($5.1)	-28%
Other Revenue	$11.8	$12.0	$.2	2%
Transfer From Reserves	$18.5	$121.9	$103.3	558%
General Fund Expenditure by Type	$165.0	$274.2	$109.2	66%
Salaries and Benefits	$110.3	$120.6	$10.3	9%
Services and Supplies	$45.2	$45.7	$.5	1%
Capital	$6.5	$10.7	$4.2	64%
Distributions and Transfers	$3.0	$97.3	$94.3	3,153%

Engineering and Compliance

INTRODUCTION

SERVICE AREA OVERVIEW

Engineering and Compliance oversees regulatory compliance and pollution control measures to safeguard air quality for all Bay Area residents. This service area is primarily responsible for implementing regulations, permitting industrial processes, and enforcing air quality rules to minimize the impacts from a variety of air pollution sources in the Bay Area. Engineering and Compliance staff conduct rigorous inspections, investigations, and permit reviews, and also promote best practices and technological advancements to achieve regulatory compliance, reduce health risks, promote environmental justice, and protect the environment.

DIVISIONS

Compliance and Enforcement

The Compliance and Enforcement Division ensures the Air District will achieve emission reductions by ensuring the air quality regulations adopted by the Board of Directors, and permit conditions issued by the Executive Officer/APCO are properly implemented. Compliance with Air District, state, and federal regulations is achieved through a robust Compliance Assurance and Enforcement Program. The program includes comprehensive inspections and investigations and a complementary Compliance Assistance Program that supports compliance objectives of the division by maintaining operations, and assisting industry with air quality regulations and requirements.

Engineering

The Engineering Division reviews and processes permit applications and renewals for approximately 10,000 facilities with over 23,000 permitted devices and operations. It also manages Title V (Major Facility Review) permits for 75 facilities. In addition to permitting, the division oversees programs to assess and reduce risks from toxic air contaminants through Regulation 11, Rule 18; the State Air Toxics Hot Spots Program; and Regulation 2, Rule 5. The division also provides technical support across the agency, including rule development, emissions inventories, compliance and enforcement, planning, and community emission reduction plans.

Source Test

The Source Test Section conducts Air District source testing and provides oversight of facility source testing and continuous emissions monitoring in order to ensure that sources of air pollution report accurate emissions. Compliance with rules and permits is often determined using source test data and information. The Source Test Section also provides subject matter expertise to develop defensible emissions data to support permit actions, rule development, emissions inventories, and policy decisions.

Engineering and Compliance

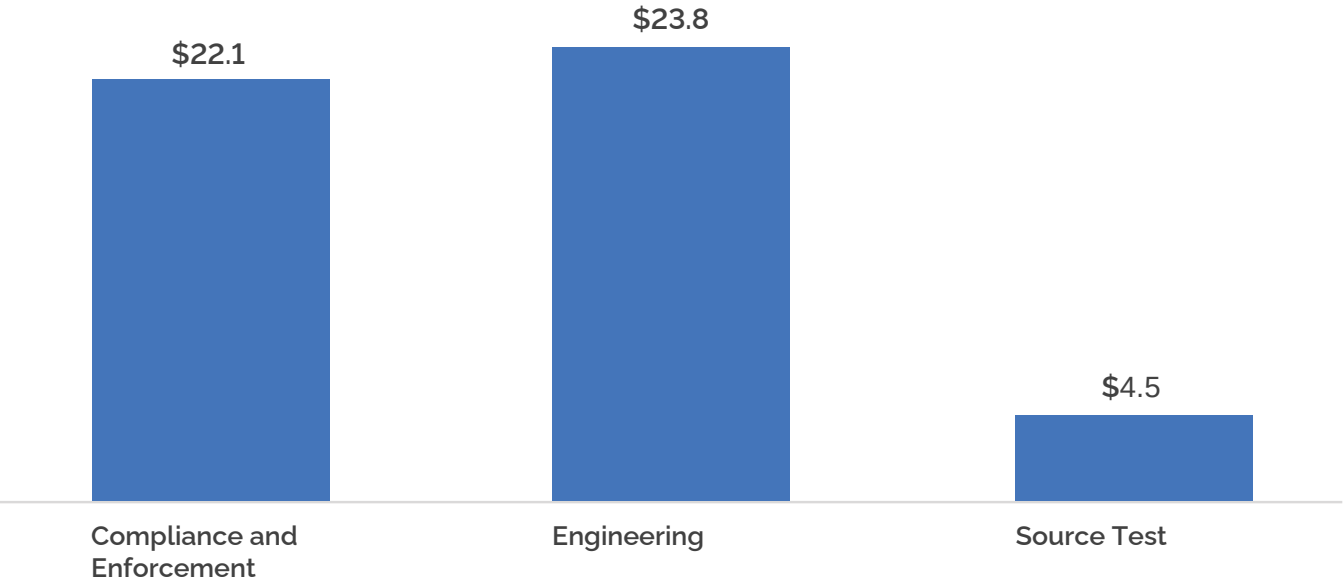
SERVICE AREA BUDGET SUMMARY

WORK PLAN HIGHLIGHTS

- Enhance compliance and enforcement policies to prioritize high-impact inspections in communities overburdened by air pollution. (Strategy 1.5)
- Strengthen enforcement investigations and accountability measures to ensure industries comply with air quality regulations. (Strategy 1.6)
- Improve accessibility and transparency of the air quality complaint process to better respond to community concerns. (Strategy 2.5)
- Reduce permitting delays and ensure equitable permit processing while addressing regulatory bottlenecks. (Strategies 4.1 and 4.2)
- Implement Board-approved strategic staffing adjustments for the Engineering Division to improve timeliness, consistency, and transparency in permitting. (Strategies 4.1, 4.2, and 4.3)
- Advance environmental justice principles in permitting decisions by integrating community input and health impact considerations. (Strategy 2.7)
- Increase transparency and public access to permit data and compliance actions to build trust and accountability. (Strategy 4.3)
- Prioritize Air District source tests for the facilities and communities with the greatest impacts. (Strategy 4.5)
- Develop improved emission factors and streamline source test reviews to increase timely action on permits. (Strategy 4.1)

Engineering and Compliance Expenditure

FY 2026-27 EXPENDITURE ($ MILLIONS)



Expenditure	FYE 2025 Audited Actual	FYE 2026 Approved Budget	FYE 2026 Amended Budget	FYE 2027 Proposed Budget	FYE 2027 FTE Headcount
Deputy Executive Officer					**1**
Compliance and Enforcement	$17.1	$21.0	$21.1	$22.1	99
Engineering	$14.0	$18.6	$19.4	$23.8	88
Source Test	$3.7	$4.5	$4.5	$4.5	16
Service Area Total	**$34.8**	**$44.1**	**$45.0**	**$50.4**	**204**

Equity and Community Programs

INTRODUCTION

SERVICE AREA OVERVIEW

Equity and Community Programs is dedicated to addressing environmental disparities and promoting community engagement within the Bay Area. Through targeted initiatives and partnerships, this service area aims to reduce pollution burdens in disproportionately impacted communities, improve public health outcomes, and foster environmental justice. Key initiatives include funding programs for emission reduction projects, incentivizing the adoption of clean technologies, and collaborating with community stakeholders to ensure equitable access to clean air and resources.

DIVISIONS

Community Investments Office

The Air District established the Community Benefits Penalty Funds Policy to directly support communities disproportionately impacted by air pollution. The Community Investments Office administers the Community Benefits Penalty Funds Policy and other funds from enforcement actions to direct resources back into the communities where violations occurred to improve community health and air quality.

Office of Civil Rights

The Air District established a new Office of Civil Rights to ensure compliance with key civil rights laws, including Title VI of the Civil Rights Act of 1964 and California Government Code Section 11135. This office will proactively assess and address potential disproportionate impacts on communities based on race, ethnicity, national origin, and other protected characteristics. Its primary focus will be on reviewing public-facing programs, conducting compliance audits, providing staff training, and managing civil rights complaints through a transparent and accessible process.

Environmental Justice

The Environmental Justice Division supports the agency's mission by collaborating with impacted communities and partners across the Bay Area to advance public health, equity, and environmental justice. The office works with community members and partners to increase awareness and transparency of air quality issues, build capacity, expand opportunities for impacted communities to participate in Air District decision-making, and support implementation of community-identified solutions. Key programs include the AB 617 Community Health Protection Program, the Community Advisory Council, the development of the agency's Environmental Justice Policy, and the James Cary Smith Community Grant Program,

Diversity, Equity and Inclusion Office

The Air District's Diversity, Equity and Inclusion Office is responsible for developing initiatives and applying an equity lens to programs, policies, practices, and procedures. Responsibilities include capacity building related to staffing, recruitment, promotions, inclusive practices in the workplace, contracting for capital projects and services, and equity training. The office recognizes the contributions of all employees and community members and works to sustain an environment where everyone is valued, respected, and included.

Strategic Incentives

The Strategic Incentives Division manages Special Revenue funds to accelerate voluntary emissions reductions, advance zero-emission technologies, and reduce community exposure to air pollution. Primarily targeting mobile sources and select stationary sources, the division incentivizes replacing older, high-emission equipment with cleaner alternatives. Programs are designed to deliver cost-effective benefits to the Bay Area while meeting strict legislative and oversight requirements, and to help businesses and agencies transition to cleaner fleets while supporting adoption of emerging technologies across sectors.

Technology Implementation Office

The Technology Implementation Office's mission is to advance emerging, cost-effective solutions to achieve greenhouse gas emissions reductions for the transportation and industrial source sectors. The office connects climate technologies and customers by providing financial incentives through grants for light-duty vehicles, electric vehicle infrastructure, and loans for various emerging climate solutions, as well as technical and match-making support. By supporting the scale-up of climate technologies, the office can help achieve state and regional greenhouse gas emissions targets and reduce emissions in impacted communities, while also making technologies cost effective.

Equity and Community Programs

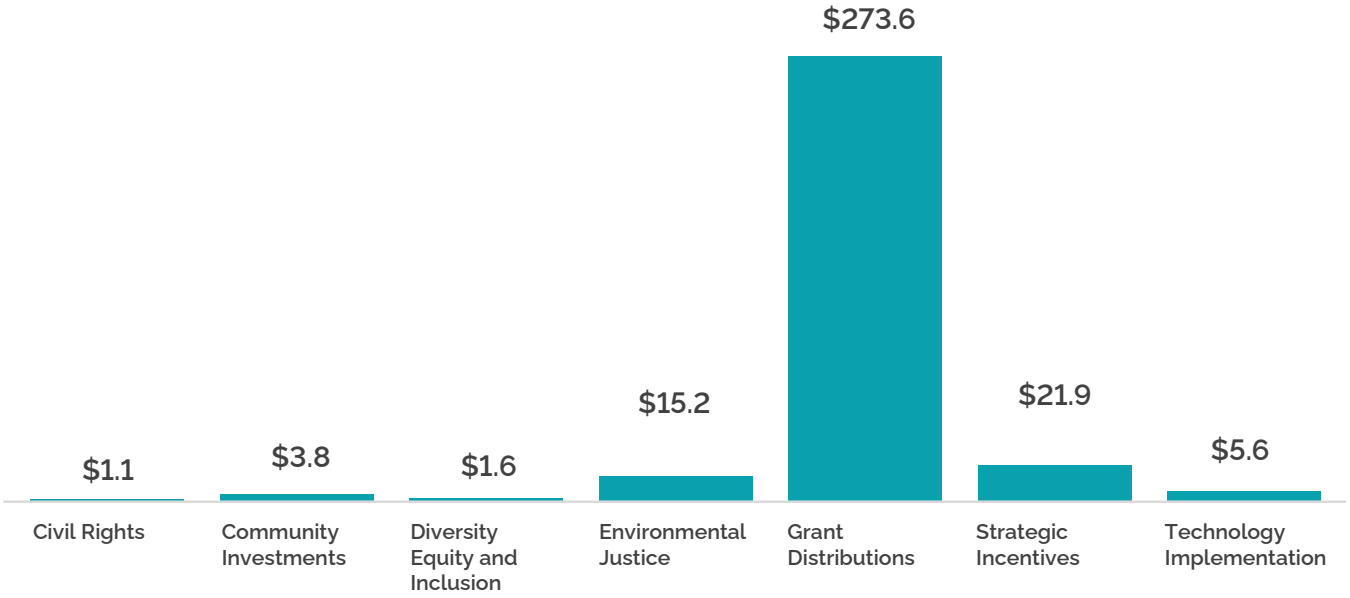
SERVICE AREA BUDGET SUMMARY

WORK PLAN HIGHLIGHTS

- Expand clean energy and zero-emission infrastructure investments to support climate resilience in frontline communities. (Strategy 1.7)
- Launch the Local Community Benefits Fund to reinvest penalty funds back into the communities where air quality violations occurred. (Strategy 2.10)
- Modernize the grant application system to improve transparency and efficiency for funding clean air initiatives. (Strategy 4.12)
- Align grant guidelines with best practices for the community grant fund to inform the Peoples Air Grant. (Strategy 2.8)
- Advance equitable state incentive programs that directly benefit communities overburdened by pollution. (Strategy 2.4)
- Implement the Clean HEET Program to reduce wintertime wood smoke pollution and improve air quality in highly-impacted areas. (Strategy 1.1)
- Strengthen community engagement through the Environmental Justice Navigator Program to build relationships and trust. (Strategy 2.1)
- Expand access to environmental career pathways through the Environmental Justice and Diversity Scholars Program. (Strategy 3.6)

Equity and Community Programs Expenditure

FY 2026-27 EXPENDITURE ($ MILLIONS)



Expenditure	FYE 2025 Audited Actual	FYE 2026 Approved Budget	FYE 2026 Amended Budget	FYE 2027 Proposed Budget	FYE 2027 FTE Headcount
Deputy Executive Officer					**1**
Civil Rights	-	$0.6	$0.6	$1.1	3
Community Investments	$0.1	$3.3	$3.3	$3.8	5
Diversity Equity and Inclusion	$0.9	$1.5	$1.6	$1.6	4
Environmental Justice	$12.8	$18.3	$21.0	$15.2	23
Grant Distributions	$72.5	$122.1	$136.1	$273.6	-
Strategic Incentives	$9.2	$21.7	$23.5	$21.9	35
Technology Implementation	$3.7	$5.6	$6.4	$5.6	11
Service Area Total	**$99.1**	**$173.2**	**$192.5**	**$322.8**	**82**

Finance and Administration

INTRODUCTION

SERVICE AREA OVERVIEW

Finance and Administration manages the financial, administrative, and operational functions of the Air District. This service area is tasked with budgeting, financial planning, procurement, human resources management, and facilities maintenance to support the organization's mission. By ensuring sound fiscal management and operational efficiency, Finance and Administration enables the Air District to fulfill its responsibilities and deliver essential services to the community.

DIVISIONS

Board of Directors

The Air District's Board of Directors is a governing body comprised of 24 locally elected representatives selected from the nine counties across the Bay Area region. These representatives bring a diverse range of perspectives and experiences to the table, reflecting the unique needs and concerns of their respective communities. As stewards of the region's air quality and environmental health, the Board plays a pivotal role in setting policies, guiding strategic initiatives, and overseeing the implementation of programs aimed at improving air quality, protecting public health, and addressing climate change challenges.

Executive Office

The Executive Office of the Air District serves as the central administrative hub, overseeing the strategic direction, coordination, and management of the organization. It provides leadership, guidance, and support to all service areas and departments within the Air District. The Executive Office is responsible for setting organizational goals, developing policies, and ensuring effective implementation of initiatives to improve air quality, protect public health, and address environmental challenges in the Bay Area.

Administrative Resources

The Administrative Resources Division provides administrative and operational support for the Air District. The Business Office handles contracts, purchasing, risk management, the mailroom, and office support services. The Fleet Office oversees vehicle acquisition, maintenance, accident management, and procurement. The Facilities Office manages planning, maintenance, construction oversight, and operations for all Air District facilities, including security and safety measures.

Finance Office

The Finance Office ensures fiscal stewardship and financial accountability for the Air District. Responsibilities include accounting, financial audits, reporting, vendor payments, permit fee processing, asset management, and

maintaining the financial system. The office also develops the annual budget, conducts cost recovery analysis and manages financial reporting for federal and state grants.

Human Resources Office

The Human Resources Office is responsible for personnel matters, including payroll and benefits, labor and employee relations, recruitment and testing, employee engagement, processing personnel actions, employee performance appraisal and recognition programs, organizational development and training, health and safety compliance, workers compensation and special events coordination.

Finance and Administration

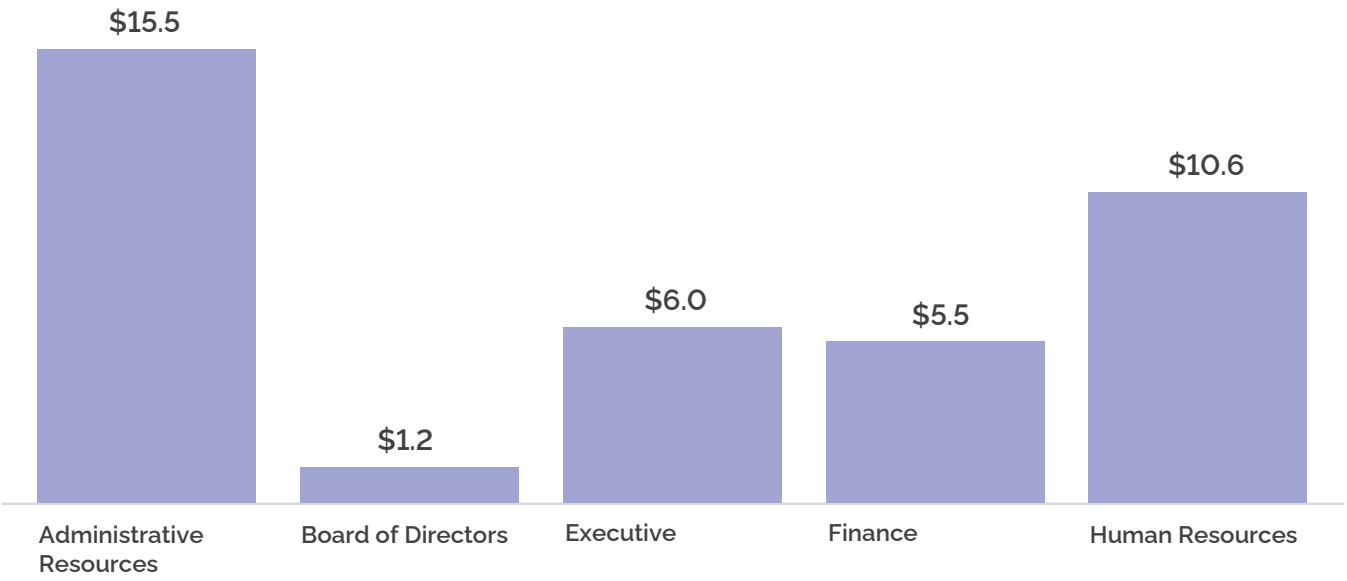
SERVICE AREA BUDGET SUMMARY

WORK PLAN HIGHLIGHTS

- Expand targeted recruitment programs to increase workforce diversity and ensure Air District staff reflect impacted communities. (Strategy 3.1)
- Implement a comprehensive professional training plan encompassing onboarding, ongoing skills development, and environmental justice, leadership, and regulatory compliance training. (Strategy 3.6)
- Enhance budget transparency, fiscal stewardship, and strategic resource allocation through improved budget tools, reporting, and long-range planning. (Strategy 4.12)
- Advance asset planning to support mission delivery by ensuring facilities and fleet assets are aligned with long-term operational needs, workforce flexibility, and fiscal sustainability. (Strategy 4.11)
- Improve procurement and contract management practices to increase efficiency, transparency, and alignment with Air District priorities. (Strategy 4.12)

Finance and Administration Expenditure

FY 2026-27 EXPENDITURE ($ MILLIONS)



Expenditure	FYE 2025 Audited Actual	FYE 2026 Approved Budget	FYE 2026 Amended Budget	FYE 2027 Proposed Budget	FYE 2027 FTE Headcount
Deputy Executive Officer					**1**
Administrative Resources	$10.0	$15.3	$16.6	$15.5	16
Board of Directors	$0.6	$0.6	$0.8	$1.2	-
Executive	$7.2	$6.4	$7.2	$6.0	14
Finance	$4.3	$5.4	$5.5	$5.5	18
Human Resources	$7.9	$8.1	$8.6	$10.6	12
Service Area Total	**$30.0**	**$35.8**	**$38.7**	**$38.8**	**61**

General Counsel

INTRODUCTION

The General Counsel provides legal counsel, representation, and support to the Air District on matters related to environmental law, regulatory compliance, enforcement actions, and policy development. This service area plays a crucial role in interpreting and implementing laws, regulations, and policies governing air quality and environmental protection. The General Counsel manages the attorneys and non-attorney staff in the Legal Office and outside counsel retained to handle specialized matters. The General Counsel and the attorneys in the Legal Office help the Air District navigate complex legal challenges, uphold regulatory standards, and advance environmental justice objectives.

SERVICE AREA BUDGET SUMMARY

WORK PLAN HIGHLIGHTS

- Adopt a new enforcement policy to hold violators accountable and ensure violations result in meaningful consequences. (Strategy 1.6)
- Develop enhanced investigation protocols to build strong legal cases for effective enforcement. (Strategy 1.5)
- Develop a new "Enforcement Town Hall Meeting" Policy to communicate regularly with affected communities about Air District enforcement activities and enforcement issues of community concern. (Strategy 2.6)
- Develop protocols to formalize how the Air District ensures compliance with civil rights laws in permitting. (Strategy 2.10)
- Expand environmental justice legal training and professional development through implementation of the Environmental Justice Law Fellowship program. (Strategy 3.4)

General Counsel Expenditure

FY 2026-27 EXPENDITURE ($ MILLIONS)



Expenditure	FYE 2025 Audited Actual	FYE 2026 Approved Budget	FYE 2026 Amended Budget	FYE 2027 Proposed Budget	FYE 2027 FTE Headcount
Legal	$5.6	$6.3	$7.6	$7.0	19
Service Area Total	**$5.6**	**$6.3**	**$7.6**	**$7.0**	**19**

Information Management

INTRODUCTION

SERVICE AREA OVERVIEW

Information Management leads the modernization of the Air District's technology infrastructure, improves core business processes, and coordinates strategic cross-functional projects under a governance structure focused on the AIr District's five-year Strategic Plan. Together, Enterprise Technology Solutions and Information Services strengthen mission delivery, information security, innovation, and structured project management.

DIVISIONS

Enterprise Technology Solutions

The Enterprise Technology Solutions Division identifies, develops, and implements both custom and off-the-shelf technologies that enhance the Air District's core operations. Key examples include systems, which enable permitting, inspection, and enforcement processes for regulated facilities, grants management tools, the Air District's financial system, and the technology powering the public-facing website. This division works closely with other service areas to streamline business processes, promote innovation, and ensure that technology solutions effectively meet staff and community needs.

Information Services

Information Services is responsible for designing, implementing, and maintaining the Air District's information technology infrastructure. This includes managing servers and networks, telecommunications, cybersecurity, business continuity, and disaster recovery systems. The division also provides user support to Air District staff and technical assistance to external stakeholders, ensuring seamless and secure access to online services. By focusing on resilience and continuous improvement, Information Services safeguards the Air District's data and systems against evolving threats and disruptions and fosters effective implementation of initiatives to improve air quality, protect public health, and address environmental challenges in the Bay Area.

Information Management

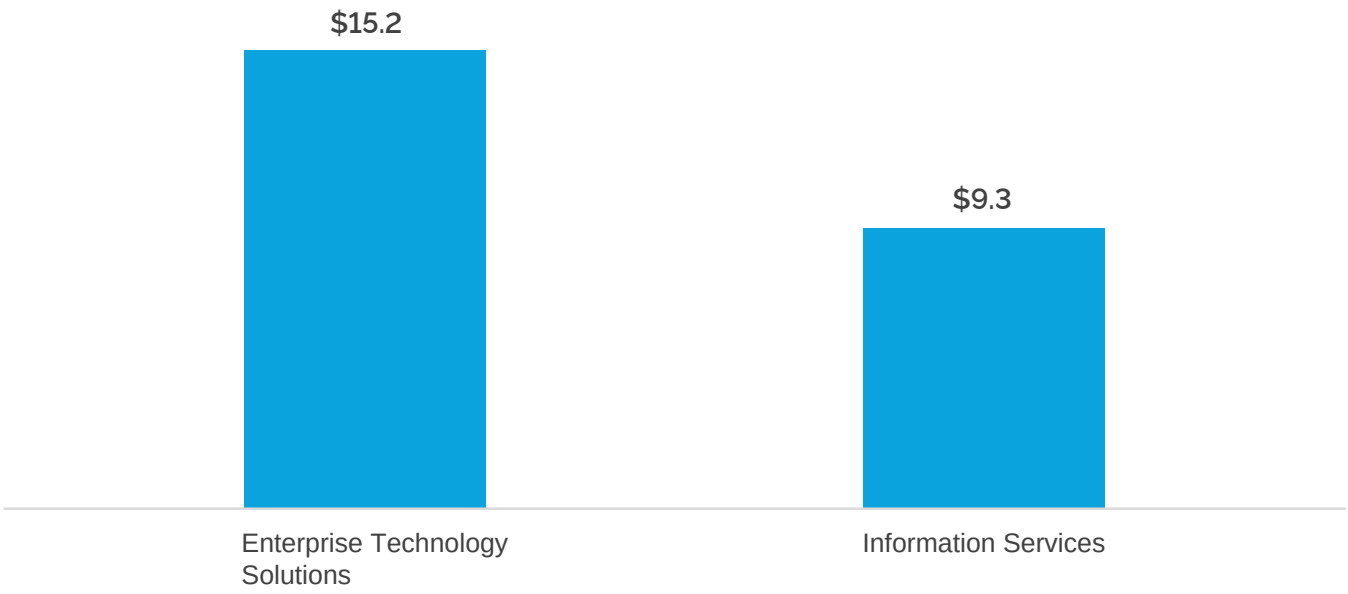
SERVICE AREA BUDGET SUMMARY

WORK PLAN HIGHLIGHTS

- Enhance the Air District's IT infrastructure to enhance cybersecurity and resilience. (Strategy 4.12)
- Establish governance and portfolio management that will provide reliable upfront implementation and operational planning for Air District initiatives. (Strategy 4.10)
- Create online data portals to provide public access to comprehensive air quality, permitting and compliance data. (Strategy 2.3)
- Streamline permitting and enforcement systems for greater transparency and operational efficiency. (Strategy 4.1)
- Develop improved grants management systems to increase accessibility for frontline communities. (Strategy 2.8)
- Enhance user support and training to improve service delivery. (Strategy 4.7)

Information Management Expenditure

FY 2026-27 EXPENDITURE ($ MILLIONS)



Expenditure	FYE 2025 Audited Actual	FYE 2026 Approved Budget	FYE 2026 Amended Budget	FYE 2027 Proposed Budget	FYE 2027 FTE Headcount
Deputy Executive Officer					**1**
Enterprise Technology Solutions	$11.2	$10.6	$11.8	$15.2	17
Information Services	$6.3	$7.2	$8.7	$9.3	16
Service Area Total	**$17.6**	**$17.8**	**$20.6**	**$24.5**	**34**

Policy

INTRODUCTION

SERVICE AREA OVERVIEW

Policy oversees and coordinates local and regional-scale air quality planning and develops and updates the Air District's regulations. The planning processes set goals and priorities for measures that the Air District takes to protect public health and the environment. The regulatory development process uses science and engineering to ensure the Air District's regulations are effective and impactful.

DIVISIONS

Planning and Climate Protection

The Planning and Climate Protection Division ensures compliance with air quality standards, leads climate initiatives, and coordinates local emissions reduction plans under AB 617. Staff support environmental justice efforts, assist with General Plan Environmental Justice Elements (SB 1000), and promote equity in climate action. They provide model ordinances, technical resources, and best practices to accelerate action. Additionally, they help agencies apply CEQA thresholds and updated guidelines to protect health and mitigate climate impacts.

Regulatory Development

The Regulatory Development Division is responsible for developing regulations to implement Air District plans to attain federal and state air quality standards and protect public health. In addition, staff assist with the preparation of community and regional air quality plans. Other measures are developed under the direction of the Board of Directors to further protect public health and safety and reduce emissions of greenhouse gases. In addition, staff review existing regulations and develop amendments to improve clarity, efficiency, and effectiveness.

Policy

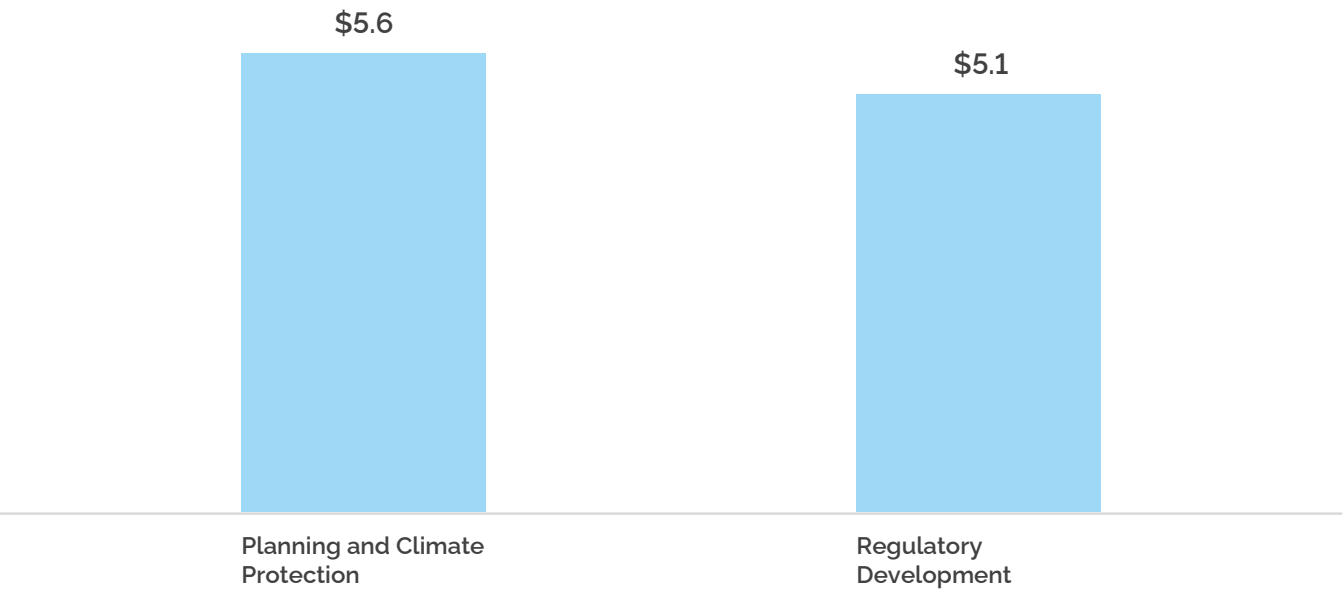
SERVICE AREA BUDGET SUMMARY

WORK PLAN HIGHLIGHTS

- Strengthen air pollution regulations to reduce emissions from major industrial sources. (Strategy 1.2)
- Minimize flaring. (Strategy 1.3)
- Change approach to air quality. (Strategy 1.1)
- Community Partnerships (Strategy 2.1)
- Advance innovative climate solutions and implement regional climate plans. (Strategy 1.7)

Policy Expenditure

FY 2026-27 EXPENDITURE ($ MILLIONS)



Expenditure	FYE 2025 Audited Actual	FYE 2026 Approved Budget	FYE 2026 Amended Budget	FYE 2027 Proposed Budget	FYE 2027 FTE Headcount
Deputy Executive Officer					**1**
Planning and Climate Protection	$4.4	$4.7	$5.7	$5.6	21
Regulatory Development	$2.6	$4.4	$5.0	$5.1	16
Service Area Total	**$7.1**	**$9.1**	**$10.7**	**$10.7**	**38**

Public Affairs

INTRODUCTION

SERVICE AREA OVERVIEW

Public Affairs is responsible for communication, outreach, and public engagement efforts to raise awareness, promote transparency, and foster community involvement in air quality issues. This service area develops and implements communication strategies, public education campaigns, and media relations activities to inform the public, policymakers, and stakeholders about air quality initiatives, health risks, and regulatory developments.

By fostering open dialogue and collaboration, Public Affairs enhances public understanding and support for the Air District's mission. Government Outreach and Special Projects develops policy proposals, guidance, and planning to support internally-facing activities related to executive and administrative functions and partnerships with local government focused on incident response and emergency preparedness.

DIVISIONS

Communications Office

The Air District's Communications Office leads agency-wide internal and external communications to ensure information shared with the public, partners, media, and staff is accurate, timely, accessible, and aligned with the Air District's mission, policies, and Board direction. The office serves as the central coordination point for communications activities across the agency, providing strategic guidance and oversight to ensure consistency and clarity in Air District messaging.

The Communications Office manages media relations and public information, including proactive outreach, press releases, and responses to media inquiries. The office is responsible for public health and air quality messaging, incident and emergency communications, and crisis response, including coordination with partner agencies during air quality incidents and other time-sensitive events. The office also leads internal communications, ensuring employees receive clear, consistent, and timely information about agency priorities, policies, major initiatives, and operational changes.

In addition, the Communications Office develops and executes print, digital, social media, and video communications; manages agency advertising; and oversees the Air District's social media platforms. The office produces and coordinates videography and multimedia content to support public education, outreach campaigns, internal communications, and the timely sharing of information across digital platforms. The office leads strategy, advertising, and outreach for the Spare the Air program and the Spare the Air Employer Program, including development of regional campaigns, partner toolkits, and public-facing materials. The office also leads advertising and outreach campaigns for major regulatory initiatives, including the Appliance

Rules, developing and implementing multilingual, equity-focused communications to inform residents, businesses, contractors, and other stakeholders.

The Communications Office oversees the Spare the Air website, related microsites, and mobile applications, ensuring content is current, user-friendly, and accessible. Communications staff also represent the Air District at community events throughout the region in support of Spare the Air, Appliance Rules outreach, and broader air quality education and awareness efforts.

External Affairs Office

The External Affairs Office coordinates the administration of the Commuter Benefits Program, in partnership with the Metropolitan Transportation Commission, and in 2026, will direct the Flex Your Commute messaging campaign to encourage greater use of commuter benefits by Bay Area employees. The office directs the Air District's external sponsorship program to ensure transparency, goals, and benefits are met in accordance with the Air District sponsorship policy.

External Affairs will launch the new Stakeholder Directory in 2026, a resource for staff to quickly identify city leaders throughout the nine-county region and track our engagement with the departments to build stronger relationships with our cities and residents. A guide for talking points development as well as a topic library for relevant Air District messaging is currently being created.

In 2026, the office will hire staff to develop a districtwide local government partnership program to expand messaging reach and information sharing with city, county and state agencies, and non-governmental organizations. The office also works with Air District staff to coordinate events and regional conferences to expand messaging for targeted initiatives and further build regional partnerships.

Legislative and Government Affairs Office

The Legislative and Government Affairs Office coordinates and tracks developing positions on state and federal legislation and budget proposals, meets with legislators and legislative staff about policy proposals and updates them on Air District activities. The office represents the Air District at legislative hearings, and interacts with stakeholder groups, state and local agencies, and members of the public. The office disseminates information on current legislative policy and budget proposals that affect Air District programs and policies and develops strategies to further the Air District's legislative priorities.

Public Affairs

SERVICE AREA BUDGET SUMMARY

WORK PLAN HIGHLIGHTS

- Enhance real-time public communication on air quality incidents to ensure accessibility and responsiveness. (Strategy 4.8)
- Strengthen partnerships with local governments and community organizations to amplify messaging and engagement. (Strategy 2.1)
- Expand public notification tools for improved incident response and transparency. (Strategy 4.6)
- Increase digital and social media outreach to support education on rulemaking, enforcement, and climate initiatives. (Strategy 4.7)
- Develop internal and external communication training to improve staff effectiveness. (Strategy 3.3)

Public Affairs Expenditure

FY 2026-27 EXPENDITURE ($ MILLIONS)



Expenditure	FYE 2025 Audited Actual	FYE 2026 Approved Budget	FYE 2026 Amended Budget	FYE 2027 Proposed Budget	FYE 2027 FTE Headcount
Deputy Executive Officer					**1**
Communications	$5.9	$7.3	$8.5	$8.8	13
External Affairs	$0.8	$2.0	$2.1	$2.1	5
Legislative and Government Affairs	$0.6	$0.9	$0.9	$0.9	2
Service Area Total	**$7.3**	**$10.3**	**$11.5**	**$11.8**	**21**

Science

INTRODUCTION

SERVICE AREA OVERVIEW

Science conducts monitoring and modeling research and analysis to inform decision-making and advance air quality goals in the Bay Area. This service area monitors air quality, calculates and tracks emissions, and assesses health impacts to inform policy priorities. Science provides evidence-based recommendations to address air quality challenges, mitigate pollution sources, and protect public health and the environment.

DIVISIONS

Assessment, Inventory and Modeling

The Assessment, Inventory, and Modeling Division develops air pollution inventories and conducts air quality modeling at the regional and community levels. It evaluates equity in pollution exposure and health impacts to support Air District programs. The division improves and reports emissions estimates for criteria pollutants, toxic air contaminants, and climate-forcing pollutants. Staff assess emissions, concentrations, and exposures to pollutants, such as particulate matter and ozone, to support targeted pollution reduction strategies.

Meteorology and Measurements

The Meteorology and Measurements Division provides air quality and meteorological data, chemical analysis, and forecasting to support the Air District's enforcement, permitting, rule development, communications, and community engagement efforts. Staff operate monitoring instruments, conduct testing and analysis, and develop air monitoring and testing plans. They also design and maintain instruments and systems, ensure data quality through rigorous quality assurance and control, and analyze and communicate findings to support air quality management.

Science

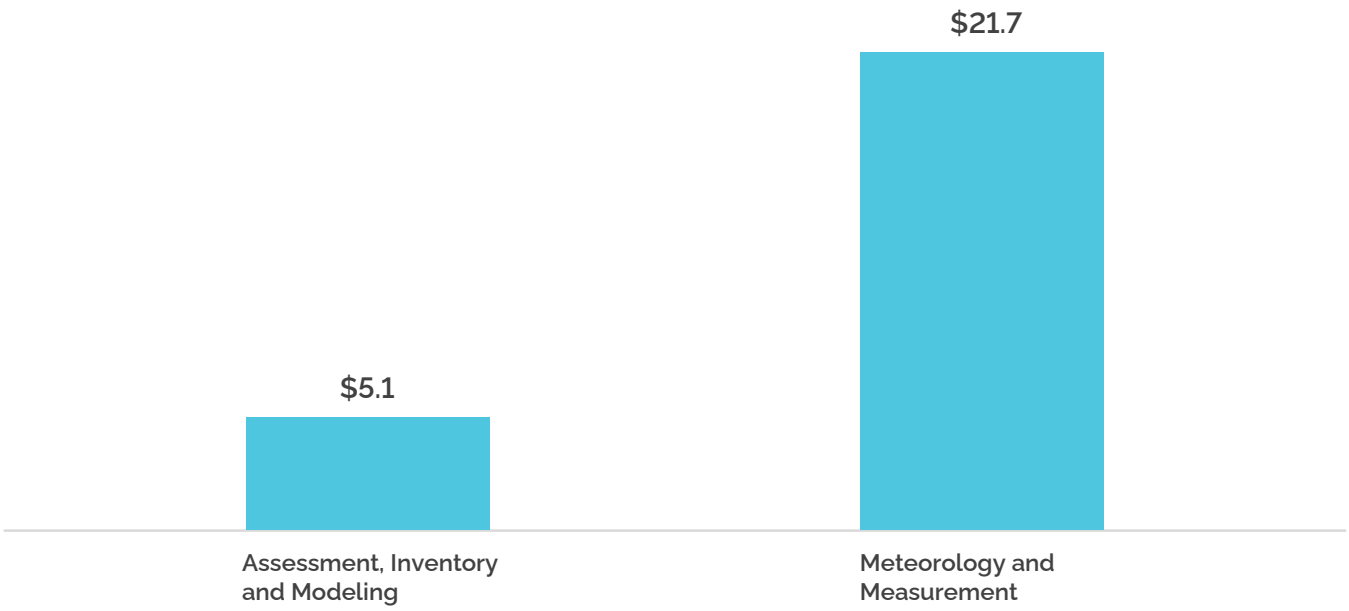
SERVICE AREA BUDGET SUMMARY

WORK PLAN HIGHLIGHTS

- Routinely update, report, and share the regional emissions inventory and source-specific emissions estimates. (Strategy 1.1 and 2.3)
- Enhance community-driven air quality data collection and public access to information. (Strategy 2.3)
- Conduct local assessments and exposure analysis to better understand the population exposure and health impacts of air pollutants in the Bay Area. (Strategy 2.4)
- Work with communities overburdened by air pollution to conduct air monitoring and develop air dispersion modeling to improve understanding of local air quality, inter-regional emissions transport, and their impacts on the Bay Area's air quality. (Strategy 2.7)
- Upgrade air quality monitoring networks to improve reliability, efficiency, data quality, and accessibility. (Strategy 4.4)

Science Expenditure

FY 2026-27 EXPENDITURE ($ MILLIONS)



Expenditure	FYE 2025 Audited Actual	FYE 2026 Approved Budget	FYE 2026 Amended Budget	FYE 2027 Proposed Budget	FYE 2027 FTE Headcount
Deputy Executive Officer					**1**
Assessment, Inventory and Modeling	$3.8	$4.2	$4.4	$5.1	19
Meteorology and Measurement	$14.3	$21.0	$21.7	$21.7	59
Service Area Total	**$18.1**	**$25.2**	**$26.1**	**$26.9**	**79**

Bay Area Air District

Some numbers in this report may look slightly different due to rounding or how totals are calculated. Percentages may not add up to exactly 100%, and totals may not match the sum of the displayed rows. These small differences are normal.

CONTACT US

415.749.4900

Bay Area Air District
375 Beale Street, Suite 600
San Francisco, CA 94105

Learn more at **baaqmd.gov**
@bayareaairdistrict

Bay Area Air District

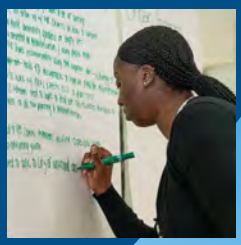
FY 2026–2027

Proposed Budget

June 3, 2026











Mission

The Air District improves air quality to protect public health, reduce historical and current environmental inequities, and mitigate climate change and its impacts.

Core Values

Transparency
We are dedicated to full transparency toward holding ourselves accountable for our decisions and actions.
Partnership
We value our partners, fostering meaningful collaboration both internally and externally to achieve shared objectives.
Environmental Justice
We will integrate environmental justice principles within all aspects of our work, and we seek enhanced environmental justice outcomes for overburdened communities.
Equity
We commit to equity and ensuring that our organizational culture fosters a diverse workforce that reflects our communities.
Trust
We gain public trust by grounding our programs and policies in law, science, and the lived experience of our communities.
Integrity
We lead with integrity, serving as honest and responsible stewards of public resources, grounding our actions in law and science, and pioneering effective and innovative solutions in partnership with the communities we serve.

Bay Area Air District

For Fiscal Year Ending June 30, 2027

CONTENTS

PAGE

Introduction

Governing Board....1
Budget in Brief....2
Organizational Chart....38
Budget Timeline....39
Strategic Plan Summary....40

District-wide Revenue and Expenditure Budgets

TABLE I: Consolidated Expenditures and Revenues by Major Categories....43
TABLE II: Consolidated Revenues....44
TABLE III: Consolidated Expenditures....45
TABLE IVa: General Fund Operating....46
TABLE IVb: General Fund Community Benefits....47
TABLE V: Carl Moyor Program (CMP)....48
TABLE VI: Mobile Source Incentive Fund (MSIF)....49
TABLE VII: Transportation Fund for Clean Air (TFCA)....50
TABLE VIII: Clean Cars for All (CCFA)....51
TABLE IX: California Good Movement Bond (CGMB)....52
TABLE X: Vehicle Mitigation (VM)....53
TABLE XI: Other Grants....54
TABLE XII: General Fund Expenditure by Service Area & Division....55
TABLE XIII: Special Revenue Funds Expenditures by Service Area & Division....58

Capital Expenditures

Table XIV: Capital Expenditure....60

PROGRAM NARRATIVES AND EXPENDITURE DETAIL

General Fund....63

SERVICE AREA - ENGINEERING & COMPLIANCE....64

Compliance & Enforcement Division....65
401 Enforcement....66
402 Compliance Assistance & Operations....68
403 Compliance Assurance....70

Engineering Division....73
501 Permit Evaluation....74
503 Risk Assessment & Reduction....76
504 Permit Operations....78
506 Title V....80
507 Engineering Special Projects....82

Source Test....85
804 Source Test....86

Bay Area Air District

For Fiscal Year Ending June 30, 2027

CONTENTS

PAGE

SERVICE AREA - EQUITY & COMMUNITY PROGRAMS 88

Civil Rights Office 89
133 Civil Rights 90

Community Investments 93
153 Community Investments Office 94

Diversity, Equity and Inclusion Office 97
113 Office of Diversity Equity & Inclusion 98

Environmental Justice Division 101
302 Environmental Justice Division 102
617 AB617 104

Strategic Incentives Division 107
311 Woodsmoke Reduction Incentive Program 108
313 Grant Program Development and Support 110

Technology Implementation Office 113
126 Greenhouse Gas Technologies 114

SERVICE AREA - FINANCE & ADMINISTRATION 116

Administrative Resources Division 117
702 Facilities 118
703 Mailroom Services 120
707 Headquarters East (Richmond) 122
708 Business and Procurement 124
709 Headquarters West (Beale Street) 126
710 Fleet Services 128

Executive Office 131
104 Executive Office 132
121 Board of Directors 134
122 Hearing Board 136
123 Advisory Council & Community Advisory Council 138

Finance Division 141
106 Payroll 142
701 Finance/Accounting 144

Human Resources Division 147
107 Benefits Administration 148
109 Organizational Development 150
111 Employment Relations 152
114 Recruitment & Testing 154

SERVICE AREA - GENERAL COUNSEL 156

Bay Area Air District

For Fiscal Year Ending June 30, 2027

CONTENTS

PAGE

Legal Division 157
201 Legal Counsel 158
202 Hearing Board Proceedings 160
203 Legal Enforcement & Penalty Assessment 162
205 Litigation 164

SERVICE AREA - INFORMATION MANAGEMENT 166

Enterprise Technology Solutions Division 167
125 Software Development and Maintenance 168
309 Website Development & Maintenance 170
712 Records Management Systems 172
725 Contracted Software Management 174

Information Services Division 177
726 IT Engineering, Operations and DevOps 178
727 User Support Desk 180
728 Cyber Security 182

SERVICE AREA - POLICY 184

Planning & Climate Protection Division 185
605 Implement Plans, Policies & Measures 186
608 Air Quality and Climate Planning 188

Regulatory Development 191
611 Rule Development 192

SERVICE AREA - PUBLIC AFFAIRS 194

Communications Office 195
301 Media Relations 196
303 Spare the Air (winter) 198
305 Spare The Air (CMAQ) 200

External Affairs Office 203
127 General Fund Sponsorship 204
128 External Affairs 206

Legislative and Government Affairs Office 209
129 Legislative Program 210

SERVICE AREA - SCIENCE 212

Assessment, Inventory & Modeling Division 213
601 Emissions Inventory and Reporting 214
603 Air Quality Analysis and Support 216
604 Air Quality Modeling Management 218
609 Exposure Assessment 220

Bay Area Air District

For Fiscal Year Ending June 30, 2027

CONTENTS

PAGE

Meteorology & Measurement Division....223
802 Air Monitoring – Operations....224
803 Laboratory....226
805 Meteorology....228
807 Air Monitoring Quality Assurance....230
809 BioWatch Monitoring....232
810 Air Monitoring - Projects & Technology....234
811 Ambient Air Quality Analysis....236
812 Refinery Community Air Monitoring....238

PROGRAM DISTRIBUTIONS....241
Program 10 - General Fund Program Distribution....242
Program 11 - General Fund Program Distribution....243

Special Revenue Fund....244

Special Revenue Fund....245

SERVICE AREA - ENGINEERING & COMPLIANCE....246

Compliance & Enforcement Division....247
318 Enhanced Mobile Source Inspections (TFCA)....248

SERVICE AREA - EQUITY & COMMUNITY PROGRAMS....250

Strategic Incentives Division....251
307 State-Funded Incentive Programs....252
308 Transportation Fund for Clean Air Administration (TFCA)....254
310 Mobile Source Incentive Fund (MSIF)....256
312 Vehicle Buy Back (MSIF)....258
316 Miscellaneous Incentive Program (Other Grant)....260
323 CA GMB - Grants Administration (CGMB)....262
324 Volkswagen Environmental Mitigation Trust (VW Trust)....264

Technology Implementation Office....267
317 Light Duty Electric Vehicle Program (Other Grant)....268
330 Clean Cars for All (CCFA)....270

SERVICE AREA - PUBLIC AFFAIRS....272

Communications Office....273
306 Spare the Air Program (TFCA)....274

External Affairs....277
319 Commuter Benefits Program (TFCA)....278

Appendices

Appendix A: Selected Legal Requirements....282
Appendix B: General Fund Reserves and Liabilities....283

Bay Area Air District

For Fiscal Year Ending June 30, 2027

CONTENTS

	PAGE
Appendix C: General Fund Revenue Trends (Figure 1)	286
Appendix D: General Fund Expenditure Trends (Figure 2)	287
Appendix E: General Fund 5-Year Projection & Assumptions	288
Appendix F: Authorized Staffing	290
Appendix G: Definitions	298

- Page Intentionally Left Blank -

Bay Area Air District

Governing Board

LYNDA HOPKINS
Chair
Sonoma County (Supervisor)

VICKI VEENKER
Vice-Chair
City of Palo Alto (Mayor)

JUAN GONZÁLEZ III
City of San Leandro (Mayor)

DAVID HAUBERT
Alameda County - District 1 (Supervisor)

MARK SALINAS
City of Hayward (Mayor)

LENA TAM
Alameda County - District 3 (Supervisor)

DIONNE ADAMS
City of Pittsburg (Mayor)

KEN CARLSON
Contra Costa County - District 4 (Supervisor)

JOHN GIOIA
Contra Costa County - District 1 (Supervisor)

GABRIEL "GABE" QUINTO
City of El Cerrito (Mayor)

BRIAN COLBERT
Marin County - District 2 (Supervisor)

JOELLE GALLAGHER
Napa County - District 1 (Supervisor)

TYRONE JUE
City and County of San Francisco (Mayor's Appointee)

BILAL MAHMOOD
San Francisco County - District 5 (Supervisor)

SHAMANN WALTON
San Francisco County - District 10 (Supervisor)

NOELIA CORZO
San Mateo County - District 2 (Supervisor)

RICO E. MEDINA
City of San Bruno (Mayor)

RAY MUELLER
San Mateo County - District 3 (Supervisor)

MARGARET ABE-KOGA
Santa Clara County – District 5 (Supervisor)

OTTO LEE
Santa Clara County - District 3 (Supervisor)

LINDA SELL
Santa Clara County – District 1 (Councilmember)

BRIAN BARNACLE
City of Petaluma (Councilmember)

MONICA BROWN
Solano County - District 2 (Supervisor)

STEVE YOUNG
City of Benicia (Mayor)

PHILIP M. FINE, PH.D.
Executive Officer/APCO

Executive Officer Message

DEAR MEMBERS OF THE AIR DISTRICT COMMUNITY,

I am pleased to present the Fiscal Year (FY) 2026–27 Proposed Budget totaling $480 million. This budget has been thoughtfully developed to align with the Air District's 2024–2029 Strategic Plan and to advance the priorities of the Air District, our Board of Directors, and the communities we serve.

While the region faces mixed economic indicators and continued uncertainty in the state's fiscal outlook, this budget reflects a balanced and responsible approach that remains firmly grounded in our core mission and commitments. It makes targeted, prudent investments that further advance our goals to improve air quality, enhance public health, and strengthen community partnerships, consistent with the Air District's Strategic Plan. Additionally, the Air District continues to maintain healthy reserves to help mitigate potential future impacts related to state funding and other economic uncertainties.

While the balanced budget has no new staffing, it does include using operating surplus and reserves to continue investments in limited term contract employees (LTCE) and to support additional staffing needed for the Permit Backlog Reduction Plan approved by the Board of Directors in September 2025.

In order to effectively implement programs and policies that promote fiscal transparency and responsibility, the Air District is conducting assessments on two important topics related to permit fees: (1) cost recovery and containment, and (2) socioeconomic review of rules, including Regulation 3: Fees. These important studies will enable informed and thoughtful adjustments to Air District permit fees and cost recovery strategies.

The FY 2026-2027 budget continues to strengthen alignment with the 2024–2029 Strategic Plan. Building on the foundation established in FY 2025–2026, this budget further connects resources to our four strategic goals:

1. Achieve Impact – Strengthen enforcement, modernize regulations, and reduce health impacts from air pollution.
2. Advance Environmental Justice – Prioritize resources for overburdened communities, increase community-driven investments and partnerships, and improve air monitoring at local scales.
3. Foster Cohesion and Inclusion – Build a diverse workforce, enhance internal collaboration, and expand training to embed environmental justice into all aspects of our work.

4. Be Effective, Accountable and Customer-Oriented – Improve permitting and enforcement processes, increase transparency, and ensure fiscal responsibility.

To further align operations with Strategic Plan goals, the Air District's organizational structure has been refined into eight service areas, each playing a critical role in advancing the agency's mission. These service areas include Engineering and Compliance, Equity and Community Programs, Finance and Administration, General Counsel, Public Affairs, Information Management, and the newly restructured Science and Policy functions, which have been separated into two distinct service areas, each led by a Deputy Executive Officer.

KEY BUDGET RECOMMENDATIONS AND INVESTMENTS

The proposed FY 2026–2027 budget includes $274 million from the General Fund and $206 million from the Special Fund, for a combined total of $480 million. This budget also provides $116 million for new community grants under the Bay Reinvesting Penalties for Air Improvement and Resilience Program (Bay REPAIR). The Bay REPAIR program will reinvest penalty funds directly into communities most impacted by air pollution.

This year's budget strategically invests in limited-term staffing resources, infrastructure, and program enhancements to support the Air District's evolving role in protecting public health and addressing environmental disparities. Key recommendations include:

Environmental Justice and Community Engagement

- Direct investment in environmental justice initiatives, ensuring that overburdened communities receive targeted resources to address air pollution disparities.
- Expansion of community-driven funding programs, including penalty reinvestment strategies, so that fines from air quality violations directly benefit impacted communities.
- Enhanced transparency and accountability, ensuring that communities have clear access to air monitoring data, permitting and enforcement actions, and regulatory development.

Infrastructure and Capital Investments

- Allocation of $6 million for one-time investments to modernize operations by upgrading IT and monitoring systems, improving governance, expanding online access, and enhancing support to boost efficiency, transparency, and data quality.

Sustainable Revenue Strategies and Fiscal Responsibility

- Implementation of fee increases consistent with the Cost Recovery Policy, ensuring sustainable funding for Air District operations.
- General wage adjustment to help mitigate economic inflation and support workforce retention.

- Provision for an average 10% vacancy savings to accommodate recruitment timelines and attrition due to retirements.
- Commitment to pre-funding pension and Other Post-Employment Benefit (OPEB) includes $5 million in ongoing discretionary contributions to proactively reduce unfunded liabilities, supporting the Air District strategy of reaching 90% funding target.

A TRANSPARENT AND ACCOUNTABLE BUDGET

This year's budget advances alignment between the Strategic Plan and fiscal decision-making by connecting program budgets to the Strategic Plan strategies and goals, thereby strengthening accountability and transparency. This approach ensures that every dollar invested advances the Air District's commitment to environmental stewardship, public trust, and equity.

As we move forward, I encourage you to review the Budget in Brief to better understand how each service area contributes to implementing these priorities. Your continued support and engagement are essential as we work together to create a future with cleaner air, healthier communities, and a stronger, more inclusive Air District.

Sincerely,



DR. PHILLIP M. FINE
EXECUTIVE OFFICER/AIR POLLUTION CONTROL OFFICER

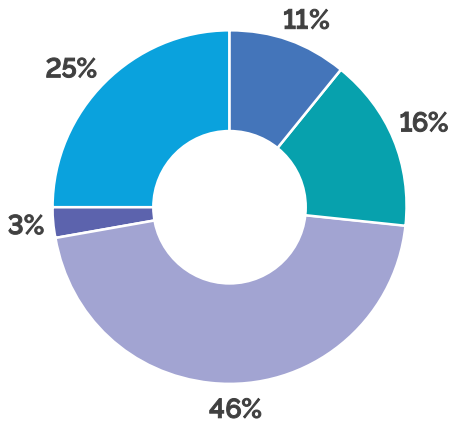
Table of Contents

All Fund Revenue and Expenditure by Type	06
All Fund Expenditure by Service Area	07
General Fund Revenue and Expenditure by Type	08
General Fund Expenditure by Service Area	09
Year to Year Comparison	10
Engineering and Compliance	11
Equity and Community Programs	14
Finance and Administration	18
General Counsel	22
Information Management	24
Policy	27
Public Affairs	30
Science	34

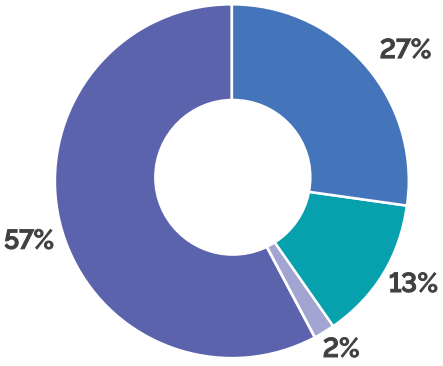
All Fund Revenue and Expenditure by Type

FY 2026-27 REVENUE AND EXPENDITURE ($ MILLIONS)

Revenue	($ Millions)	
Property Taxes	$51.3	11%
Permits/Fees	$75.6	16%
Grants	$219.3	46%
Other Revenue	$12.0	3%
Transfer From Reserves	$121.9	25%
Total Revenue	**$480.1**	

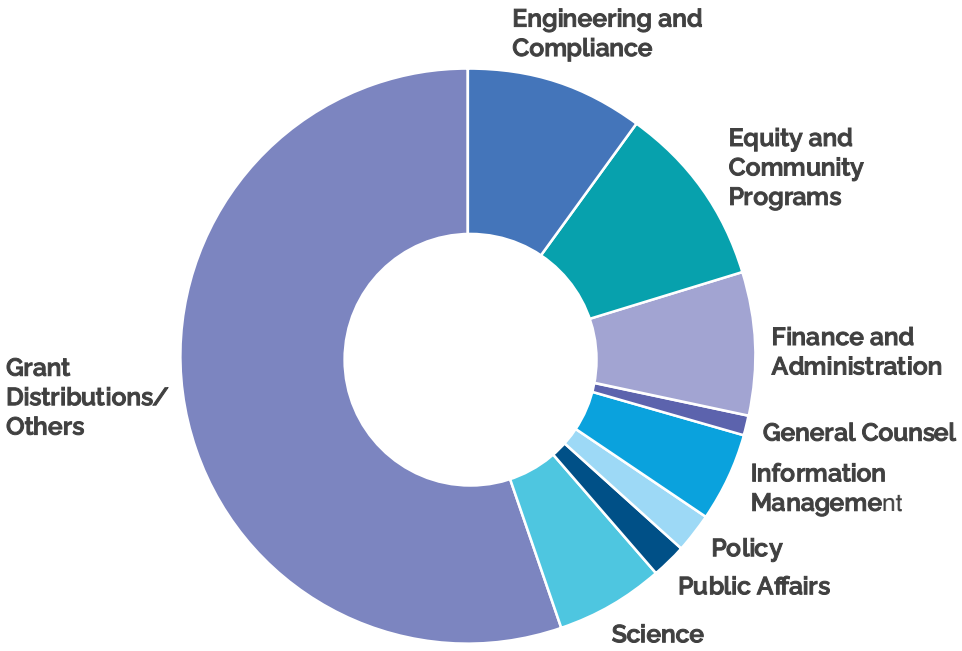


Expenditure		
Salaries and Benefits	$130.5	27%
Services and Supplies	$63.0	13%
Capital	$11.0	2%
Distributions and Transfers	$275.5	57%
Total Expenditure	**$480.1**	



All Fund Expenditure by Service Area

FY 2026-27 EXPENDITURE ($ MILLIONS)

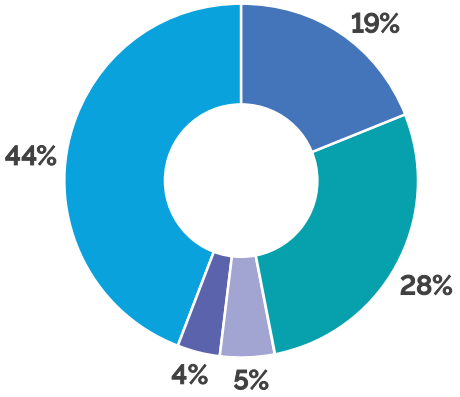


Expenditure	($ Millions)	
Engineering and Compliance	$50.4	10%
Equity and Community Programs	$49.2	10%
Finance and Administration	$38.8	8%
General Counsel	$7.0	1%
Information Management	$24.5	5%
Policy	$10.7	2%
Public Affairs	$11.8	2%
Science	$26.9	6%
Grant Distributions/Others	$260.8	54%
Total Expenditure	**$480.1**	

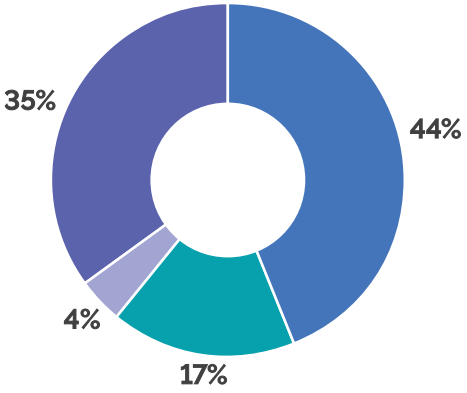
General Fund Revenue and Expenditure by Type

FY 2026-27 REVENUE AND EXPENDITURE ($ MILLIONS)

Revenue	($ Millions)	
Property Taxes	$51.3	19%
Permits/Fees	$75.6	28%
Grants	$13.4	5%
Other Revenue	$12.0	4%
Transfer From Reserves	$121.9	44%
Total Revenue	**$274.2**	

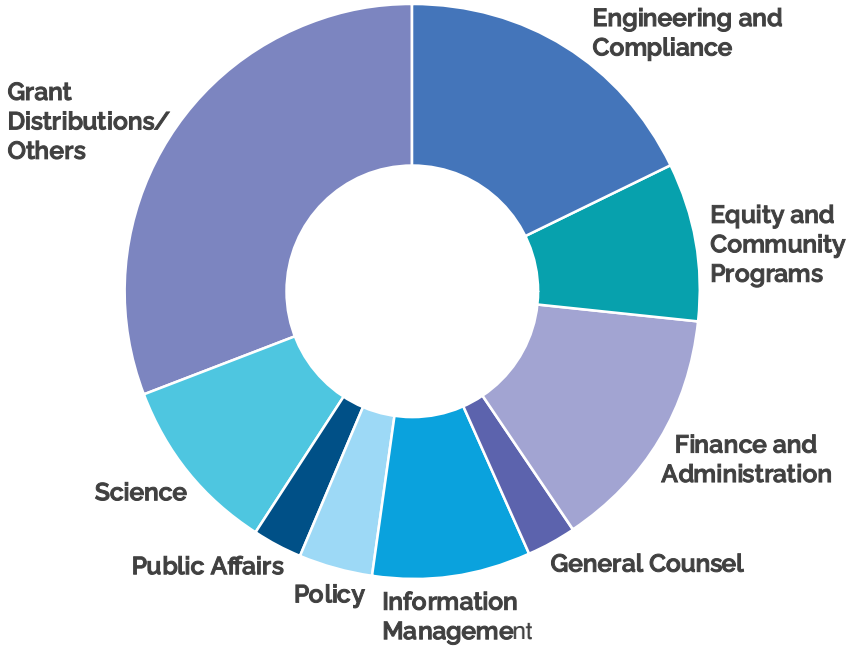


Expenditure		
Salaries and Benefits	$120.6	44%
Services and Supplies	$45.7	17%
Capital	$10.7	4%
Distributions and Transfers	$97.3	35%
Total Expenditure	**$274.2**	



General Fund Expenditure by Service Area

FY 2026-27 EXPENDITURE ($ MILLIONS)



Expenditure	($ Millions)	
Engineering and Compliance	$50.4	18%
Equity and Community Programs	$24.0	9%
Finance and Administration	$38.8	14%
General Counsel	$7.0	3%
Information Management	$24.5	9%
Policy	$10.7	4%
Public Affairs	$7.5	3%
Science	$26.9	10%
Grant Distributions/Others	$84.5	31%
Total Expenditure	**$274.2**	

Year to Year Comparison

FYE 2026 AND FYE 2027 REVENUE AND EXPENDITURE ($ MILLIONS)

	FYE 2026	FYE 2027	$ Δ	% Δ
All Fund Revenue by Type	$312.3	$480.1	$167.8	54%
Property Taxes	$47.6	$51.3	$3.7	8%
Permits/Fees	$68.7	$75.6	$6.9	10%
Grants	$165.7	$219.3	$53.6	32%
Other Revenue	$11.8	$12.0	$.3	2%
Transfer From Reserves	$18.5	$121.9	$103.3	558%
All Fund Expenditure by Type	$312.3	$480.1	$167.8	54%
Salaries and Benefits	$120.7	$130.5	$9.8	8%
Services and Supplies	$60.4	$63.0	$2.5	4%
Capital	$6.9	$11.0	$4.1	60%
Distributions and Transfers	$124.2	$275.5	$151.3	122%

	FYE 2026	FYE 2027	$ Δ	% Δ
General Fund Revenue by Type	$165.0	$274.2	$109.2	66%
Property Taxes	$47.6	$51.3	$3.7	8%
Permits/Fees	$68.7	$75.6	$6.9	10%
Grants	$18.5	$13.4	($5.1)	-28%
Other Revenue	$11.8	$12.0	$.2	2%
Transfer From Reserves	$18.5	$121.9	$103.3	558%
General Fund Expenditure by Type	$165.0	$274.2	$109.2	66%
Salaries and Benefits	$110.3	$120.6	$10.3	9%
Services and Supplies	$45.2	$45.7	$.5	1%
Capital	$6.5	$10.7	$4.2	64%
Distributions and Transfers	$3.0	$97.3	$94.3	3,153%

Engineering and Compliance

INTRODUCTION

SERVICE AREA OVERVIEW

Engineering and Compliance oversees regulatory compliance and pollution control measures to safeguard air quality for all Bay Area residents. This service area is primarily responsible for implementing regulations, permitting industrial processes, and enforcing air quality rules to minimize the impacts from a variety of air pollution sources in the Bay Area. Engineering and Compliance staff conduct rigorous inspections, investigations, and permit reviews, and also promote best practices and technological advancements to achieve regulatory compliance, reduce health risks, promote environmental justice, and protect the environment.

DIVISIONS

Compliance and Enforcement

The Compliance and Enforcement Division ensures the Air District will achieve emission reductions by ensuring the air quality regulations adopted by the Board of Directors, and permit conditions issued by the Executive Officer/APCO are properly implemented. Compliance with Air District, state, and federal regulations is achieved through a robust Compliance Assurance and Enforcement Program. The program includes comprehensive inspections and investigations and a complementary Compliance Assistance Program that supports compliance objectives of the division by maintaining operations, and assisting industry with air quality regulations and requirements.

Engineering

The Engineering Division reviews and processes permit applications and renewals for approximately 10,000 facilities with over 23,000 permitted devices and operations. It also manages Title V (Major Facility Review) permits for 75 facilities. In addition to permitting, the division oversees programs to assess and reduce risks from toxic air contaminants through Regulation 11, Rule 18; the State Air Toxics Hot Spots Program; and Regulation 2, Rule 5. The division also provides technical support across the agency, including rule development, emissions inventories, compliance and enforcement, planning, and community emission reduction plans.

Source Test

The Source Test Section conducts Air District source testing and provides oversight of facility source testing and continuous emissions monitoring in order to ensure that sources of air pollution report accurate emissions. Compliance with rules and permits is often determined using source test data and information. The Source Test Section also provides subject matter expertise to develop defensible emissions data to support permit actions, rule development, emissions inventories, and policy decisions.

Engineering and Compliance

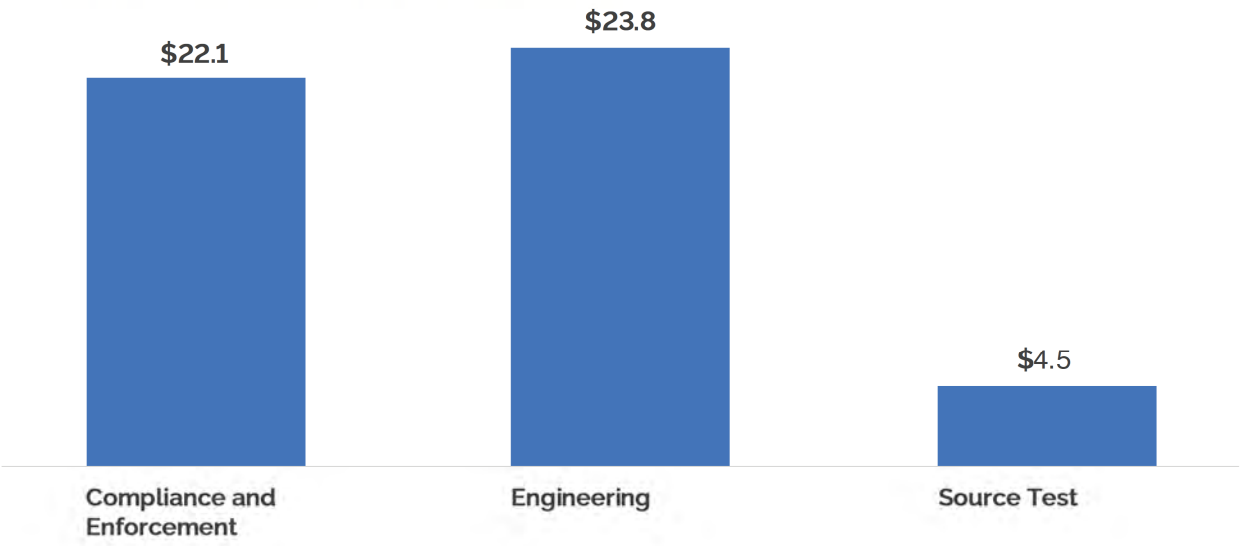
SERVICE AREA BUDGET SUMMARY

WORK PLAN HIGHLIGHTS

- Enhance compliance and enforcement policies to prioritize high-impact inspections in communities overburdened by air pollution. (Strategy 1.5)
- Strengthen enforcement investigations and accountability measures to ensure industries comply with air quality regulations. (Strategy 1.6)
- Improve accessibility and transparency of the air quality complaint process to better respond to community concerns. (Strategy 2.5)
- Reduce permitting delays and ensure equitable permit processing while addressing regulatory bottlenecks. (Strategies 4.1 and 4.2)
- Implement Board-approved strategic staffing adjustments for the Engineering Division to improve timeliness, consistency, and transparency in permitting. (Strategies 4.1, 4.2, and 4.3)
- Advance environmental justice principles in permitting decisions by integrating community input and health impact considerations. (Strategy 2.7)
- Increase transparency and public access to permit data and compliance actions to build trust and accountability. (Strategy 4.3)
- Prioritize Air District source tests for the facilities and communities with the greatest impacts. (Strategy 4.5)
- Develop improved emission factors and streamline source test reviews to increase timely action on permits. (Strategy 4.1)

Engineering and Compliance Expenditure

FY 2026-27 EXPENDITURE ($ MILLIONS)



Expenditure	FYE 2025 Audited Actual	FYE 2026 Approved Budget	FYE 2026 Amended Budget	FYE 2027 Proposed Budget	FYE 2027 FTE Headcount
Deputy Executive Officer					**1**
Compliance and Enforcement	$17.1	$21.0	$21.1	$22.1	99
Engineering	$14.0	$18.6	$19.4	$23.8	88
Source Test	$3.7	$4.5	$4.5	$4.5	16
Service Area Total	**$34.8**	**$44.1**	**$45.0**	**$50.4**	**204**

Equity and Community Programs

INTRODUCTION

SERVICE AREA OVERVIEW

Equity and Community Programs is dedicated to addressing environmental disparities and promoting community engagement within the Bay Area. Through targeted initiatives and partnerships, this service area aims to reduce pollution burdens in disproportionately impacted communities, improve public health outcomes, and foster environmental justice. Key initiatives include funding programs for emission reduction projects, incentivizing the adoption of clean technologies, and collaborating with community stakeholders to ensure equitable access to clean air and resources.

DIVISIONS

Community Investments Office

The Air District established the Community Benefits Penalty Funds Policy to directly support communities disproportionately impacted by air pollution. The Community Investments Office administers the Community Benefits Penalty Funds Policy and other funds from enforcement actions to direct resources back into the communities where violations occurred to improve community health and air quality.

Office of Civil Rights

The Air District established a new Office of Civil Rights to ensure compliance with key civil rights laws, including Title VI of the Civil Rights Act of 1964 and California Government Code Section 11135. This office will proactively assess and address potential disproportionate impacts on communities based on race, ethnicity, national origin, and other protected characteristics. Its primary focus will be on reviewing public-facing programs, conducting compliance audits, providing staff training, and managing civil rights complaints through a transparent and accessible process.

Environmental Justice

The Environmental Justice Division supports the agency's mission by collaborating with impacted communities and partners across the Bay Area to advance public health, equity, and environmental justice. The office works with community members and partners to increase awareness and transparency of air quality issues, build capacity, expand opportunities for impacted communities to participate in Air District decision-making, and support implementation of community-identified solutions. Key programs include the AB 617 Community Health Protection Program, the Community Advisory Council, the development of the agency's Environmental Justice Policy, and the James Cary Smith Community Grant Program,

Diversity, Equity and Inclusion Office

The Air District's Diversity, Equity and Inclusion Office is responsible for developing initiatives and applying an equity lens to programs, policies, practices, and procedures. Responsibilities include capacity building related to staffing, recruitment, promotions, inclusive practices in the workplace, contracting for capital projects and services, and equity training. The office recognizes the contributions of all employees and community members and works to sustain an environment where everyone is valued, respected, and included.

Strategic Incentives

The Strategic Incentives Division manages Special Revenue funds to accelerate voluntary emissions reductions, advance zero-emission technologies, and reduce community exposure to air pollution. Primarily targeting mobile sources and select stationary sources, the division incentivizes replacing older, high-emission equipment with cleaner alternatives. Programs are designed to deliver cost-effective benefits to the Bay Area while meeting strict legislative and oversight requirements, and to help businesses and agencies transition to cleaner fleets while supporting adoption of emerging technologies across sectors.

Technology Implementation Office

The Technology Implementation Office's mission is to advance emerging, cost-effective solutions to achieve greenhouse gas emissions reductions for the transportation and industrial source sectors. The office connects climate technologies and customers by providing financial incentives through grants for light-duty vehicles, electric vehicle infrastructure, and loans for various emerging climate solutions, as well as technical and match-making support. By supporting the scale-up of climate technologies, the office can help achieve state and regional greenhouse gas emissions targets and reduce emissions in impacted communities, while also making technologies cost effective.

Equity and Community Programs

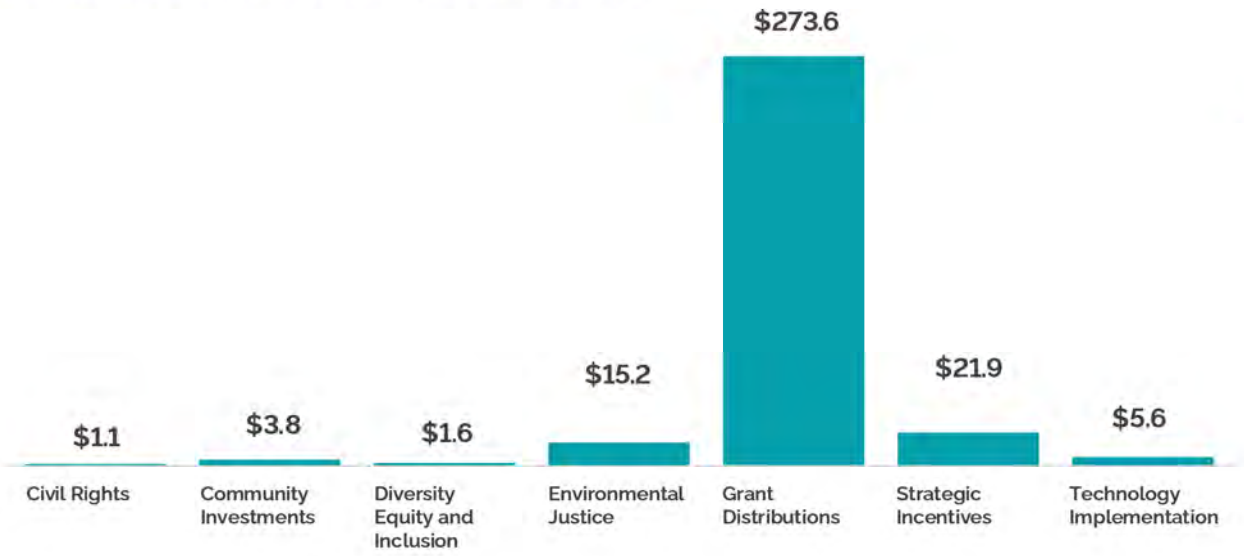
SERVICE AREA BUDGET SUMMARY

WORK PLAN HIGHLIGHTS

- Expand clean energy and zero-emission infrastructure investments to support climate resilience in frontline communities. (Strategy 1.7)
- Launch the Local Community Benefits Fund to reinvest penalty funds back into the communities where air quality violations occurred. (Strategy 2.10)
- Modernize the grant application system to improve transparency and efficiency for funding clean air initiatives. (Strategy 4.12)
- Align grant guidelines with best practices for the community grant fund to inform the Peoples Air Grant. (Strategy 2.8)
- Advance equitable state incentive programs that directly benefit communities overburdened by pollution. (Strategy 2.4)
- Implement the Clean HEET Program to reduce wintertime wood smoke pollution and improve air quality in highly-impacted areas. (Strategy 1.1)
- Strengthen community engagement through the Environmental Justice Navigator Program to build relationships and trust. (Strategy 2.1)
- Expand access to environmental career pathways through the Environmental Justice and Diversity Scholars Program. (Strategy 3.6)

Equity and Community Programs Expenditure

FY 2026-27 EXPENDITURE ($ MILLIONS)



Expenditure	FYE 2025 Audited Actual	FYE 2026 Approved Budget	FYE 2026 Amended Budget	FYE 2027 Proposed Budget	FYE 2027 FTE Headcount
Deputy Executive Officer					**1**
Civil Rights	-	$0.6	$0.6	$1.1	3
Community Investments	$0.1	$3.3	$3.3	$3.8	5
Diversity Equity and Inclusion	$0.9	$1.5	$1.6	$1.6	4
Environmental Justice	$12.8	$18.3	$21.0	$15.2	23
Grant Distributions	$72.5	$122.1	$136.1	$273.6	-
Strategic Incentives	$9.2	$21.7	$23.5	$21.9	35
Technology Implementation	$3.7	$5.6	$6.4	$5.6	11
Service Area Total	**$99.1**	**$173.2**	**$192.5**	**$322.8**	**82**

Finance and Administration

INTRODUCTION

SERVICE AREA OVERVIEW

Finance and Administration manages the financial, administrative, and operational functions of the Air District. This service area is tasked with budgeting, financial planning, procurement, human resources management, and facilities maintenance to support the organization's mission. By ensuring sound fiscal management and operational efficiency, Finance and Administration enables the Air District to fulfill its responsibilities and deliver essential services to the community.

DIVISIONS

Board of Directors

The Air District's Board of Directors is a governing body comprised of 24 locally elected representatives selected from the nine counties across the Bay Area region. These representatives bring a diverse range of perspectives and experiences to the table, reflecting the unique needs and concerns of their respective communities. As stewards of the region's air quality and environmental health, the Board plays a pivotal role in setting policies, guiding strategic initiatives, and overseeing the implementation of programs aimed at improving air quality, protecting public health, and addressing climate change challenges.

Executive Office

The Executive Office of the Air District serves as the central administrative hub, overseeing the strategic direction, coordination, and management of the organization. It provides leadership, guidance, and support to all service areas and departments within the Air District. The Executive Office is responsible for setting organizational goals, developing policies, and ensuring effective implementation of initiatives to improve air quality, protect public health, and address environmental challenges in the Bay Area.

Administrative Resources

The Administrative Resources Division provides administrative and operational support for the Air District. The Business Office handles contracts, purchasing, risk management, the mailroom, and office support services. The Fleet Office oversees vehicle acquisition, maintenance, accident management, and procurement. The Facilities Office manages planning, maintenance, construction oversight, and operations for all Air District facilities, including security and safety measures.

Finance Office

The Finance Office ensures fiscal stewardship and financial accountability for the Air District. Responsibilities include accounting, financial audits, reporting, vendor payments, permit fee processing, asset management, and

maintaining the financial system. The office also develops the annual budget, conducts cost recovery analysis and manages financial reporting for federal and state grants.

Human Resources Office

The Human Resources Office is responsible for personnel matters, including payroll and benefits, labor and employee relations, recruitment and testing, employee engagement, processing personnel actions, employee performance appraisal and recognition programs, organizational development and training, health and safety compliance, workers compensation and special events coordination.

Finance and Administration

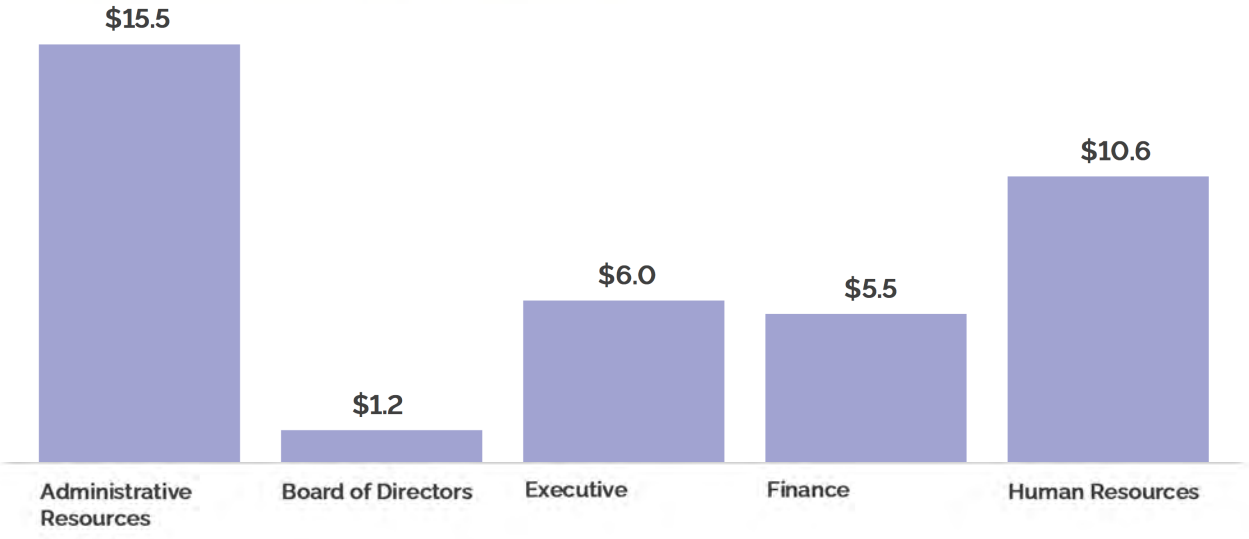
SERVICE AREA BUDGET SUMMARY

WORK PLAN HIGHLIGHTS

- Expand targeted recruitment programs to increase workforce diversity and ensure Air District staff reflect impacted communities. (Strategy 3.1)
- Implement a comprehensive professional training plan encompassing onboarding, ongoing skills development, and environmental justice, leadership, and regulatory compliance training. (Strategy 3.6)
- Enhance budget transparency, fiscal stewardship, and strategic resource allocation through improved budget tools, reporting, and long-range planning. (Strategy 4.12)
- Advance asset planning to support mission delivery by ensuring facilities and fleet assets are aligned with long-term operational needs, workforce flexibility, and fiscal sustainability. (Strategy 4.11)
- Improve procurement and contract management practices to increase efficiency, transparency, and alignment with Air District priorities. (Strategy 4.12)

Finance and Administration Expenditure

FY 2026-27 EXPENDITURE ($ MILLIONS)



Expenditure	FYE 2025 Audited Actual	FYE 2026 Approved Budget	FYE 2026 Amended Budget	FYE 2027 Proposed Budget	FYE 2027 FTE Headcount
Deputy Executive Officer					**1**
Administrative Resources	$10.0	$15.3	$16.6	$15.5	16
Board of Directors	$0.6	$0.6	$0.8	$1.2	-
Executive	$7.2	$6.4	$7.2	$6.0	14
Finance	$4.3	$5.4	$5.5	$5.5	18
Human Resources	$7.9	$8.1	$8.6	$10.6	12
Service Area Total	**$30.0**	**$35.8**	**$38.7**	**$38.8**	**61**

General Counsel

INTRODUCTION

The General Counsel provides legal counsel, representation, and support to the Air District on matters related to environmental law, regulatory compliance, enforcement actions, and policy development. This service area plays a crucial role in interpreting and implementing laws, regulations, and policies governing air quality and environmental protection. The General Counsel manages the attorneys and non-attorney staff in the Legal Office and outside counsel retained to handle specialized matters. The General Counsel and the attorneys in the Legal Office help the Air District navigate complex legal challenges, uphold regulatory standards, and advance environmental justice objectives.

SERVICE AREA BUDGET SUMMARY

WORK PLAN HIGHLIGHTS

- Adopt a new enforcement policy to hold violators accountable and ensure violations result in meaningful consequences. (Strategy 1.6)
- Develop enhanced investigation protocols to build strong legal cases for effective enforcement. (Strategy 1.5)
- Develop a new "Enforcement Town Hall Meeting" Policy to communicate regularly with affected communities about Air District enforcement activities and enforcement issues of community concern. (Strategy 2.6)
- Develop protocols to formalize how the Air District ensures compliance with civil rights laws in permitting. (Strategy 2.10)
- Expand environmental justice legal training and professional development through implementation of the Environmental Justice Law Fellowship program. (Strategy 3.4)

General Counsel Expenditure

FY 2026-27 EXPENDITURE ($ MILLIONS)



Expenditure	FYE 2025 Audited Actual	FYE 2026 Approved Budget	FYE 2026 Amended Budget	FYE 2027 Proposed Budget	FYE 2027 FTE Headcount
Legal	$5.6	$6.3	$7.6	$7.0	19
Service Area Total	**$5.6**	**$6.3**	**$7.6**	**$7.0**	**19**

Information Management

INTRODUCTION

SERVICE AREA OVERVIEW

Information Management leads the modernization of the Air District's technology infrastructure, improves core business processes, and coordinates strategic cross-functional projects under a governance structure focused on the AIr District's five-year Strategic Plan. Together, Enterprise Technology Solutions and Information Services strengthen mission delivery, information security, innovation, and structured project management.

DIVISIONS

Enterprise Technology Solutions

The Enterprise Technology Solutions Division identifies, develops, and implements both custom and off-the-shelf technologies that enhance the Air District's core operations. Key examples include systems, which enable permitting, inspection, and enforcement processes for regulated facilities, grants management tools, the Air District's financial system, and the technology powering the public-facing website. This division works closely with other service areas to streamline business processes, promote innovation, and ensure that technology solutions effectively meet staff and community needs.

Information Services

Information Services is responsible for designing, implementing, and maintaining the Air District's information technology infrastructure. This includes managing servers and networks, telecommunications, cybersecurity, business continuity, and disaster recovery systems. The division also provides user support to Air District staff and technical assistance to external stakeholders, ensuring seamless and secure access to online services. By focusing on resilience and continuous improvement, Information Services safeguards the Air District's data and systems against evolving threats and disruptions and fosters effective implementation of initiatives to improve air quality, protect public health, and address environmental challenges in the Bay Area.

Information Management

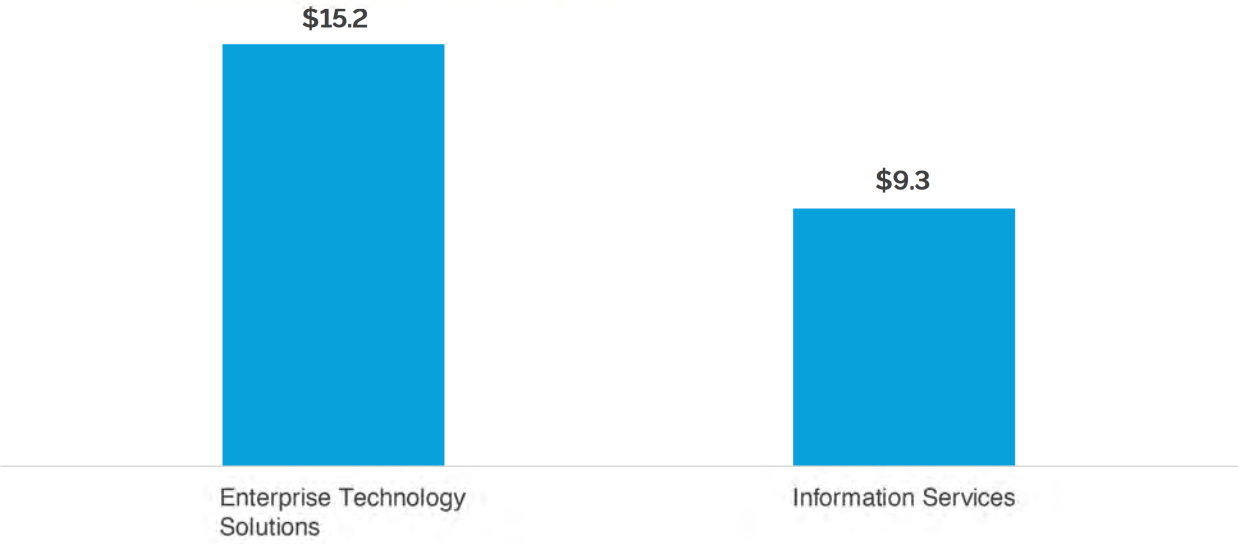
SERVICE AREA BUDGET SUMMARY

WORK PLAN HIGHLIGHTS

- Enhance the Air District's IT infrastructure to enhance cybersecurity and resilience. (Strategy 4.12)
- Establish governance and portfolio management that will provide reliable upfront implementation and operational planning for Air District initiatives. (Strategy 4.10)
- Create online data portals to provide public access to comprehensive air quality, permitting and compliance data. (Strategy 2.3)
- Streamline permitting and enforcement systems for greater transparency and operational efficiency. (Strategy 4.1)
- Develop improved grants management systems to increase accessibility for frontline communities. (Strategy 2.8)
- Enhance user support and training to improve service delivery. (Strategy 4.7)

Information Management Expenditure

FY 2026-27 EXPENDITURE ($ MILLIONS)



Expenditure	FYE 2025 Audited Actual	FYE 2026 Approved Budget	FYE 2026 Amended Budget	FYE 2027 Proposed Budget	FYE 2027 FTE Headcount
Deputy Executive Officer					**1**
Enterprise Technology Solutions	$11.2	$10.6	$11.8	$15.2	17
Information Services	$6.3	$7.2	$8.7	$9.3	16
Service Area Total	**$17.6**	**$17.8**	**$20.6**	**$24.5**	**34**

Policy

INTRODUCTION

SERVICE AREA OVERVIEW

Policy oversees and coordinates local and regional-scale air quality planning and develops and updates the Air District's regulations. The planning processes set goals and priorities for measures that the Air District takes to protect public health and the environment. The regulatory development process uses science and engineering to ensure the Air District's regulations are effective and impactful.

DIVISIONS

Planning and Climate Protection

The Planning and Climate Protection Division ensures compliance with air quality standards, leads climate initiatives, and coordinates local emissions reduction plans under AB 617. Staff support environmental justice efforts, assist with General Plan Environmental Justice Elements (SB 1000), and promote equity in climate action. They provide model ordinances, technical resources, and best practices to accelerate action. Additionally, they help agencies apply CEQA thresholds and updated guidelines to protect health and mitigate climate impacts.

Regulatory Development

The Regulatory Development Division is responsible for developing regulations to implement Air District plans to attain federal and state air quality standards and protect public health. In addition, staff assist with the preparation of community and regional air quality plans. Other measures are developed under the direction of the Board of Directors to further protect public health and safety and reduce emissions of greenhouse gases. In addition, staff review existing regulations and develop amendments to improve clarity, efficiency, and effectiveness.

Policy

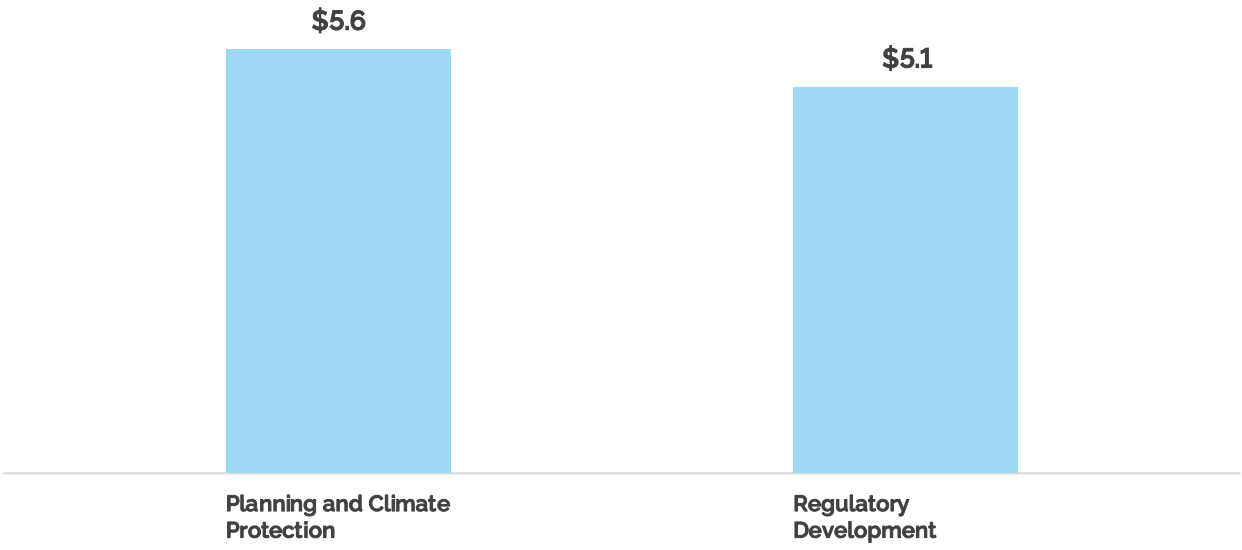
SERVICE AREA BUDGET SUMMARY

WORK PLAN HIGHLIGHTS

- Strengthen air pollution regulations to reduce emissions from major industrial sources. (Strategy 1.2)
- Minimize flaring. (Strategy 1.3)
- Change approach to air quality. (Strategy 1.1)
- Community Partnerships (Strategy 2.1)
- Advance innovative climate solutions and implement regional climate plans. (Strategy 1.7)

Policy Expenditure

FY 2026-27 EXPENDITURE ($ MILLIONS)



Expenditure	FYE 2025 Audited Actual	FYE 2026 Approved Budget	FYE 2026 Amended Budget	FYE 2027 Proposed Budget	FYE 2027 FTE Headcount
Deputy Executive Officer					**1**
Planning and Climate Protection	$4.4	$4.7	$5.7	$5.6	21
Regulatory Development	$2.6	$4.4	$5.0	$5.1	16
Service Area Total	**$7.1**	**$9.1**	**$10.7**	**$10.7**	**38**

Public Affairs

INTRODUCTION

SERVICE AREA OVERVIEW

Public Affairs is responsible for communication, outreach, and public engagement efforts to raise awareness, promote transparency, and foster community involvement in air quality issues. This service area develops and implements communication strategies, public education campaigns, and media relations activities to inform the public, policymakers, and stakeholders about air quality initiatives, health risks, and regulatory developments.

By fostering open dialogue and collaboration, Public Affairs enhances public understanding and support for the Air District's mission. Government Outreach and Special Projects develops policy proposals, guidance, and planning to support internally-facing activities related to executive and administrative functions and partnerships with local government focused on incident response and emergency preparedness.

DIVISIONS

Communications Office

The Air District's Communications Office leads agency-wide internal and external communications to ensure information shared with the public, partners, media, and staff is accurate, timely, accessible, and aligned with the Air District's mission, policies, and Board direction. The office serves as the central coordination point for communications activities across the agency, providing strategic guidance and oversight to ensure consistency and clarity in Air District messaging.

The Communications Office manages media relations and public information, including proactive outreach, press releases, and responses to media inquiries. The office is responsible for public health and air quality messaging, incident and emergency communications, and crisis response, including coordination with partner agencies during air quality incidents and other time-sensitive events. The office also leads internal communications, ensuring employees receive clear, consistent, and timely information about agency priorities, policies, major initiatives, and operational changes.

In addition, the Communications Office develops and executes print, digital, social media, and video communications; manages agency advertising; and oversees the Air District's social media platforms. The office produces and coordinates videography and multimedia content to support public education, outreach campaigns, internal communications, and the timely sharing of information across digital platforms. The office leads strategy, advertising, and outreach for the Spare the Air program and the Spare the Air Employer Program, including development of regional campaigns, partner toolkits, and public-facing materials. The office also leads advertising and outreach campaigns for major regulatory initiatives, including the Appliance

Rules, developing and implementing multilingual, equity-focused communications to inform residents, businesses, contractors, and other stakeholders.

The Communications Office oversees the Spare the Air website, related microsites, and mobile applications, ensuring content is current, user-friendly, and accessible. Communications staff also represent the Air District at community events throughout the region in support of Spare the Air, Appliance Rules outreach, and broader air quality education and awareness efforts.

External Affairs Office

The External Affairs Office coordinates the administration of the Commuter Benefits Program, in partnership with the Metropolitan Transportation Commission, and in 2026, will direct the Flex Your Commute messaging campaign to encourage greater use of commuter benefits by Bay Area employees. The office directs the Air District's external sponsorship program to ensure transparency, goals, and benefits are met in accordance with the Air District sponsorship policy.

External Affairs will launch the new Stakeholder Directory in 2026, a resource for staff to quickly identify city leaders throughout the nine-county region and track our engagement with the departments to build stronger relationships with our cities and residents. A guide for talking points development as well as a topic library for relevant Air District messaging is currently being created.

In 2026, the office will hire staff to develop a districtwide local government partnership program to expand messaging reach and information sharing with city, county and state agencies, and non-governmental organizations. The office also works with Air District staff to coordinate events and regional conferences to expand messaging for targeted initiatives and further build regional partnerships.

Legislative and Government Affairs Office

The Legislative and Government Affairs Office coordinates and tracks developing positions on state and federal legislation and budget proposals, meets with legislators and legislative staff about policy proposals and updates them on Air District activities. The office represents the Air District at legislative hearings, and interacts with stakeholder groups, state and local agencies, and members of the public. The office disseminates information on current legislative policy and budget proposals that affect Air District programs and policies and develops strategies to further the Air District's legislative priorities.

Public Affairs

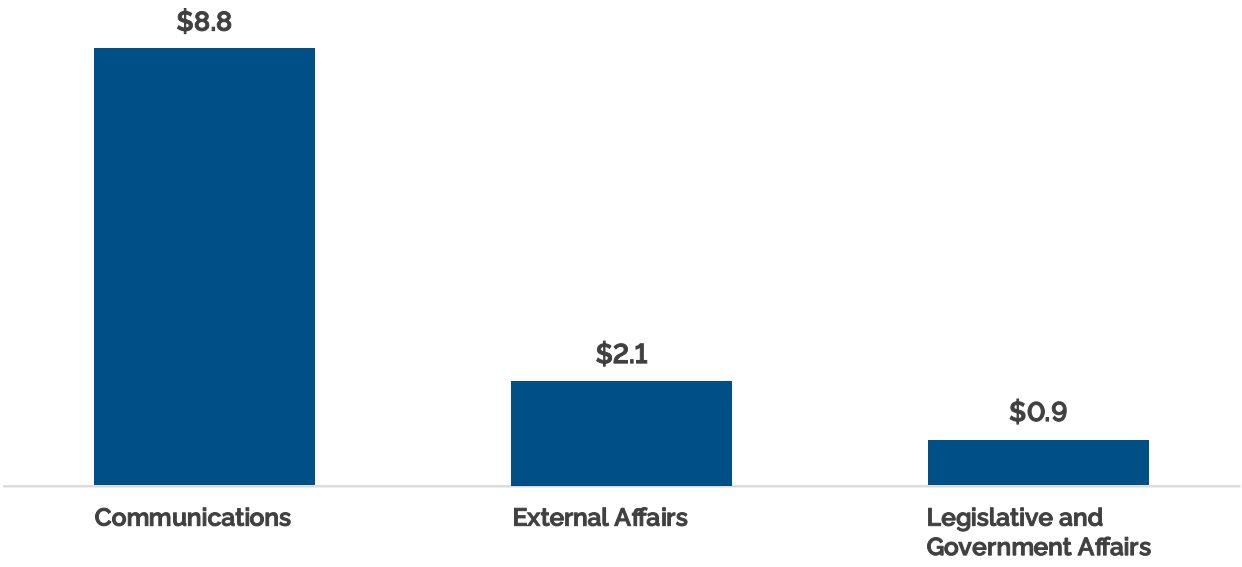
SERVICE AREA BUDGET SUMMARY

WORK PLAN HIGHLIGHTS

- Enhance real-time public communication on air quality incidents to ensure accessibility and responsiveness. (Strategy 4.8)
- Strengthen partnerships with local governments and community organizations to amplify messaging and engagement. (Strategy 2.1)
- Expand public notification tools for improved incident response and transparency. (Strategy 4.6)
- Increase digital and social media outreach to support education on rulemaking, enforcement, and climate initiatives. (Strategy 4.7)
- Develop internal and external communication training to improve staff effectiveness. (Strategy 3.3)

Public Affairs Expenditure

FY 2026-27 EXPENDITURE ($ MILLIONS)



Expenditure	FYE 2025 Audited Actual	FYE 2026 Approved Budget	FYE 2026 Amended Budget	FYE 2027 Proposed Budget	FYE 2027 FTE Headcount
Deputy Executive Officer					**1**
Communications	$5.9	$7.3	$8.5	$8.8	13
External Affairs	$0.8	$2.0	$2.1	$2.1	5
Legislative and Government Affairs	$0.6	$0.9	$0.9	$0.9	2
Service Area Total	**$7.3**	**$10.3**	**$11.5**	**$11.8**	**21**

Science

INTRODUCTION

SERVICE AREA OVERVIEW

Science conducts monitoring and modeling research and analysis to inform decision-making and advance air quality goals in the Bay Area. This service area monitors air quality, calculates and tracks emissions, and assesses health impacts to inform policy priorities. Science provides evidence-based recommendations to address air quality challenges, mitigate pollution sources, and protect public health and the environment.

DIVISIONS

Assessment, Inventory and Modeling

The Assessment, Inventory, and Modeling Division develops air pollution inventories and conducts air quality modeling at the regional and community levels. It evaluates equity in pollution exposure and health impacts to support Air District programs. The division improves and reports emissions estimates for criteria pollutants, toxic air contaminants, and climate-forcing pollutants. Staff assess emissions, concentrations, and exposures to pollutants, such as particulate matter and ozone, to support targeted pollution reduction strategies.

Meteorology and Measurements

The Meteorology and Measurements Division provides air quality and meteorological data, chemical analysis, and forecasting to support the Air District's enforcement, permitting, rule development, communications, and community engagement efforts. Staff operate monitoring instruments, conduct testing and analysis, and develop air monitoring and testing plans. They also design and maintain instruments and systems, ensure data quality through rigorous quality assurance and control, and analyze and communicate findings to support air quality management.

Science

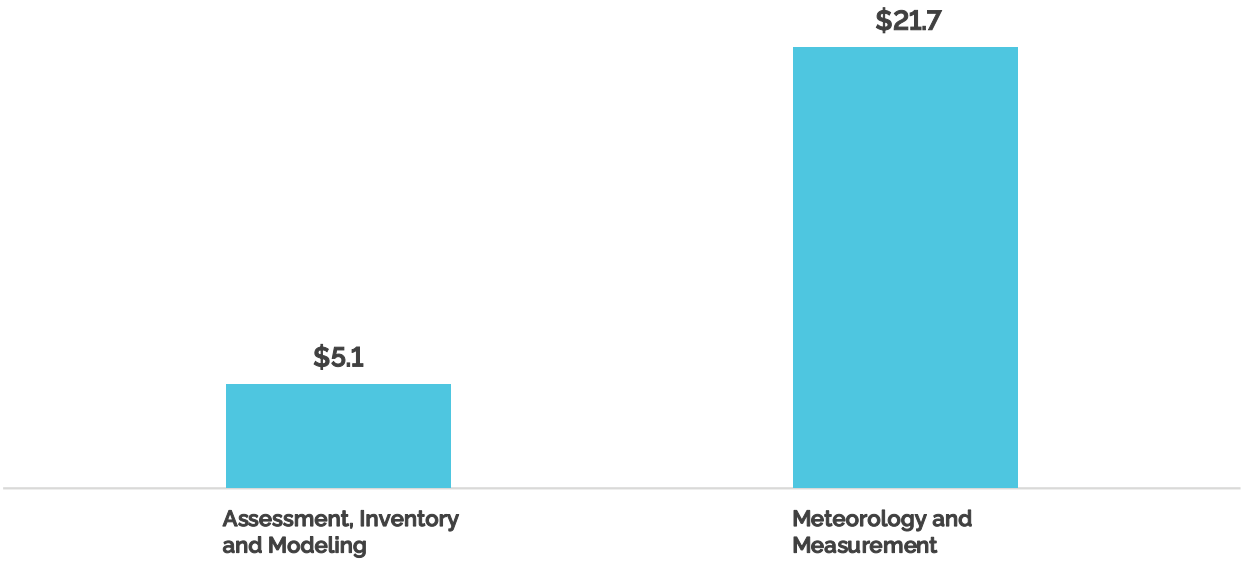
SERVICE AREA BUDGET SUMMARY

WORK PLAN HIGHLIGHTS

- Routinely update, report, and share the regional emissions inventory and source-specific emissions estimates. (Strategy 1.1 and 2.3)
- Enhance community-driven air quality data collection and public access to information. (Strategy 2.3)
- Conduct local assessments and exposure analysis to better understand the population exposure and health impacts of air pollutants in the Bay Area. (Strategy 2.4)
- Work with communities overburdened by air pollution to conduct air monitoring and develop air dispersion modeling to improve understanding of local air quality, inter-regional emissions transport, and their impacts on the Bay Area's air quality. (Strategy 2.7)
- Upgrade air quality monitoring networks to improve reliability, efficiency, data quality, and accessibility. (Strategy 4.4)

Science Expenditure

FY 2026-27 EXPENDITURE ($ MILLIONS)

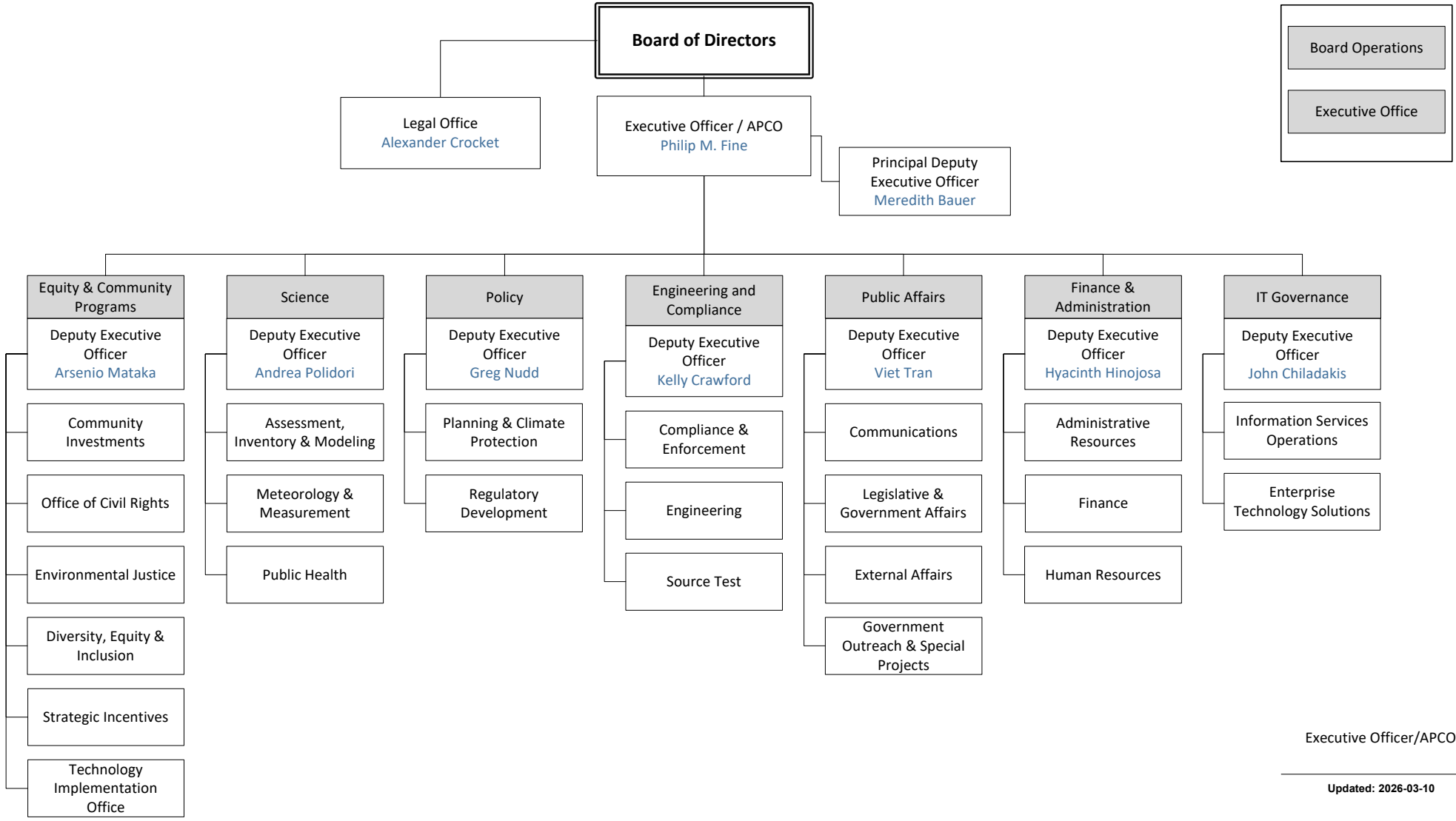


Expenditure	FYE 2025 Audited Actual	FYE 2026 Approved Budget	FYE 2026 Amended Budget	FYE 2027 Proposed Budget	FYE 2027 FTE Headcount
Deputy Executive Officer					**1**
Assessment, Inventory and Modeling	$3.8	$4.2	$4.4	$5.1	19
Meteorology and Measurement	$14.3	$21.0	$21.7	$21.7	59
Service Area Total	**$18.1**	**$25.2**	**$26.1**	**$26.9**	**79**

- Page Intentionally Left Blank -

Bay Area Air District

Bay Area Air District Organizational Chart



Executive Officer/APCO

Updated: 2026-03-10

Bay Area Air District Annual Budget Process

December

Air District administration begins development of the annual budget, developing recommendations, strategic plan projects, budget projections and staffing recommendations for the upcoming budget

Air District administration presents prior year financial results and presents mid-year budget adjustments.

January

The Board conducts an annual board retreat and engages the public and staff on priorities for the upcoming budget year

February

Air District staff conduct public workshop on the Fee Regulation amendments

Air District staff finalize proposed budget and proposed Fee Regulation with staffing recommendation and prepares a 5 Year financial forecast with key assumptions

March – May

Proposed Budget is released to the Public

Air District staff conduct a Community Workshop to receive input on the Budget and Fee Regulation

The Air District's Finance and Administration Committee receives public input and on the Proposed Fee Regulation Amendments and Proposed Budget

The Air District's Finance and Administration Committee deliberates the budget and fee proposals and refers recommendations for consideration to the Board.

The Board conducts its first public hearing on the Proposed Fee Regulation amendments and Proposed Budget for deliberation and public input.

June

The Board conducts its second public hearing and adopts the Fee regulations and Budget.

July 1

The adopted fees and budget becomes effective.

The 2024-2029 Strategic Plan was adopted by the Air District Board of Directors in September 2024.

In its second year of implementation, the Air District's proposed FY 2026–2027 budget deepens alignment between Strategic Plan commitments and workplace investments. Building on foundational work completed in the first year, the proposed budget prioritizes staffing, systems, and workplace improvements that accelerate delivery of outcomes across all four Strategic Plan goals, with particular emphasis on environmental justice, organizational effectiveness, and internal capacity building.

The plan is centered on four primary goals: 1. Achieve impact, 2. Advance environmental justice, 3. Foster cohesion and inclusion, and 4. Maintain an effective, accountable, and customer-oriented organization. The strategic plan includes 36 strategies and 124 commitments to action.

Strategic Plan Summary

Under Goal 1, Bay Area Air District will achieve impact by improving our approach to air quality planning. To achieve impact, we will strengthen our regulations, permitting and enforcement policies, and improve how we hold industry accountable when our regulations are violated. We will work with communities to distribute grants, we will develop innovative regional solutions to climate change, and we will better support our local government partners and other agencies in their efforts to mitigate climate change.

Under Goal 2, we will advance environmental justice by supporting, partnering with, and uplifting communities overburdened by pollution to reduce disparities in air pollution exposure. We will help communities collect their own air pollution data and provide tools to assess and understand existing air pollution data. We will improve our air quality complaint process, identify air pollution disparities, and develop a community-led process on how communities will spend money collected from industry violations penalties.

Under Goal 3, Bay Area Air District will foster cohesion and inclusion by striving to make the Air District's workforce more diverse and reflective of the communities we serve. To increase organizational cohesion, we will make sure everyone in the organization understands and respects the value of diverse workforce, one that welcomes and includes everyone.

Under Goal 4, we will maintain an effective, accountable, and customer-oriented organization, delivering exemplary services with transparency and efficiency. We will improve our permitting, monitoring, and enforcement processes; our data management systems; increase efficiency and effectiveness of our inspections. We will also ensure that we keep the promises we make as we align the Air District's resources and annual budgets with organization and community priorities and report on our progress regularly.

Strategic Plan Process

Every year, we will report progress on our efforts to implement the 2024-29 Strategic Plan. Progress reports will be used to determine whether we need to revise our Strategic Plan implementation action plans to be more effective. Every five years we will perform a comprehensive Strategic Plan update, which will provide an opportunity to reassess our priorities. As with the development of the 2024-29 Strategic Plan, we will consult with communities, employees, our partners, and the Board of Directors in the plan update.

Strategic Plan Implementation – Action Plans.

As the Strategic Plan enters its second budget year, action plans are actively supported through funded positions, technology investments, and cross-service area coordination reflected in the proposed FY 2026–2027 budget. Progress reporting will continue to inform refinements to action plans and resource allocation. Bay Area Air District will take steps to advance all 36 strategies and strategy commitments over the five year Strategic Plan timeline by developing priority area action plans, often crossing multiple divisions and services areas to deliver results on promised commitments. An initial set of 24 action plans have been identified and set up across the organization. They include specific key milestones and due dates through December 2026, covering approximately 87 percent of the Strategic Plan commitments. Subsequent action plans will address all remaining commitments.

Most action plans cover multiple Strategic Plan strategies and commitments, though some cover single strategies or even a single commitment. In total, the action plans include over 480 key milestones.

Concurrently with developing action plans, staff continued to make progress on work already underway at the time the *2024-2029 Strategic Plan* was adopted. Numerous actions, advancing all four goals, have been completed.

District-Wide Revenue and Expenditure Budgets

TABLE I: Consolidated Expenditures and Revenues by Major Categories

	AUDITED ACTUALS FYE 2025			APPROVED BUDGET FYE 2026			AMENDED BUDGET FYE 2026			PROPOSED BUDGET FYE 2027		
	GENERAL FUND	SPECIAL FUNDS	TOTAL FUNDS	GENERAL FUND	SPECIAL FUNDS	TOTAL FUNDS	GENERAL FUND	SPECIAL FUNDS	TOTAL FUNDS	GENERAL FUND	SPECIAL FUNDS	TOTAL FUNDS
REVENUES												
County Revenues	49,888,444		49,888,444	47,568,000		47,568,000	47,568,000		47,568,000	51,300,000		51,300,000
Permits / Fees	70,540,882		70,540,882	68,713,181		68,713,181	68,713,181		68,713,181	75,620,528		75,620,528
Grant Revenues	12,354,578	84,683,859	97,038,437	16,897,694	147,263,177	164,160,871	16,370,771	164,106,175	180,476,946	13,392,993	205,860,886	219,253,879
Other Revenues	101,579,020	143,331	101,722,351	11,750,787		11,750,787	12,343,095		12,343,095	12,022,011		12,022,011
Rev Before Reimb & Tsfr	234,362,924	84,827,190	319,190,114	144,929,662	147,263,177	292,192,839	144,995,047	164,106,175	309,101,222	152,335,532	205,860,886	358,196,418
Reimbursements Programs	1,356,214	930,845	2,287,059	1,564,439		1,564,439	1,564,439		1,564,439			
Transfer In	2,068,404		2,068,404	5,404,494		5,404,494	5,404,494		5,404,494	1,968,113		1,968,113
Transfer from / (to) Reserves	(101,888,544)		(101,888,544)	16,416,986		16,416,986	30,145,562		30,145,562	119,894,659		119,894,659
Total REVENUES	135,898,998	85,758,035	221,657,033	168,315,579	147,263,177	315,578,756	182,109,542	164,106,175	346,215,717	274,198,304	205,860,886	480,059,190
EXPENDITURES												
Personnel & Benefits	97,105,534	7,779,865	104,885,399	110,298,086	10,414,187	120,712,273	110,298,080	10,414,187	120,712,267	120,562,909	9,949,734	130,512,643
Services & Supplies	30,471,314	4,730,585	35,201,899	45,248,237	15,196,100	60,444,337	58,445,770	18,114,446	76,560,216	45,709,193	17,265,650	62,974,843
Capital Expenditures	7,015,354		7,015,354	6,477,416	400,000	6,877,416	7,053,207	400,000	7,453,207	10,675,857	350,000	11,025,857
Exp Before Dist & Tsfr	134,592,202	12,510,450	147,102,652	162,023,739	26,010,287	188,034,026	175,797,057	28,928,633	204,725,690	176,947,959	27,565,384	204,513,343
Program Distributions	1,306,795	71,179,181	72,485,976	2,989,728	119,150,522	122,140,250	3,010,360	133,075,173	136,085,533	97,250,345	176,327,389	273,577,734
Transfer Out		2,068,404	2,068,404	3,302,125	2,102,369	5,404,494	3,302,125	2,102,369	5,404,494		1,968,113	1,968,113
Total EXPENDITURES	135,898,998	85,758,035	221,657,033	168,315,579	147,263,177	315,578,756	182,109,542	164,106,175	346,215,717	274,198,304	205,860,886	480,059,190

TABLE II: Consolidated Revenues

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/$ Change 27/26 Amended $	Percent Change %
COUNTY REVENUES						
Alameda	9,102,184	8,050,000	8,050,000	9,562,000	1,512,000	18.78%
Contra Costa	5,381,475	5,400,000	5,400,000	5,599,000	199,000	(3.69)%
Marin	2,138,082	2,131,000	2,131,000	2,131,000		
Napa	1,546,848	1,583,000	1,583,000	1,609,000	26,000	1.64%
San Francisco	7,379,805	7,210,000	7,210,000	7,088,000	(122,000)	(1.69)%
San Mateo	6,917,501	6,422,000	6,422,000	7,196,000	774,000	12.05%
Santa Clara	14,056,462	13,407,000	13,407,000	14,624,000	1,217,000	9.08%
Solano	1,163,742	1,152,000	1,152,000	1,234,000	82,000	7.12%
Sonoma	2,202,345	2,213,000	2,213,000	2,257,000	44,000	1.99%
	49,888,444	47,568,000	47,568,000	51,300,000	3,732,000	7.85%
PERMITS / FEES						
Permit Renewal & Application Fees	51,187,770	48,366,276	48,366,276	53,922,686	5,556,410	11.49%
Community Health Impact	1,252,988	1,242,407	1,242,407	1,326,099	83,692	6.74%
Criteria Pollutant and Toxics Emissions	1,849,104	1,833,648	1,833,648	1,995,177	161,529	8.81%
Title V Fees	7,115,807	8,469,866	8,469,866	9,362,243	892,377	10.54%
Asbestos Fees	3,698,740	3,300,000	3,300,000	3,400,000	100,000	3.03%
Toxics Inventory Fees	1,578,872	1,226,697	1,226,697	1,654,188	427,491	34.85%
Registration Fees	283,080	272,889	272,889	240,286	(32,603)	(11.95)%
Hearing Board Fees	72,601	50,000	50,000	90,000	40,000	80.00%
Greenhouse Gas Fees	3,501,920	3,951,398	3,951,398	3,629,849	(321,549)	(8.14)%
	70,540,882	68,713,181	68,713,181	75,620,528	6,907,347	10.05%
GRANT REVENUES						
Federal Grant	3,574,743	5,493,940	5,517,017	3,812,873	(1,704,144)	(30.89)%
Other Grants	8,779,835	11,403,754	10,853,754	9,580,120	(1,273,634)	(11.73)%
	12,354,577	16,897,694	16,370,771	13,392,993	(2,977,778)	(18.19)%
OTHER REVENUES						
Penalty Assessments	4,008,496	4,000,000	4,000,000	4,000,000		
State Subvention	1,701,561	1,701,561	1,701,561	1,701,561		
PERP (Portable Equip Prog)	1,780,668	1,000,000	1,000,000	1,050,000	50,000	5.00%
Interest Income	5,375,634	4,213,000	4,213,000	4,608,693	395,693	9.39%
Miscellaneous Income	388,711	836,226	1,428,534	661,757	766,777	53.68%
	13,255,069	11,750,787	12,343,095	12,022,011	1,212,470	9.82%
Total Operating Revenues	146,038,973	144,929,662	144,995,047	152,335,532	7,340,485	5.06%
Reimbursement Programs						
DHS Biowatch Funding	1,356,214	1,564,439	1,564,439		(1,564,439)	(100.00)%
	1,356,214	1,564,439	1,564,439		(1,564,439)	(100.00)%
Transfer fm/(to) Reserves OP	(13,564,593)	16,416,987	30,145,562	20,176,438	(9,969,124)	(33.07)%
Transfer In	2,068,404	2,102,369	2,102,369	1,968,113	(134,256)	(6.39)%
Total General Fund Operating Revenues	135,898,998	165,013,454	178,807,417	174,480,083	(4,327,334)	(2.42)%
General Fund Community Benefits						
Local and Regional	88,323,951	3,302,125	3,302,125		(3,302,125)	100.00%
Transfer fm/(to) Reserves CB	(88,323,951)			99,718,221	99,718,221	
Total General Fund Community Benefits		3,302,125	3,302,125	99,718,221	96,416,096	100.00%
Special Revenue Funds						
Grant Programs						
Carl Moyer Fund	36,925,891	56,668,151	70,639,567	50,688,084	(19,951,483)	(28.24)%
Mobile Source Incentive Fund (MSIF)	4,820,959	17,690,241	19,382,589	17,253,678	(2,128,911)	(10.98)%
Transportation Fund for Clean Air (TFCA)	20,018,085	34,768,311	35,161,608	52,010,695	16,849,087	47.92%
Clean Cars for All (CCFA)	21,124,410	16,381,866	17,161,019	29,771,195	12,610,176	73.48%
California Goods Movement Bond (CGMB)	377,480	144,420	148,742	20,951,534	20,802,792	13,985.82%
Vehicle Mitigation (VM)	2,347,879	21,555,595	21,558,057	15,082,212	(6,475,845)	(30.04)%
Other Grants Revenues	143,331	54,593	54,593	20,103,488	20,048,895	36,724.30%
Total Special Revenue Funds	85,758,035	147,263,177	164,106,175	205,860,886	41,754,711	25.44%
TOTAL DISTRICT WIDE	221,657,033	315,578,756	346,215,717	480,059,190	133,843,473	38.66%

TABLE III: Consolidated Expenditures

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/$ Change 27/26 Amended $	Percent Change %
NUMBER OF POSITIONS (FTE)	434.31	523.05	532.05	538.02	5.97	1.1%
NUMBER OF POSITIONS (LTCE)	5.48	23.00	23.00	36.00	13.00	56.5%
PERSONNEL						
Permanent Salaries	70,505,898	86,700,475	86,700,475	94,479,695	7,779,220	9.0%
Overtime Salaries	514,394	747,000	747,000	769,000	22,000	2.9%
Temporary Salaries	1,271,868	1,002,006	1,002,006	758,006	(244,000)	(24.4)%
Payroll Taxes	1,110,851	1,251,979	1,251,979	1,348,460	96,481	7.7%
Pension Benefits	15,633,746	16,396,793	16,396,793	19,059,625	2,662,832	16.2%
FICA Replacement Benefits	1,572,240	1,926,288	1,926,287	2,090,090	163,803	8.5%
Group Insurance Benefits	13,699,483	16,405,871	16,405,867	18,787,593	2,381,726	14.5%
Transportation Subsidy	214,659	701,070	701,070	551,041	(150,029)	(21.4)%
Workers' Compensation	224,316	230,002	230,000	229,995	(5)	
Discretionary Contribution		4,999,995	4,999,994	5,000,002	8	
Board Stipends	137,949		230,000	230,000		
Vacancy Savings		(9,649,204)	(9,879,204)	(12,790,864)	(2,911,660)	29.5%
	104,885,399	120,712,273	120,712,267	130,512,643	9,800,376	8.1%
SERVICES & SUPPLIES						
Travel	283,984	870,383	847,107	899,028	51,921	6.1%
Training & Education	320,777	1,088,413	1,444,189	1,669,781	225,592	15.6%
Repair & Maintenance	1,802,432	1,141,909	1,589,697	1,529,700	(59,997)	(3.8)%
Communications	716,400	1,033,765	1,067,798	1,248,976	181,178	17.0%
Building Maintenance	333,989	755,750	1,175,205	769,750	(405,455)	(34.5)%
Utilities	312,725	345,134	345,134	369,550	24,416	7.1%
Postage	27,306	155,240	170,229	125,890	(44,339)	(26.0)%
Printing & Reproduction	67,255	629,939	745,129	557,827	(187,302)	(25.1)%
Equipment Rental	44,966	128,000	128,000	55,000	(73,000)	(57.0)%
Rents & Leases	3,172,961	4,323,560	4,776,979	3,701,050	(1,075,929)	(22.5)%
Professional Services	25,868,392	44,413,067	57,743,155	45,084,170	(12,658,985)	(21.9)%
General Insurance	829,576	1,024,000	1,024,325	1,321,000	296,675	29.0%
Shop & Field Supplies	306,082	866,312	972,643	969,582	(3,061)	(0.3)%
Laboratory Supplies	132,708	216,500	277,427	192,250	(85,177)	(30.7)%
Gasoline & Variable Fuel	154,181	550,000	732,282	250,000	(482,282)	(65.9)%
Computer Hardware & Software	717,899	2,626,320	3,233,688	3,833,744	600,056	18.6%
Stationery & Office Supplies	25,756	79,350	84,924	222,050	137,126	161.5%
Books & Journals	84,041	163,910	169,520	137,710	(31,810)	(18.8)%
Minor Office Equipment	478	32,785	32,785	37,785	5,000	15.3%
	35,201,899	60,444,337	76,560,216	62,974,843	(13,585,373)	(17.7)%
CAPITAL						
Office Equipment		110,000	110,000	190,000	80,000	72.7%
Computer & Network	5,621,599	4,150,000	4,557,330	7,450,000	2,892,670	63.5%
Motorized Equipment		60,000	60,000	60,000		
Lab & Monitoring Equipment	1,343,646	2,557,416	2,646,850	3,325,857	679,007	25.7%
Communications Equipment	50,109		79,027		(79,027)	(100.0)%
	7,015,354	6,877,416	7,453,207	11,025,857	3,572,650	47.9%
Total Expenditures	147,102,652	188,034,026	204,725,690	204,513,343	(212,347)	(0.1)%
Transfer In/Out	2,068,404	5,404,494	5,404,494	1,968,113	(3,436,381)	(63.6)%
Program Distribution	72,485,976	122,140,250	136,085,533	273,577,734	137,492,201	101.0%
TOTAL DISTRICT WIDE	221,657,032	315,578,756	346,215,717	480,059,190	133,843,473	38.7%

TABLE IVa: General Fund Operating

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/$ Change 27/26 Amended $	Percent Change %
NUMBER OF POSITIONS (FTE)	397.69	471.52	478.52	491.26	12.74	2.7%
NUMBER OF POSITIONS (LTCE)	4.50	16.20	16.20	30.15	13.95	86.1%
REVENUES						
Revenues	147,395,187	146,494,101	146,559,486	152,335,532	5,776,046	3.9%
Transfer from / (to) Reserves	(13,564,593)	16,416,987	30,145,562	20,176,438	(9,969,124)	(33.1)%
Transfer In	2,068,404	2,102,369	2,102,369	1,968,113	(134,256)	(6.4)%
Total Revenues - General Fund	135,898,998	165,013,454	178,807,417	174,480,083	(4,327,334)	(2.4)%
PERSONNEL EXPENDITURES						
Permanent Salaries	64,999,678	78,247,265	78,247,265	86,484,881	8,237,616	10.5%
Overtime Salaries	382,009	550,000	550,000	552,000	2,000	0.4%
Temporary Salaries	1,267,753	902,006	902,006	708,006	(194,000)	(21.5)%
Payroll Taxes	1,025,194	1,130,870	1,130,870	1,235,443	104,573	9.2%
Pension Benefits	14,368,564	14,816,125	14,816,125	17,450,380	2,634,255	17.8%
FICA Replacement Benefits	1,450,250	1,720,507	1,720,506	1,898,530	178,024	10.3%
Group Insurance Benefits	12,953,371	15,012,434	15,012,431	17,473,461	2,461,030	16.4%
Transportation Subsidy	196,702	626,176	626,176	500,538	(125,638)	(20.1)%
Workers' Compensation	208,194	205,430	205,428	208,917	3,489	1.7%
Discretionary Contribution		4,513,452	4,513,452	4,577,841	64,389	1.4%
Board Stipends	137,949		230,000	230,000		
Vacancy Savings		(9,649,204)	(9,879,204)	(12,790,864)	(2,911,660)	29.5%
Total Personnel Expenditures	96,989,659	108,075,061	108,075,055	118,529,133	10,454,078	9.7%
SERVICES & SUPPLIES EXP						
Travel	271,834	736,683	713,407	774,328	60,921	8.5%
Training & Education	314,878	1,022,913	1,378,689	1,618,781	240,092	17.4%
Repair & Maintenance	1,802,432	1,141,909	1,589,697	1,529,700	(59,997)	(3.8)%
Communications	706,753	1,004,765	1,038,798	1,221,976	183,178	17.6%
Building Maintenance	333,989	755,750	1,175,205	769,750	(405,455)	(34.5)%
Utilities	312,725	345,134	345,134	369,550	24,416	7.1%
Postage	27,306	127,740	142,729	108,640	(34,089)	(23.9)%
Printing & Reproduction	58,206	600,939	715,434	537,527	(177,907)	(24.9)%
Equipment Rental	44,966	128,000	128,000	55,000	(73,000)	(57.0)%
Rents & Leases	3,172,961	4,323,560	4,776,979	3,701,050	(1,075,929)	(22.5)%
Professional Services	21,177,044	28,500,767	38,913,204	26,423,170	(12,490,034)	(32.1)%
General Insurance	829,576	1,024,000	1,024,325	1,321,000	296,675	29.0%
Shop & Field Supplies	304,207	858,112	964,443	962,882	(1,561)	(0.2)%
Laboratory Supplies	132,708	216,500	277,427	192,250	(85,177)	(30.7)%
Gasoline & Variable Fuel	154,181	550,000	732,282	250,000	(482,282)	(65.9)%
Computer Hardware & Software	717,255	2,582,320	3,189,688	3,790,744	601,056	18.8%
Stationery & Office Supplies	25,701	72,350	77,924	192,050	114,126	146.5%
Books & Journals	84,041	161,910	167,520	135,910	(31,610)	(18.9)%
Minor Office Equipment	478	15,785	15,785	20,785	5,000	31.7%
Total Services & Supplies Exp	30,471,233	44,169,137	57,366,670	43,975,093	(13,391,577)	(23.3)%
CAPITAL EXPENDITURES						
Office Equipment		110,000	110,000	190,000	80,000	72.7%
Computer & Network	5,621,599	3,750,000	4,157,330	7,100,000	2,942,670	70.8%
Motorized Equipment		60,000	60,000	60,000		
Lab & Monitoring Equipment	1,343,646	2,557,416	2,646,850	3,325,857	679,007	25.7%
Communications Equipment	50,109		79,027		(79,027)	(100.0)%
Total Capital Expenditures	7,015,354	6,477,416	7,053,207	10,675,857	3,622,650	51.4%
TRANSFER IN/OUT	115,956	3,302,125	3,302,125		(3,302,125)	(100.0)%
TOTAL EXPENDITURES	134,592,202	162,023,739	175,797,057	173,180,083	(2,616,974)	(1.5)%
Program Distribution	1,306,795	2,989,728	3,010,360	1,300,000	(1,710,360)	(56.8)%
TOTAL EXP - GENERAL FUND	135,898,998	165,013,454	178,807,417	174,480,083	(4,327,334)	(2.4)%

TABLE IVb: General Fund Community Benefits

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
NUMBER OF POSITIONS (FTE)	0.47	6.83	6.83	5.82	(1.01)	(14.79)%
NUMBER OF POSITIONS (LTCE)		3.00	3.00	3.00		
REVENUES						
General Revenues				99,718,221	99,718,221	
Transfer In		3,302,125	3,302,125		(3,302,125)	(100.00)%
TOTAL REVENUES		3,302,125	3,302,125	99,718,221	96,416,096	2,919.82%
PERSONNEL EXPENDITURES						
Permanent Salaries	88,001	1,500,150	1,500,150	1,371,269	(128,881)	(8.59)%
Overtime Salaries	4,737	37,000	37,000	37,000		
Payroll Taxes	1,193	21,631	21,631	19,542	(2,089)	(9.66)%
Pension Benefits	7,802	273,905	273,905	276,196	2,291	0.84%
FICA Replacement Benefits	1,831	34,664	34,664	32,119	(2,545)	(7.34)%
Group Insurance Benefits	11,379	252,477	252,477	213,192	(39,285)	(15.56)%
Transportation Subsidy	674	12,616	12,616	8,468	(4,148)	(32.88)%
Workers' Compensation	258	4,139	4,139	3,534	(605)	(14.62)%
Discretionary Contribution		86,443	86,443	72,456	(13,987)	(16.18)%
Total Personnel Expenditures	115,875	2,223,025	2,223,025	2,033,776	(189,249)	(8.51)%
SERVICES & SUPPLIES EXPENDITURES						
Travel	81	34,000	34,000	34,000		
Training & Education		15,000	15,000	15,000		
Communications		10,000	10,000	10,000		
Printing & Reproduction		3,500	3,500	3,500		
Professional Services		1,000,000	1,000,000	1,650,000	650,000	65.00%
Computer Hardware & Software		8,000	8,000	8,000		
Stationery & Office Supplies		2,000	2,000	7,000	5,000	250.00%
Books & Journals		600	600	600		
Minor Office Equipment		6,000	6,000	6,000		
Total Services & Supplies Expenditures	81	1,079,100	1,079,100	1,734,100	655,000	60.70%
CAPITAL EXPENDITURES						
TRANSFER IN/OUT	(115,956)					
TOTAL EXPENDITURES		3,302,125	3,302,125	3,767,876	465,751	14.10%
Program Distribution				95,950,345	95,950,345	
Total Expenditures Including Program Distributions		3,302,125	3,302,125	99,718,221	96,416,096	2,919.82%

TABLE V: Carl Moyer Fund

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/$ Change 27/26 Amended $	Percent Change %
NUMBER OF POSITIONS (FTE)	12.61	19.60	19.60	13.65	(5.95)	(30.4)%
NUMBER OF POSITIONS (LTCE)	12.61	0.30	0.30	0.30		
REVENUES						
Admin Revenue	3,377,901	4,668,151	4,714,916	3,688,084	(1,026,832)	(21.8)%
Program Revenue	33,547,990	52,000,000	57,967,214	47,000,000	(10,967,214)	(18.9)%
General Revenues			7,957,437		(7,957,437)	(100.0)%
Total Revenue - Carl Moyor	36,925,891	56,668,151	70,639,567	50,688,084	(19,951,483)	(28.2)%
PERSONNEL EXPENDITURES						
Permanent Salaries	1,902,454	2,730,553	2,730,553	2,090,510	(640,043)	(23.4)%
Overtime Salaries	521					
Payroll Taxes	29,525	38,723	38,723	29,592	(9,131)	(23.6)%
Pension Benefits	493,406	507,706	507,706	420,622	(87,084)	(17.2)%
FICA Replacement Benefits	42,102	70,207	70,207	50,782	(19,425)	(27.7)%
Group Insurance Benefits	257,763	464,761	464,761	334,906	(129,855)	(27.9)%
Transportation Subsidy	5,843	25,552	25,552	13,388	(12,164)	(47.6)%
Workers' Compensation	5,572	8,383	8,383	5,588	(2,795)	(33.3)%
Discretionary Contribution		156,966	156,966	110,344	(46,622)	(29.7)%
Total Personnel Expenditures	2,737,186	4,002,851	4,002,851	3,055,732	(947,119)	(23.7)%
SERVICES & SUPPLIES EXPENDITURES						
Travel	4,848	18,500	18,500	14,000	(4,500)	(24.3)%
Training & Education	1,450	10,000	10,000	6,000	(4,000)	(40.0)%
Communications	2,058	5,000	5,000	3,000	(2,000)	(40.0)%
Postage		1,000	1,000	1,000		
Printing & Reproduction		3,000	3,000	3,000		
Professional Services	104,783	100,500	147,265	163,000	15,735	10.7%
Shop & Field Supplies	176	2,800	2,800	2,800		
Computer Hardware & Software		6,000	6,000	6,000		
Stationery & Office Supplies		2,000	2,000	1,000	(1,000)	(50.0)%
Books & Journals		500	500	500		
Minor Office Equipment		2,500	2,500	2,500		
Total Services & Supplies Expenditures	113,315	151,800	198,565	202,800	4,235	2.1%
CAPITAL EXPENDITURES						
Computer & Network		175,000	175,000	125,000	(50,000)	(28.6)%
Total Capital Expenditures		175,000	175,000	125,000	(50,000)	(28.6)%
TRANSFER IN/OUT	527,400	338,500	338,500	304,552	(33,948)	(10.0)%
TOTAL EXPENDITURES	3,377,901	4,668,151	4,714,916	3,688,084	(1,026,832)	(21.8)%
Program Distribution	33,547,990	52,000,000	65,924,651	47,000,000	(18,924,651)	(28.7)%
Total Expenditures - Carl Moyor	36,925,891	56,668,151	70,639,567	50,688,084	(19,951,483)	(28.2)%

TABLE VI: Mobile Source Incentive Fund (MSIF)

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/$ Change 27/26 Amended	Percent Change
	2025	2026	2026	2027	$	%
NUMBER OF POSITIONS (FTE)	3.90	5.07	5.07	3.55	(1.52)	(30.0)%
NUMBER OF POSITIONS (LTCE)	0.09	0.20	0.20	0.10	(0.10)	(50.0)%
REVENUES						
Admin Revenue	2,813,231	12,690,241	14,382,589	12,253,678	(2,128,911)	(14.8)%
Program Revenue	1,076,883	5,000,000	5,000,000	5,000,000		
General Revenues	930,845					
Total Revenues - MSIF	4,820,959	17,690,241	19,382,589	17,253,678	(2,128,911)	(11.0)%
PERSONNEL EXPENDITURES						
Permanent Salaries	552,807	740,847	740,847	543,653	(197,194)	(26.6)%
Overtime Salaries	325					
Payroll Taxes	8,607	10,556	10,556	7,657	(2,899)	(27.5)%
Pension Benefits	125,293	139,698	139,698	109,367	(30,331)	(21.7)%
FICA Replacement Benefits	12,257	18,593	18,593	13,290	(5,303)	(28.5)%
Group Insurance Benefits	74,958	107,931	107,931	80,555	(27,376)	(25.4)%
Transportation Subsidy	1,826	6,767	6,767	3,504	(3,263)	(48.2)%
Workers' Compensation	1,619	2,220	2,220	1,462	(758)	(34.1)%
Discretionary Contribution		42,611	42,611	28,690	(13,921)	(32.7)%
Total Personnel Expenditures	777,692	1,069,223	1,069,223	788,178	(281,045)	(26.3)%
SERVICES & SUPPLIES EXPENDITURES						
Travel	135	16,500	16,500	11,000	(5,500)	(33.3)%
Training & Education		16,000	16,000	10,500	(5,500)	(34.4)%
Communications	3,059	2,000	2,000	2,000		
Postage		1,500	1,500	1,000	(500)	(33.3)%
Printing & Reproduction	372	4,000	4,000	1,300	(2,700)	(67.5)%
Professional Services	1,847,828	11,357,000	13,049,348	11,378,000	(1,671,348)	(12.8)%
Shop & Field Supplies	1,055	2,000	2,000	2,000		
Computer Hardware & Software		7,000	7,000	6,000	(1,000)	(14.3)%
Stationery & Office Supplies		1,000	1,000	1,000		
Books & Journals		200	200	200		
Minor Office Equipment		2,500	2,500	2,500		
Total Services & Supplies Expenditures	1,852,449	11,409,700	13,102,048	11,415,500	(1,686,548)	(12.9)%
CAPITAL EXPENDITURES						
Computer & Network		50,000	50,000	50,000		
Total Capital Expenditures		50,000	50,000	50,000		
TRANSFER IN/OUT	183,091	161,318	161,318		(161,318)	(100.0)%
TOTAL EXPENDITURES	2,813,231	12,690,241	14,382,589	12,253,678	(2,128,911)	(14.8)%
Program Distribution	2,007,728	5,000,000	5,000,000	5,000,000		
Total Expenditures - MSIF	4,820,959	17,690,241	19,382,589	17,253,678	(2,128,911)	(11.0)%

TABLE VII: Transportation Fund for Clean Air (TFCA)

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/$ Change 27/26 Amended $	Percent Change %
NUMBER OF POSITIONS (FTE)	7.91	7.10	7.10	5.92	(1.18)	(16.6)%
NUMBER OF POSITIONS (LTCE)	0.17	0.20	0.20	0.20		
REVENUES						
Admin Revenue	4,014,932	4,768,311	5,161,608	6,010,695	849,087	16.5%
Program Revenue	16,003,153	30,000,000	30,000,000	46,000,000	16,000,000	53.3%
Total Revenues - TFCA	20,018,085	34,768,311	35,161,608	52,010,695	16,849,087	47.9%
PERSONNEL EXPENDITURES						
Permanent Salaries	1,168,186	1,111,451	1,111,451	956,533	(154,918)	(13.9)%
Overtime Salaries	116,773	100,000	100,000	120,000	20,000	20.0%
Temporary Salaries	4,115					
Payroll Taxes	18,384	16,056	16,056	13,491	(2,565)	(16.0)%
Pension Benefits	241,884	214,669	214,669	192,690	(21,979)	(10.2)%
FICA Replacement Benefits	26,009	25,766	25,766	22,288	(3,478)	(13.5)%
Group Insurance Benefits	158,523	158,524	158,523	133,349	(25,174)	(15.9)%
Transportation Subsidy	3,943	9,378	9,378	5,876	(3,502)	(37.3)%
Workers' Compensation	3,416	3,077	3,077	2,452	(625)	(20.3)%
Discretionary Contribution		64,040	64,040	50,549	(13,491)	(21.1)%
Total Personnel Expenditures	1,741,233	1,702,961	1,702,960	1,497,228	(205,732)	(12.1)%
SERVICES & SUPPLIES EXPENDITURES						
Travel	4,692	14,000	14,000	14,000		
Training & Education	3,700	11,500	11,500	5,500	(6,000)	(52.2)%
Communications	2,315	5,000	5,000	5,000		
Postage		24,500	24,500	14,250	(10,250)	(41.8)%
Printing & Reproduction	8,407	15,500	16,195	9,500	(6,695)	(41.3)%
Professional Services	1,731,044	1,812,000	2,204,602	3,461,000	1,256,398	57.0%
Shop & Field Supplies	644	3,000	3,000	1,500	(1,500)	(50.0)%
Computer Hardware & Software	644	7,000	7,000	7,000		
Stationery & Office Supplies	55	1,000	1,000	5,000	4,000	400.0%
Books & Journals		200	200		(200)	(100.0)%
Minor Office Equipment		5,000	5,000	5,000		
Total Services & Supplies Expenditures	1,751,501	1,898,700	2,291,997	3,527,750	1,235,753	53.9%
CAPITAL EXPENDITURES						
Computer & Network		175,000	175,000	125,000	(50,000)	(28.6)%
Total Capital Expenditures		175,000	175,000	125,000	(50,000)	(28.6)%
TRANSFER IN/OUT	522,198	991,651	991,651	860,717	(130,934)	(13.2)%
TOTAL EXPENDITURES	4,014,932	4,768,311	5,161,608	6,010,694	849,087	16.5%
Program Distribution	16,003,153	30,000,000	30,000,000	46,000,000	16,000,000	53.3%
Total Expenditures - TFCA	20,018,085	34,768,311	35,161,608	52,010,695	16,849,087	47.9%

TABLE VIII: Clean Cars for All (CCFA)

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/$ Change 27/26 Amended $	Percent Change %
NUMBER OF POSITIONS (FTE)	7.94	7.92	7.92	7.89	(0.03)	(0.4)%
NUMBER OF POSITIONS (LTCE)	0.22	3.00	3.00		(3.00)	(100.0)%
REVENUES						
Admin Revenue	3,124,231	4,231,344	5,010,497	4,443,806	(566,691)	(11.3)%
Program Revenue	18,000,179	12,150,522	12,150,522	25,327,389	13,176,867	108.4%
Total Revenues - CCFA	21,124,410	16,381,866	17,161,019	29,771,195	12,610,176	73.5%
PERSONNEL EXPENDITURES						
Permanent Salaries	1,211,019	1,558,169	1,558,169	1,471,787	(86,382)	(5.5)%
Overtime Salaries	10,029	60,000	60,000	60,000		
Temporary Salaries		100,000	100,000	50,000	(50,000)	(50.0)%
Payroll Taxes	18,969	22,488	22,488	20,730	(1,758)	(7.8)%
Pension Benefits	264,886	287,669	287,669	296,066	8,397	2.9%
FICA Replacement Benefits	26,913	38,523	38,523	36,020	(2,503)	(6.5)%
Group Insurance Benefits	164,596	261,634	261,634	259,265	(2,369)	(0.9)%
Transportation Subsidy	3,776	14,020	14,020	9,496	(4,524)	(32.3)%
Workers' Compensation	3,547	4,599	4,599	3,964	(635)	(13.8)%
Discretionary Contribution		89,653	89,653	77,669	(11,984)	(13.4)%
Total Personnel Expenditures	1,703,735	2,436,755	2,436,755	2,284,997	(151,758)	(6.2)%
SERVICES & SUPPLIES EXPENDITURES						
Travel	2,264	36,000	36,000	37,000	1,000	2.8%
Training & Education	749	9,500	9,500	10,500	1,000	10.5%
Communications	2,215	7,000	7,000	7,000		
Printing & Reproduction	270					
Professional Services	954,042	1,577,000	2,356,153	1,865,000	(491,153)	(20.8)%
Computer Hardware & Software		11,000	11,000	11,000		
Stationery & Office Supplies				15,000	15,000	
Total Services & Supplies Expenditures	959,540	1,640,500	2,419,653	1,945,500	(474,153)	(19.6)%
CAPITAL EXPENDITURES						
TRANSFER IN/OUT	460,956	154,089	154,089	213,309	59,220	38.4%
TOTAL EXPENDITURES	3,124,231	4,231,344	5,010,497	4,443,806	(566,691)	(11.3)%
Program Distribution	18,000,179	12,150,522	12,150,522	25,327,389	13,176,867	108.4%
Total Expenditures - CCFA	21,124,410	16,381,866	17,161,019	29,771,195	12,610,176	73.5%

TABLE IX: California Goods Movement Bond (CGMB)

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/$ Change 27/26 Amended	Percent Change
	2025	2026	2026	2027	$	%
NUMBER OF POSITIONS (FTE)	0.47	0.55	0.55	4.20	3.65	663.64%
NUMBER OF POSITIONS (LTCE)				0.10	0.10	
REVENUES						
Admin Revenue	177,480	144,420	148,742	951,534	802,792	539.72%
Program Revenue	200,000			20,000,000	20,000,000	
Total Revenues - CGMB	377,480	144,420	148,742	20,951,534	20,802,792	13,985.82%
PERSONNEL EXPENDITURES						
Permanent Salaries	81,483	94,465	94,465	615,344	520,879	551.40%
Payroll Taxes	1,222	1,362	1,362	8,656	7,294	535.54%
Pension Benefits	21,061	18,090	18,090	123,638	105,548	583.46%
FICA Replacement Benefits	1,786	1,941	1,941	15,658	13,717	706.70%
Group Insurance Benefits	10,958	16,169	16,169	108,452	92,283	570.74%
Transportation Subsidy	279	706	706	4,128	3,422	484.70%
Workers' Compensation	239	232	232	1,723	1,491	642.67%
Discretionary Contribution		5,456	5,456	32,435	26,979	494.48%
Total Personnel Expenditures	117,028	138,421	138,421	910,034	771,613	557.44%
SERVICES & SUPPLIES EXPENDITURES						
Travel	21	1,000	1,000	1,000		
Postage				500	500	
Professional Services	5,116	5,000	9,321	40,000	30,679	329.14%
Total Services & Supplies Expenditures	5,137	6,000	10,321	41,500	31,179	302.09%
CAPITAL EXPENDITURES						
TRANSFER IN/OUT	55,315					
TOTAL EXPENDITURES	177,480	144,420	148,742	951,534	802,792	539.72%
Program Distribution	200,000			20,000,000	20,000,000	
Total Expenditures - CGMB	377,480	144,420	148,742	20,951,534	20,802,792	13,985.82%

TABLE X: Vehicle Mitigation (VM)

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/$ Change 27/26 Amended	Percent Change
	2025	2026	2026	2027	$	%
NUMBER OF POSITIONS (FTE)	3.32	4.26	4.26	5.38	1.12	26.3%
NUMBER OF POSITIONS (LTCE)	0.02	0.10	0.10	0.10		
REVENUES						
Admin Revenue	1,071,079	1,555,595	1,558,057	2,082,212	524,155	33.6%
Program Revenue	1,276,800	20,000,000	20,000,000	13,000,000	(7,000,000)	(35.0)%
Total Revenues - VM	2,347,879	21,555,595	21,558,057	15,082,212	(6,475,845)	(30.0)%
PERSONNEL EXPENDITURES						
Permanent Salaries	502,270	679,277	679,277	873,686	194,409	28.6%
Payroll Taxes	7,757	9,744	9,744	12,329	2,585	26.5%
Pension Benefits	110,850	131,529	131,529	176,101	44,572	33.9%
FICA Replacement Benefits	11,092	15,382	15,382	19,946	4,564	29.7%
Group Insurance Benefits	67,935	126,859	126,859	174,364	47,505	37.4%
Transportation Subsidy	1,616	5,598	5,598	5,259	(339)	(6.1)%
Workers' Compensation	1,471	1,837	1,837	2,195	358	19.5%
Discretionary Contribution		39,158	39,158	46,197	7,039	18.0%
Total Personnel Expenditures	702,991	1,009,384	1,009,384	1,310,077	300,693	29.8%
SERVICES & SUPPLIES EXPENDITURES						
Travel	109	13,700	13,700	13,700		
Training & Education		3,500	3,500	3,500		
Postage		500	500	500		
Printing & Reproduction		3,000	3,000	3,000		
Professional Services	48,535	60,800	63,262	104,000	40,738	64.4%
Shop & Field Supplies		400	400	400		
Computer Hardware & Software		5,000	5,000	5,000		
Stationery & Office Supplies		1,000	1,000	1,000		
Books & Journals		500	500	500		
Minor Office Equipment		1,000	1,000	1,000		
Total Services & Supplies Expenditures	48,644	89,400	91,862	132,600	40,738	44.3%
CAPITAL EXPENDITURES						
Computer & Network				50,000	50,000	
Total Capital Expenditures				50,000	50,000	
TRANSFER IN/OUT	319,444	456,811	456,811	589,535	132,724	29.1%
TOTAL EXPENDITURES	1,071,079	1,555,595	1,558,057	2,082,212	524,155	33.6%
Program Distribution	1,276,800	20,000,000	20,000,000	13,000,000	(7,000,000)	(35.0)%
Total Expenditures - VM	2,347,879	21,555,595	21,558,057	15,082,212	(6,475,845)	(30.0)%

TABLE XI: Other Grants

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/$ Change 27/26 Amended $	Percent Change %
NUMBER OF POSITIONS (FTE)		0.20	0.20	0.35	0.15	75.0%
NUMBER OF POSITIONS (LTCE)				0.05	0.05	
REVENUES						
Admin Revenue		54,593	54,593	103,488	48,895	89.6%
Program Revenue				20,000,000	20,000,000	
General Revenues	143,331					
Total Revenues - Other Grants	143,331	54,593	54,593	20,103,488	20,048,895	36,724.3%
PERSONNEL EXPENDITURES						
Permanent Salaries		38,298	38,298	72,032	33,734	88.1%
Payroll Taxes		549	549	1,020	471	85.8%
Pension Benefits		7,402	7,402	14,565	7,163	96.8%
FICA Replacement Benefits		705	705	1,457	752	106.7%
Group Insurance Benefits		5,082	5,082	10,049	4,967	97.7%
Transportation Subsidy		257	257	384	127	49.4%
Workers' Compensation		84	84	160	76	90.5%
Discretionary Contribution		2,216	2,216	3,821	1,605	72.4%
Total Personnel Expenditures		54,593	54,593	103,488	48,895	89.6%
SERVICES & SUPPLIES EXPENDITURES						
CAPITAL EXPENDITURES						
TOTAL EXPENDITURES		54,593	54,593	103,488	48,895	89.6%
Program Distribution	143,331			20,000,000	20,000,000	
Total Expenditures - Other Grants	143,331	54,593	54,593	20,103,488	20,048,895	36,724.3%

TABLE XII: General Fund Expenditure by Service Area & Division

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/$ Change 27/26 Amended $	Percent Change %
ENGINEERING & COMPLIANCE						
Compliance & Enforcement						
Enforcement	6,335,830	8,080,409	8,087,562	8,348,369	260,807	(3.2)%
Compliance Assistance & Operations	4,114,357	4,811,033	4,819,737	5,141,016	321,279	-6.7%
Compliance Assurance	6,643,539	8,125,984	8,143,217	8,568,873	425,656	-5.2%
Total Compliance & Enforcement	17,093,726	21,017,426	21,050,516	22,058,258	1,007,742	15.1%
Engineering						
Permit Evaluation	9,040,651	11,760,721	12,115,416	15,062,217	2,946,801	24.3%
Risk Assessment & Reduction	2,241,408	2,821,165	3,207,553	3,425,150	217,597	6.8%
Permit Operations	766,986	923,966	961,946	1,555,664	593,718	61.7%
Title V	403,553	1,069,056	1,069,056	1,222,521	153,465	14.4%
Engineering Special Projects	1,592,623	2,036,986	2,048,960	2,564,207	515,247	25.1%
Total Engineering	14,045,221	18,611,894	19,402,931	23,829,759	4,426,828	22.8%
Source Test						
Source Test	3,655,345	4,453,291	4,487,383	4,497,390	10,007	0.2%
Total Source Test	3,655,345	4,453,291	4,487,383	4,497,390	10,007	0.2%
TOTAL ENGINEERING & COMPLIANCE	34,794,292	44,082,611	44,940,830	50,385,407	5,444,577	12.1%
EQUITY & COMMUNITY PROGRAMS						
Civil Rights						
Civil Rights		645,870	645,870	1,129,629	483,759	74.9%
Total Civil Rights		645,870	645,870	1,129,629	483,759	74.9%
Community Investments						
Community Investments Office	115,956	3,302,125	3,302,125	3,767,876	465,751	14.1%
Total Community Investments	115,956	3,302,125	3,302,125	3,767,876	465,751	14.1%
Diversity Equity & Inclusion						
Office of Diversity Equity & Inclusion	851,059	1,520,682	1,570,523	1,579,723	9,200	0.6%
Total Diversity Equity & Inclusion	851,059	1,520,682	1,570,523	1,579,723	9,200	0.6%
Environmental Justice						
Environmental Justice	4,733,530	6,227,066	7,843,061	4,297,159	(3,545,902)	(45.2)%
AB617	8,021,264	12,096,161	13,133,320	10,906,220	(2,227,100)	(17.0)%
Total Environmental Justice	12,754,794	18,323,227	20,976,381	15,203,379	(5,773,002)	(27.5)%
Strategic Incentives						
Woodsmoke Reduction Incentive Program	217,431	308,365	331,731	289,433	(42,298)	(12.8)%
Grant Program Development and Support	97,259	522,611	558,283	821,184	262,901	47.1%
Total Strategic Incentives	314,690	830,976	890,014	1,110,617	220,603	24.8%
Technology Implementation Office						
Greenhouse Gas Technologies	603,790	1,351,294	1,385,314	1,173,569	(211,745)	(15.3)%
Total Technology Implementation Office	603,790	1,351,294	1,385,314	1,173,569	(211,745)	(15.3)%
TOTAL EQUITY & COMMUNITY PROGRAMS	14,640,289	25,974,174	28,770,227	23,964,793	492,617	14.5%
FINANCE & ADMINISTRATION						
Administrative Resources						
Facilities	1,387,649	2,585,533	3,155,754	2,461,361	(694,393)	(22.0)%
Mailroom Services	523,025	1,019,782	1,081,536	663,650	(417,886)	(38.6)%
Headquarters East (Richmond)	239,586	631,000	631,000	738,000	107,000	17.0%
Business and Procurement	1,824,820	2,579,286	2,616,711	2,794,631	177,920	6.8%
Headquarters West (Beale Street)	4,476,768	5,454,000	5,454,000	6,474,000	1,020,000	18.7%
Fleet Services	1,537,645	3,060,607	3,706,975	2,398,072	(1,308,903)	(35.3)%
Total Administrative Resources	9,989,493	15,330,208	16,645,976	15,529,714	(1,116,262)	(6.7)%
Executive						
Executive Office	7,228,839	6,423,410	7,155,849	6,032,641	(1,123,208)	(15.7)%
Board of Directors	416,876	402,475	467,475	631,344	163,869	35.1%

TABLE XII: General Fund Expenditure by Service Area & Division

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/$ Change 27/26 Amended	Percent Change
	2025	2026	2026	2027	$	%
Hearing Board	63,968	100,986	120,985	103,137	(17,848)	(14.8)%
Advisory Council & CAC	109,598	105,814	255,814	430,305	174,491	68.2%
Total Executive	7,819,281	7,032,685	8,000,123	7,197,427	(802,696)	(10.0)%
Finance						
Payroll	1,163,007	1,580,765	1,607,964	1,337,920	(270,044)	(16.8)%
Finance/Accounting	3,108,353	3,811,622	3,874,068	4,161,850	287,782	7.4%
Total Finance	4,271,360	5,392,387	5,482,032	5,499,770	17,738	0.3%
Human Resources						
Benefits Administration	4,308,719	4,434,656	4,499,174	5,755,711	1,256,537	27.9%
Organizational Development	654,961	1,029,918	1,309,457	1,515,034	205,577	15.7%
Employment Relations	1,594,521	1,259,361	1,434,127	1,697,650	263,523	18.4%
Recruitment & Testing	1,378,516	1,363,055	1,364,270	1,628,380	264,110	19.4%
Total Human Resources	7,936,717	8,086,990	8,607,028	10,596,775	1,989,747	23.1%
TOTAL FINANCE & ADMINISTRATION	30,016,851	35,842,270	38,735,159	38,823,686	88,527	0.2%
GENERAL COUNSEL						
Legal						
Legal Counsel	2,366,715	2,825,477	3,106,691	2,877,433	(229,258)	(7.4)%
Hearing Board Proceedings	41,246	46,282	46,282	6,369	(39,913)	(86.2)%
Legal Enforcement & Penalty Assessment	2,497,185	3,055,110	3,102,000	3,345,165	243,165	7.8%
Litigation	713,338	405,768	1,372,225	759,824	(612,401)	(44.6)%
Total Legal	5,618,484	6,332,637	7,627,198	6,988,791	(638,407)	(8.4)%
TOTAL GENERAL COUNSEL	5,618,484	6,332,637	7,627,198	6,988,791	(638,407)	(8.4)%
INFORMATION MANAGEMENT						
Enterprise Technology Solutions						
Software Development and Maintenance	8,248,965	7,061,081	7,831,391	7,720,280	(111,111)	(1.4)%
Website Development & Maintenance	1,218,863	1,375,403	1,783,567	1,935,423	151,856	8.5%
Records Management Systems	553,678	816,281	896,527	1,002,035	105,508	11.8%
Software Dev Operations, Data Reporting	1,219,625	1,325,053	1,330,384	4,544,240	3,213,856	241.6%
Total Enterprise Technology Solutions	11,241,131	10,577,818	11,841,869	15,201,978	3,360,109	28.4%
Information Services						
IT Engineering, Operations and DevOps	4,853,832	4,694,420	5,726,892	5,482,576	(244,316)	(4.3)%
User Support Desk	1,491,559	1,890,796	2,349,441	2,847,707	498,266	21.2%
Cybersecurity		654,598	654,598	938,268	283,670	43.3%
Total Information Services	6,345,391	7,239,814	8,730,931	9,268,551	537,620	6.2%
TOTAL INFORMATION MANAGEMENT	17,586,522	17,817,632	20,572,800	24,470,529	3,897,729	18.9%
POLICY						
Planning & Climate Protection						
Implement Plans, Policies & Measures	1,698,531		92,286		(92,286)	(100.0)%
Planning and Climate Protection	2,725,193	4,713,057	5,600,604	5,595,427	(5,177)	(0.1)%
Total Planning & Climate Protection	4,423,724	4,713,057	5,692,890	5,595,427	(97,463)	(100.1)%
Rule Development						
Rule Development	2,630,397	4,434,839	5,047,580	5,119,245	71,665	1.4%
Total Rule Development	2,630,397	4,434,839	5,047,580	5,119,245	71,665	1.4%
TOTAL POLICY	7,054,121	9,147,896	10,740,470	10,714,672	(25,798)	(98.7)%
PUBLIC AFFAIRS						
Communications						
Media Relations	1,995,019	2,995,703	3,695,418	3,210,110	(485,308)	(13.1)%

TABLE XII: General Fund Expenditure by Service Area & Division

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/$ Change 27/26 Amended	Percent Change
	2025	2026	2026	2027	$	%
Spare the Air (winter)	1,199,510	1,591,731	1,678,490	1,498,452	(180,038)	(10.7)%
Spare The Air (CMAQ)	130,682					
Total Communications	3,325,211	4,587,434	5,373,908	4,708,562	(665,346)	(23.8)%
External Affairs						
General Fund Sponsorships	208,155	598,730	636,225	439,991	(196,234)	(30.8)%
External Affairs	549,327	1,163,320	1,201,444	1,443,860	242,416	20.2%
Total External Affairs	757,482	1,762,050	1,837,669	1,883,851	46,182	(10.6)%
Legislative and Government Affairs						
Legislative Program	645,743	912,358	945,240	940,411	(4,829)	(0.5)%
Total Legislative and Government Affairs	645,743	912,358	945,240	940,411	(4,829)	(0.5)%
TOTAL PUBLIC AFFAIRS	4,728,436	7,261,842	8,156,817	7,532,824	(623,993)	(34.9)%
SCIENCE						
Assessment, Inventory & Modeling						
Emissions Inventory and Reporting	1,797,989	1,919,358	1,819,358	2,169,220	349,862	19.2%
Air Quality Analysis and Support	913,770	771,448	889,879	1,639,592	749,713	84.2%
Air Quality Modeling Management	722,324	843,557	843,557	398,647	(444,910)	(52.7)%
Exposure Assessment	368,062	714,527	873,554	917,661	44,107	5.0%
Total Assessment, Inventory & Modeling	3,802,145	4,248,890	4,426,348	5,125,120	698,772	15.8%
Meteorology & Measurements						
Air Monitoring - Operations	6,016,101	7,666,695	7,746,251	9,456,520	1,710,269	22.1%
Laboratory	2,314,037	2,510,212	2,542,258	2,600,681	58,423	2.3%
Meteorology	983,416	1,033,298	1,112,777	1,077,175	(35,602)	(3.2)%
Air Monitoring Quality Assurance	1,145,568	1,729,872	1,750,611	1,907,909	157,298	9.0%
BioWatch Monitoring	1,356,158	1,564,439	1,739,102		(1,739,102)	(100.0)%
Air Monitoring - Projects & Technology	1,055,984	1,466,420	1,624,629	995,561	(629,068)	(38.7)%
Ambient Air Quality Analysis	1,411,407	2,877,796	3,074,525	2,551,476	(523,049)	(17.0)%
Refinery Community Air Monitoring		2,116,259	2,116,259	3,143,679	1,027,420	48.5%
Total Meteorology & Measurements	14,282,671	20,964,991	21,706,412	21,733,001	26,589	0.1%
TOTAL SCIENCE	18,084,816	25,213,881	26,132,760	26,858,121	725,361	2.8%
Others						
Vacancy Savings		(9,649,204)	(9,879,204)	(12,790,864)	(2,911,660)	29.5%
Program Distribution	1,306,795	2,989,728	3,010,360	97,250,345	94,239,985	3,130.5%
Transfer In/Out	2,068,404	3,302,125	3,302,125		(3,302,125)	(100.0)%
Total Expenditures - General Fund Divisions	135,898,998	168,315,579	182,109,542	274,198,304	92,140,358	248.0%

TABLE XIII: Special Revenue Fund Expenditure by Service Area & Division

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/$ Change 27/26 Amended $	Percent Change %
ENGINEERING & COMPLIANCE						
Compliance & Enforcement						
Enhanced Mobile Source Insp (TFCA)	9,013	15,500	16,195	15,500	(695)	(4.3)%
Total Compliance & Enforcement	9,013	15,500	16,195	15,500	(695)	(4.3)%
TOTAL ENGINEERING & COMPLIANCE	9,013	15,500	16,195	15,500	(695)	
EQUITY & COMMUNITY PROGRAMS						
Community Investments						
Richmond Community Air Quality Fund				20,000,000	20,000,000	
Total Community Investments				20,000,000	20,000,000	
Strategic Incentives						
State-Funded Incentive Programs	36,925,891	56,668,151	70,639,567	50,688,084	(19,951,483)	(28.2)%
Transportation Fund for Clean Air (TFCA)	17,400,355	31,758,296	31,779,372	47,731,250	15,951,878	50.2%
Mobile Source Incentive Fund (MSIF)	2,797,055	6,186,152	6,186,812	5,796,872	(389,940)	(6.3)%
Vehicle Buy Back (MSIF)	2,023,905	11,504,089	13,195,777	11,456,806	(1,738,971)	(13.2)%
Misc Incentive Program (Other Grant)		54,593	54,593	103,488	48,895	89.6%
CA GMB - Grants Administration (CGMB)	377,480	144,421	148,742	20,951,534	20,802,792	13,985.8%
Volkswagen Env Mitigatn Trust (VW Trust)	2,347,879	21,555,595	21,558,057	15,082,212	(6,475,845)	(30.0)%
Total Strategic Incentives	61,872,565	127,871,297	143,562,920	151,810,246	8,247,326	5.7%
Technology Implementation Office						
Light Duty Elec Vehicle Pgm (Other Grant)	9,793,562	13,876,661	14,455,802	7,796,405	(6,659,397)	(46.1)%
Clean Cars for All (CCFA)	11,330,848	2,505,205	2,705,217	21,974,790	19,269,573	712.3%
Total Technology Implementation Office	21,124,410	16,381,866	17,161,019	29,771,195	12,610,176	73.5%
TOTAL EQUITY & COMMUNITY PROGRAMS	82,996,975	144,253,163	160,723,939	201,581,441	40,857,502	25.4%
PUBLIC AFFAIRS						
Communications						
Spare the Air Program (TFCA)	2,608,717	2,761,849	3,133,374	4,093,605	960,231	30.6%
Total Communications	2,608,717	2,761,849	3,133,374	4,093,605	960,231	30.6%
External Affairs						
Commuter Benefits Program (TFCA)		232,667	232,667	170,340	(62,327)	(26.8)%
Total External Affairs		232,667	232,667	170,340	(62,327)	(26.8)%
TOTAL PUBLIC AFFAIRS	2,608,717	2,994,516	3,366,041	4,263,945	897,904	26.7%
Others						
Program Distribution	143,331					
Total Expenditures - Special Revenue Fund Divisions	85,758,035	147,263,177	164,106,175	205,860,886	41,754,711	25.4%

Capital Expenditure

TABLE XIV
CAPITAL EXPENDITURE

Service Area	Description	Pgm	Capital Type	Request
	GENERAL FUND CAPITAL EXPENDITURE by SERVICE AREA			
Engineering & Compliance				
	Multi Program Van Custom Equipment and Build Out, replacement, 10 yr useful life	804	Lab & Monitoring Equipment	$40,000
	One (1) Multi Test Program Field Testing Van, replacement, 10 yr useful life	804	Lab & Monitoring Equipment	$60,000
	One (1) Source Test Field Multi Detector GC, new, 10 yr useful life	804	Lab & Monitoring Equipment	$45,000
	One (1) Source Test Isokinetic Meter Consoles, replacement, 10 yr useful life	804	Lab & Monitoring Equipment	$8,000
	Two (2) Source Test Analyzers, replacement, 10 yr useful life	804	Motorized Equipment	$56,000
Equity & Community Programs				
	MSA, StackNexus, Build and maintain new grants management system; 10 yr life	313	Computer & Network Equipment	$200,000
Finance & Administration				
	Office Equipment	709	Office Equipment	$150,000
Information Management				
	Capital enhancement of permitting and enforcement computer systems to include project requests on FYE 27 Backlog.	125	Computer & Network Equipment	$3,600,000
	Language Translation POC: Implementation Services	309	Computer & Network Equipment	$50,000
	Language Translation POC: Translation Services	309	Computer & Network Equipment	$100,000
	Website Migration & Development	309	Computer & Network Equipment	$150,000
	Website Migration Assessment and Planning	309	Computer & Network Equipment	$400,000
	Open Air Data Portal	725	Computer & Network Equipment	$1,000,000
	AI Permitting Enhancement Project	725	Computer & Network Equipment	$1,100,000
	Capital Project Documentation Services	725	Computer & Network Equipment	$200,000
	Ticketing System for Permitting Applications	727	Computer & Network Equipment	$300,000
Science				
	AMO_ 2 TSI UFP Analyzer(s) @ $43,000, 10 yr useful life	802	Lab & Monitoring Equipment	$85,000
	AMO_ 3 Magee Black Carbon Analyzer(s) @ $43,000, 10 yr useful life	802	Lab & Monitoring Equipment	$129,000
	AMO_1 URG Black Carbon Sampler(s) @ $13,000, 10 yr useful life	802	Lab & Monitoring Equipment	$26,000
	AMO_10 Thermo Nitrogen Dioxide Analyzer(s) @ $25,000, 10 yr useful life	802	Lab & Monitoring Equipment	$250,000
	AMO_12 Teledyne Zero Air Generators @ $14,854, 7 yr useful life	802	Lab & Monitoring Equipment	$175,000
	AMO_12 Thermo Multigas Calibrators @ $33,334, 10 yr useful life	802	Lab & Monitoring Equipment	$400,000
	AMO_16 Met One PM2.5 FEM Continuous Analyzer(s) @ $33,846, 10 yr useful life	802	Lab & Monitoring Equipment	$541,536
	AMO_2 ATEK Air Toxics Sampler(s) @ $13,000, 10 yr useful life	802	Lab & Monitoring Equipment	$26,000
	AMO_2 Thermo Ozone Calibrator(s) @ $27,500, 10 yr useful life	802	Lab & Monitoring Equipment	$55,000
	AMO_2 Thermo Sulfur Dioxide Analyzer(s) @ $23,500, 10 yr useful life	802	Lab & Monitoring Equipment	$47,000
	AMO_5 Thermo Ozone Analyzer(s) @ $22,000, 10 yr useful life	802	Lab & Monitoring Equipment	$110,000
	MDS_10 Agilaire Data Acquisition Systems (DAS) @ $10,500, 5 yr useful life	802	Lab & Monitoring Equipment	$105,000
	MDS_8 Agilaire Kits (DAS) @ $3,875, 5 yr useful life	802	Lab & Monitoring Equipment	$31,000
	MDS_15 VPN Router(s) @ $1,700 3 yr useful life	802	Lab & Monitoring Equipment	$25,500
	MDS_35 Managed TCP/IP Switches @ $10,660, 5 yr useful life	802	Lab & Monitoring Equipment	$373,100
	AMO_2 Thermo PM FRM Samplers @ $31,000, 7 yr useful life	802	Lab & Monitoring Equipment	$62,000
	AMO_4 Teledyne Continuous PM Analyzers @ $54,000 + 3 upgrade Kits @ $25,000, 7 yr useful life	802	Lab & Monitoring Equipment	$291,000
	FY27 Document Scanner - Record Retention Digitization Project; 5 yr useful life	803	Office Equipment	$7,500
	Air Quality Instrument Calibrators	807	Lab & Monitoring Equipment	$76,000

TABLE XIV
CAPITAL EXPENDITURE

Service Area	Description	Pgm	Capital Type	Request
Science (cont.)				
	Meteorological Calibration Equipment	807	Lab & Monitoring Equipment	$15,235
	Performance Audit Calibrator	807	Lab & Monitoring Equipment	$22,000
	Zero Air Generator	807	Lab & Monitoring Equipment	$38,000
	Workspace pod(s) for field office in West Oakland (Hollis), 2 office-pods for the Hollis warehouse space. 10 yr useful life and can be moved.	810	Office Equipment	$68,000
	Additional Particulate Matter instrumentation, including black carbon and size speciation instruments. Useful life 10+ yrs.	812	Lab & Monitoring Equipment	$180,000
	Air monitoring trailers to house Refinery Community Air Monitoring equipment. Useful life 10+ yrs.	812	Lab & Monitoring Equipment	$67,500
	Data loggers for collecting data from instrumentation at Refinery Community Air Monitoring stations. Useful life 10+ yrs.	812	Lab & Monitoring Equipment	$20,000
	SIFT-MS Gas Analyzers for measuring VOC, NOx, SO2, H2S, ammonia, and more. Useful life 7+ yrs.	812	Lab & Monitoring Equipment	$610,000
			TOTAL GENERAL FUND	**$11,295,371**

SPECIAL REVENUE FUND CAPITAL EXPENDITURE by SERVICE AREA

Equity & Community Programs				
	MSA, StackNexus, Build and maintain new grants management system; 10 yr useful life	307	Computer & Network Equipment	$125,000
	Contractor for Grants Management System development	308	Computer & Network Equipment	$125,000
	MSA, StackNexus, Build and maintain new grants management system; 10 yr useful life	310	Computer & Network Equipment	$50,000
	MSA, StackNexus, Build and maintain new grants management system; 10 yr useful life	324	Computer & Network Equipment	$50,000
			TOTAL SPECIAL REVENUE FUND	**$350,000**
			TOTAL CAPITAL EXPENDITURE By SERVICE AREA	**$11,645,371**

CAPITAL EXPENDITURE by TYPE

Capital Type	Service Area	Request
Computer & Network Equipment	**Equity & Community Programs**	$550,000
Computer & Network Equipment	**Information Management**	$6,900,000
Lab & Monitoring Equipment	**Engineering & Compliance**	$153,000
Lab & Monitoring Equipment	**Science**	$3,760,871
Motorized Equipment	**Engineering & Compliance**	$56,000
Office Equipment	**Finance & Administration**	$150,000
Office Equipment	**Science**	$75,500
	TOTAL CAPITAL EXPENDITURE by TYPE	**$11,645,371**

- Page Intentionally Left Blank -

General Fund
Program Narratives and Expenditure Details

Note: Definitions are provided in Appendix G
and are an integral part of this budget document.

SERVICE AREA - ENGINEERING & COMPLIANCE

Compliance & Enforcement Division

The Compliance & Enforcement Division ensures the Air District will realize the emission reductions achieved by the air quality regulations adopted by the Board of Directors, and permit conditions issued by the Executive Officer/APCO. Compliance with Air District, state, and federal regulations is achieved through a robust Compliance Assurance and Enforcement Program that includes comprehensive inspections and investigations and a complementary Compliance Assistance Program that supports compliance objectives of the Division by maintaining operations and assisting industry with air quality regulations and requirements. The Division works closely with local and state regulatory agencies, regulated industry and members of the community to provide the highest level of service to protect air quality and public health. The Division implements Air District strategies and enforces regulations that pertain to stationary sources, and has some mobile source enforcement authority in collaboration with the California Air Resources Board. Division priorities include conducting Title V and Synthetic Minor facility inspections, locating unpermitted sources of operations, resolving violations at facilities with ongoing non-compliance and responding to and investigating air quality complaints. Staff work collaboratively across divisions to achieve the Air District's mission and apply the appropriate level of enforcement proportional to the level of non-compliance. The Division vigorously pursues violators who show a disregard for the law and well-being of the public and ensures corrective actions and measures to resolve violations are taken.

The Compliance and Enforcement Division continues to focus on activities that align with the Air District's Strategic Plan and support commitments to communities and stakeholders to achieve clean air to protect public health and the environment as follows:

The Compliance Assurance and Enforcement Programs focus on announced and unannounced inspections of air pollution sources to ensure compliance. Targeted strategies are used to guide inspections to identify non-compliance and reduce excess emissions. Sources include: Title V and Synthetic Minors facilities, petroleum refineries, chemical plants, dry cleaners, gasoline dispensing facilities, autobody shops, asbestos renovations and demolitions, agricultural and prescribed burning, and other permitted sources. Other facets of the program requiring Division resources include investigations of Title V deviation reporting, Reportable Compliance Activities, and other inspections pertaining to the Portable Equipment Registration Program (PERP), Asbestos projects (renovations, demolitions and naturally occurring asbestos – NOA), compliance determinations for State Air Toxics Control Measures (ATCMs) and Federal Maximum Available Control Technology (MACTs) for air toxics. Air pollution complaints and incident response and investigations are a high priority in the Division that aim to address and resolve air quality concerns of local communities.

The Compliance Assistance Program develops outreach materials, advisories, policies and procedures and guidance information and implements compliance strategies that complement a wide range of enforcement efforts. The program aims to enhance industry and public understanding of compliance and enforcement programs and regulatory requirements, address compliance concerns and assist in resolving air quality violations. Key programs and projects in Compliance Assistance and Operations include the Air District's Wood Smoke Reduction Program, Air Quality Complaint Program, AB617 Community Health Protection Program, Title V, Open Burning, Flare Monitoring, Naturally Occurring Asbestos, Inspector Training, Green Business Certifications, Variance and Hearing Board Activities, and many others that ensure compliance with state, federal and Air District regulations and requirements. The program also maintains online web information, the dispatch operating system and the compliance assistance and complaint phone lines which are all integral interfaces with the public.

Managing Division:

Compliance & Enforcement

Contact Person:

John Marvin

Program Purpose:

The Enforcement Program consists of activities designed to respond when sources are found in violation of applicable Federal, State and Air District regulations and permit conditions. This program includes all Division activities necessary to address non-compliance including issuing Notices of Violation (NOV) and Notices to Comply (NTC), identifying causes and solutions for non-compliance, developing enforcement cases for legal action, and providing testimony during hearings and court cases. Other elements of the program include responding to the public's air pollution complaints, returning sources to compliance, and supporting enforcement of the variance and abatement order process.

Essential Functions

- Investigate and enforce air quality violations; issue and process NOVs and NTCs; re-inspect sources to verify compliance status after issuance. Work with Legal Division to procure penalty settlement and/or successful prosecution.
- Receive and investigate citizen inquiries and general air pollution complaints. Respond to these complaints as soon as possible where highest priority response is given to ongoing complaints alleged against potential nuisance sites.
- Prepare enforcement cases in coordination with Legal Division; conduct/coordinate investigations to support their development for legal actions.
- Provide technical analysis and support for variances, abatement orders, and permit appeals to the Hearing Board. Prepare a District position report on all matters before the Hearing Board. Ensure that increments of progress are met.
- Refinery Flares: review, comment, approve and enforce provisions in Regulation 12, Rules 11 and 12.
- Provide staff at community meetings to present information on the complaint process, enforcement activities, etc.
- Participate in interagency environmental task force programs to coordinate District enforcement activities with other County/State/Federal governmental agencies.

Strategic Plan Commitment	Strategic Plan Strategy
1.03.03 Share timely, accessible information.	1.03 - Minimize Flaring
2.02.03 Work with communities to collect air pollution data.	2.02 - Collect Community Data
2.05.02 Improve the transparency of complaint outcomes and follow up with community members on what the problem was and how it was resolved.	2.05 - Air Quality Complaints
2.05.03 Ensure responsiveness, including during nights, weekends, and holidays.	2.05 - Air Quality Complaints
4.05.01 Target inspections and other compliance activities where they are most needed.	4.05 - Improve Compliance Investigations
4.08.04 Deliver short, understandable, actionable alerts during incidents, and more robust and transparent after incident resolution and investigations.	4.08 - Air Quality Incidents

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)	30.34	35.57	35.57	34.70	(0.87)	(2.45)%
Personnel Expenditures						
Permanent Salaries	4,314,254	5,091,300	5,091,300	5,258,263	166,963	3.28%
Overtime Salaries	40,631	117,000	117,000	125,000	8,000	6.84%
Payroll Taxes	67,708	72,612	72,612	74,211	1,599	2.20%
Pension Benefits	1,014,780	963,100	963,100	1,058,324	95,224	9.89%
FICA Replacement Benefits	95,916	125,487	125,487	126,363	876	0.70%
Group Insurance Benefits	586,514	857,476	857,476	901,753	44,277	5.16%
Transportation Subsidy	12,152	45,671	45,671	33,315	(12,356)	(27.05)%
Workers' Compensation	12,633	14,983	14,983	13,905	(1,078)	(7.19)%
Discretionary Contribution		292,960	292,960	277,635	(15,325)	(5.23)%
Total Personnel Expenditures	6,144,588	7,580,589	7,580,589	7,868,769	288,180	3.80%
Services & Supplies Expenditures						
Travel	16,341	20,250	20,280	24,400	4,120	20.32%
Training & Education	12,501	12,790	15,660	21,500	5,840	37.29%
Repair & Maintenance	39,290	192,750	194,092	148,000	(46,092)	(23.75)%
Communications	14,701	140,900	140,900	117,000	(23,900)	(16.96)%
Building Maintenance		2,500	2,500	2,500		
Utilities	2,712	4,000	4,000	4,000		
Printing & Reproduction	1,578	2,000	2,505	3,000	495	19.76%
Rents & Leases	74,084	85,040	85,040	86,600	1,560	1.83%
Professional Services	273					
Shop & Field Supplies	29,542	36,590	38,996	64,600	25,604	65.66%
Computer Hardware & Software		2,000	2,000	2,000		
Stationery & Office Supplies	220			5,000	5,000	
Minor Office Equipment		1,000	1,000	1,000		
Total Services & Supplies Expenditures	191,242	499,820	506,973	479,600	(27,373)	(5.40)%
Capital Expenditures						
Total Expenditures	6,335,830	8,080,409	8,087,562	8,348,369	260,807	3.22%

Compliance Assistance & Operations 402

Managing Division:

Compliance & Enforcement

Contact Person:

Tracy Lee

Program Purpose:

Compliance Assistance and Operations (Operations) is responsible for ensuring business continuity and program compliance. A primary focus of Operations is the development and implementation of policies and procedures, compliance advisories, public outreach and educational material, and alignment of core programs with the Air District Strategic Plan. Functions include administering a broad range of compliance programs, and supporting compliance assurance activities such as the Targeted Inspection, Air Quality Complaint, Title V and Reportable Compliance Programs. Operations aim to strengthen interagency coordination and meaningful engagement with AB 617 and overburdened communities to develop enforcement programs and strategies that further reduce air pollution and address community concerns. The work includes transforming strategies into policies and actions to enhance investigations, implementing new enforcement tools to prioritize inspections and target non-compliance, and making information transparent and accessible to build community trust. Core work also includes developing enforcement webpages and online information, maintaining records retention of confidential and public documents, responding to public records requests, and providing integral compliance assistance services to the public.

Essential Functions

- Develop and implement policies and procedures, compliance advisories, and other documents/processes to ensure consistent application of enforcement of air quality rules and regulations.
- Support a variety of compliance and enforcement activities in the field, core programs and cross-divisional projects.
- Align Division programs, projects and policies with Air District mission, goals and Strategic Plan initiatives and actions.
- Ensure staff maintain safety training and certifications by providing educational materials, training and guidance to comply with occupational health and safety standards.
- Ensure transparency of Division goals and objectives, programs and policies and build trust with community and local enforcement partner agencies through compliance assistance and outreach.
- Establish administrative processes, workflow and procedures that aim to achieve consistency, efficiency and maintain business needs and functions.
- Maintain compliance assistance phone lines and dispatch operating system during core business hours.

Strategic Plan Commitment	Strategic Plan Strategy
2.02.01 Provide community with air quality data collection tools.	2.02 - Collect Community Data
2.03.02 Work with community members to better describe available data and understand how they want to access data.	2.03 - Make Data Accessible
2.05.01 Explore new ways to provide complaint information to the public.	2.05 - Air Quality Complaints
2.05.02 Improve the transparency of complaint outcomes and follow up with community members on what the problem was and how it was resolved.	2.05 - Air Quality Complaints
2.05.03 Ensure responsiveness, including during nights, weekends, and holidays.	2.05 - Air Quality Complaints
4.05.01 Target inspections and other compliance activities where they are most needed.	4.05 - Improve Compliance Investigations

Compliance Assistance & Operations 402

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	21.28	22.54	22.54	24.02	1.48	6.57%
Personnel Expenditures						
Permanent Salaries	2,895,744	3,197,752	3,197,752	3,405,156	207,404	6.49%
Overtime Salaries	4,847	7,000	7,000	8,000	1,000	14.29%
Payroll Taxes	45,000	45,531	45,531	47,910	2,379	5.23%
Pension Benefits	636,760	606,333	606,333	683,982	77,649	12.81%
FICA Replacement Benefits	64,055	79,524	79,524	87,468	7,944	9.99%
Group Insurance Benefits	392,204	521,989	521,989	541,883	19,894	3.81%
Transportation Subsidy	8,756	28,943	28,943	23,060	(5,883)	(20.33)%
Workers' Compensation	8,479	9,495	9,495	9,625	130	1.37%
Discretionary Contribution		183,966	183,966	179,432	(4,534)	(2.46)%
Total Personnel Expenditures	4,055,845	4,680,533	4,680,533	4,986,516	305,983	6.54%
Services & Supplies Expenditures						
Travel	2,203	18,000	18,000	18,000		
Training & Education	8,767	38,500	40,935	54,000	13,065	31.92%
Repair & Maintenance		4,000	4,000	4,000		
Communications	44,801	39,500	44,735	44,500	(235)	(0.53)%
Postage		3,000	3,000	4,000	1,000	33.33%
Printing & Reproduction	698	8,500	8,778	8,500	(278)	(3.17)%
Rents & Leases		500	500	500		
Professional Services	1,683	6,500	7,256	9,000	1,744	24.04%
Shop & Field Supplies	360	3,500	3,500	3,500		
Computer Hardware & Software		1,500	1,500	1,500		
Stationery & Office Supplies		5,000	5,000	5,000		
Minor Office Equipment		2,000	2,000	2,000		
Total Services & Supplies Expenditures	58,512	130,500	139,204	154,500	15,296	10.99%
Capital Expenditures						
Total Expenditures	4,114,357	4,811,033	4,819,737	5,141,016	321,279	6.67%

Managing Division:

Compliance & Enforcement

Contact Person:

Juan Ortellado

Program Purpose:

The program involves conducting comprehensive compliance inspections and investigations of stationary sources ranging from large industrial facilities, such as refineries, chemical plants, wastewater treatment, landfills, power plants and metal facilities, to smaller businesses, such as gasoline stations, auto body shops and dry cleaners. The program also includes enforcement of State Airborne Toxic Control Measures for sources that generate asbestos and diesel particulate matter. Beyond routine inspections to ensure that equipment, emissions monitoring, abatement and controls operate in compliance with regulatory requirements, the program involves responding to major incidents and potential air emission releases of hazardous chemicals and pollutants. Facilities discovered to be in violation are required to initiate timely corrective actions, minimize offsite community impacts and take steps to resolve air quality violations. Enforcement actions may require enhanced communications and coordination with other local agencies and first responders that result in joint investigations and enforcement case development.

Essential Functions

- Refinery Inspection Program for Regulatory and Title 5 Permit Compliance.
- Title V Inspections Program / EPA Grant / Aerometric Information Retrieval System (AIRS) and audits.
- Synthetic Minor Inspection Program.
- Gasoline Dispensing Facilities (GDFs) Inspection Program.
- Asbestos Inspection Program
- Initiate response to major air pollution incidents as soon as possible, and within minutes of notification, provide technical assistance and support to first response agencies during and after incidents; prepare incident reports.
- State Portable Equipment Inspection Program.
- Grants, Diesel Particulate Matter, and Refrigeration Management Inspections Program.
- Inspection Communications / Computer Programs.
- Conduct targeted prescribed burns Title 17/ Regulation 5 Open Burning inspections.

Strategic Plan Commitment	Strategic Plan Strategy
1.03.03 Share timely, accessible information.	1.03 - Minimize Flaring
2.02.03 Work with communities to collect air pollution data.	2.02 - Collect Community Data
2.05.02 Improve the transparency of complaint outcomes and follow up with community members on what the problem was and how it was resolved.	2.05 - Air Quality Complaints
2.05.03 Ensure responsiveness, including during nights, weekends, and holidays.	2.05 - Air Quality Complaints
4.05.01 Target inspections and other compliance activities where they are most needed.	4.05 - Improve Compliance Investigations
4.08.04 Deliver short, understandable, actionable alerts during incidents, and more robust and transparent after incident resolution and investigations.	4.08 - Air Quality Incidents

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)	31.28	36.93	36.93	36.40	(0.53)	(1.44)%
Personnel Expenditures						
Permanent Salaries	4,485,315	5,303,828	5,303,828	5,550,164	246,336	4.64%
Overtime Salaries	15,115	8,000	8,000	16,000	8,000	100.00%
Payroll Taxes	69,742	75,637	75,637	78,224	2,587	3.42%
Pension Benefits	1,005,873	999,676	999,676	1,117,275	117,599	11.76%
FICA Replacement Benefits	99,376	130,280	130,280	132,554	2,274	1.75%
Group Insurance Benefits	608,228	868,279	868,279	909,922	41,643	4.80%
Transportation Subsidy	14,071	47,415	47,415	34,947	(12,468)	(26.30)%
Workers' Compensation	13,135	15,556	15,555	14,587	(968)	(6.22)%
Discretionary Contribution		305,213	305,213	293,100	(12,113)	(3.97)%
Total Personnel Expenditures	6,310,855	7,753,884	7,753,883	8,146,773	392,890	5.07%
Services & Supplies Expenditures						
Travel	21,735	17,500	17,500	17,500		
Training & Education	1,314	6,800	6,800	6,800		
Repair & Maintenance	168	10,000	13,528	10,000	(3,528)	(26.08)%
Communications	136,676	123,500	123,500	143,500	20,000	16.19%
Building Maintenance		4,000	4,000	4,000		
Utilities	5,305	3,000	3,000	3,000		
Printing & Reproduction	400	1,000	1,701	1,000	(701)	(41.21)%
Rents & Leases	116,883	125,500	125,500	125,500		
Professional Services	3,320	15,500	24,583	15,500	(9,083)	(36.95)%
Shop & Field Supplies	45,650	40,000	43,429	70,000	26,571	61.18%
Computer Hardware & Software	546	23,000	23,479	23,000	(479)	(2.04)%
Stationery & Office Supplies	687	2,300	2,314	2,300	(14)	(0.61)%
Total Services & Supplies Expenditures	332,684	372,100	389,334	422,100	32,766	8.42%
Capital Expenditures						
Total Expenditures	6,643,539	8,125,984	8,143,217	8,568,873	425,656	5.23%

- Page Intentionally Left Blank -

Engineering Division

Engineering Division (Division) gives high priority to the timely review of permit applications and permit renewals. The typical application evaluation includes analyzing emissions impacts and determining compliance with applicable air quality requirements, including Best Available Control Technology (BACT), 'No Net Increase' emission offset requirements, New Source Review (NSR) of Toxic Air Contaminants (TAC) and California Environmental Quality Act (CEQA). There are about 10,000 facilities with about 26,000 devices and operations that have Air District permits. The Division processes, reviews, issues, and renews Title V (Major Facility Review) permits for about 79 facilities.

The Division implements Regulation 11, Rule 18, Reduction of Risk from Air Toxic Emissions at Existing Facilities. The Division expects to refine TAC emissions and prioritization scores for approximately 300 facilities and expects to conduct refined site-wide health risk assessments (HRAs) for about 150 facilities. HRA results will determine if the facilities are subject to the risk reduction requirements of this rule. Risk reduction plans will be reviewed, approved, and tracked. The toxics programs also support Community Health Protection Program goals to eliminate health disparities in overburdened communities.

The Division implements the State Air Toxics "Hot Spots" Program, which applies to existing facilities that emit TACs. Based on the annual TAC emissions inventory, the Division calculates prioritization scores for facilities, conducts HRAs for high priority facilities, and reports HRA results to CARB.

The Division continues to implement the Criteria Air Pollutants and Toxic Air Contaminants Reporting (CTR) Regulation and the Toxic Hot Spots Emissions Inventory Criteria and Guidelines Regulation, and state regulations establishing a uniform system of annual reporting of emissions of criteria air pollutants and TACs for permitted facilities. The Division has been actively working with other agencies and CAPCOA in the development of uniform emissions inventory guidelines for different source categories.

Due to power outages and PG&E Public Safety Power Shutoffs (PSPS), there continues to be a large number of applications for backup generators.

The Division is participating in the Air District's Assembly Bill 617 (AB 617) implementation, which includes a Community Health Protection Program to benefit communities most directly affected by air pollution. The Division participates in the workgroups for the CARB BARCT/BACT Technology Clearinghouse, CARB Permitting FAQs for environmental justice workgroup, and the Emissions Inventory workgroup. The Division also participates in the Air District's AB 617 priority community workgroups.

The Division is working on short- and long-term projects to incorporate environmental justice principles in permitting. This includes (1) the development of permitting tools with other divisions and (2) implementing initiatives identified with the Environmental Justice Ad Hoc Committee of the Community Advisory Council to create Environmental Justice Strategies for permitting that are part of the Air District's Strategic Plan.

The Division has fully transitioned to the Production System and continues to develop additional functionality to improve permitting operations, which includes an online system for the regulated community. These tools will increase consistency, efficiency, and accuracy by allowing customers to submit applications, report data for the emissions inventory, pay invoices and renew permits through an online interface.

The Division provides technical support to other divisions, agencies, and programs, including rule development, emissions inventory, compliance and enforcement, planning, monitoring and measurement, the Technology Implementation Office, and the Air District's Regional Climate Action Plan. Key rule development efforts include amendments to Regulation 3 (Fees), and amendments to rules to implement Expedited Best Available Retrofit Control Technology for AB 617.

Managing Division:

Engineering

Contact Person:

Nicolas Maiden

Program Purpose:

Evaluate all Non-Title V permit applications. Review and process data updates and permit renewals.

The Permit Evaluation Program involves activities related to the evaluation of permit applications submitted to the District (except Title V permit applications, which are covered under Program 506). This includes applications for: (1) new/modified sources subject to District New Source Review requirements, (2) emissions banking, (3) Interchangeable Emission Reduction Credits (IERCs), and (4) Prevention of Significant Deterioration (PSD) & Acid Rain permits. Staff calculates emissions, evaluates compliance with regulatory requirements, including case-by-case Best Available Control Technology (BACT) and emissions offset determinations and establishes enforceable permit conditions. The program includes California Environmental Quality Act (CEQA) review and Climate Protection activities related to permitted sources.

The Permit Renewal Program involves activities related to the annual renewal of District permits. The permit renewal process involves collection of data needed to update the Air District's emissions inventory, review of permit conditions, preparation of permit fee invoices, reconciliation of discrepancies and issuance of permit documents. Information gathered during this process is used for planning and rule development and may also result in enforcement action or additional permitting.

Essential Functions

- Evaluate all non-Title V permit applications (1,500 estimated).
- Complete CEQA-review functions.
- Provide technical support to all divisions including estimating emissions, rule/condition interpretations and rule development.
- Assist other agencies, industry and the public.
- Participate in cross-agency committees such as California Air Pollution Controls Officers Association (CAPCOA). Engineering Managers' Subcommittee and National Association of Clean Air Agencies (NACAA).
- Support implementation of rules (e.g., Refinery Regulations, GHG Regulations).
- Request, enter and review annual data update requests. Review and maintain permit conditions. Review permit renewal invoice program.

Strategic Plan Commitment	Strategic Plan Strategy
4.01.01 Update regulations to ensure permits can be done efficiently and timely.	4.01 - Timely Permits
4.01.03 Establish permit project teams for complex permits.	4.01 - Timely Permits
4.01.04 Update resource management to align with permit workload.	4.01 - Timely Permits
4.02.03 Improve how we communicate information about permits and the permitting process to communities and applicants using more understandable, less technical language.	4.02 - Transparent Permit Process
4.03.02 Review standard permit conditions and our process for translating regulations to permit conditions.	4.03 - Consistent Permits
4.03.03 Review how we issue permits to ensure we are following civil rights laws and regulations.	4.03 - Consistent Permits
4.03.04 Explore how to further consider cumulative impacts in our permitting process.	4.03 - Consistent Permits
4.03.05 Review when to do a broad environmental analysis of a permitting decision.	4.03 - Consistent Permits

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	42.67	48.07	48.07	52.69	4.62	9.61%
Number of Positions (LTCE)		2.00	2.00	12.70	10.70	535.00%
Personnel Expenditures						
Permanent Salaries	6,240,185	7,597,862	7,597,862	9,946,168	2,348,306	30.91%
Overtime Salaries	78,217	150,000	150,000	150,000		
Temporary Salaries	22,054	335,000	335,000	335,000		
Payroll Taxes	97,365	108,340	108,340	140,170	31,830	29.38%
Pension Benefits	1,377,651	1,438,113	1,438,113	2,002,073	563,960	39.22%
FICA Replacement Benefits	138,298	176,641	176,641	238,112	61,471	34.80%
Group Insurance Benefits	845,576	1,099,491	1,099,491	1,504,359	404,868	36.82%
Transportation Subsidy	19,211	64,288	64,288	62,777	(1,511)	(2.35)%
Workers' Compensation	18,273	21,091	21,091	26,203	5,112	24.24%
Discretionary Contribution		437,753	437,753	525,213	87,460	19.98%
Total Personnel Expenditures	8,836,830	11,428,579	11,428,579	14,930,075	3,501,496	30.64%
Services & Supplies Expenditures						
Travel	4,764	15,500	15,500	15,500		
Training & Education	220	2,964	2,964	2,964		
Communications		110	110	110		
Professional Services	198,837	311,000	665,695	111,000	(554,695)	(83.33)%
Computer Hardware & Software		2,000	2,000	2,000		
Books & Journals		200	200	200		
Minor Office Equipment		368	368	368		
Total Services & Supplies Expenditures	203,821	332,142	686,837	132,142	(554,695)	(80.76)%
Capital Expenditures						
Total Expenditures	9,040,651	11,760,721	12,115,416	15,062,217	2,946,801	24.32%

Managing Division:

Engineering

Contact Person:

Ariana Husain

Program Purpose:

The Air Toxics Program involves the integration of Federal and State air toxics mandates with local goals established by the Air District's Board of Directors. The program includes air toxics new source review (NSR), reduction of risk from existing facilities (Regulation 11, Rule 18), air toxics control measures, and the Air Toxics "Hot Spots" Program (AB2588). The Air Toxics Program also provides support to other Community Health Protection programs that seek toeliminate air quality disparities in overburden communities. Staff provides guidance on toxic emission calculations, controls, regulation, and impacts, assists with incident and compliance evaluation, conducts health risk assessments (HRAs) for stationary sources, and approves risk reduction plans for existing facilities.

Essential Functions

- Perform HRAs for permit applications involving new or modified sources (estimated 300 HRAs per year).
- Prepare and review facility-wide HRAs, Risk Reduction Plans (RRPs), and TBARCT determinations for facilities subject to Rule 11-18.
- Maintain and improve air toxics emissions inventory through the implementation of updated CARB toxics emissions reporting requirements and the support of TARMAC efforts to improve toxic emission factors for various source categories.
- Complete annual air toxics prioritization for Hot Spots Program and conduct or review new HRAs required for high-priority sites that are exempt from Rule 11-18. Coordinate public notification and risk reduction audits.
- Support amendments to Rule 2-1 and 2-5 by clarifying language and updating health effects values.
- Review HRAs and Prevention of Significant Deterioration (PSD) modeling analyses for major permit applications.
- Support development of data management systems such as the Permit and Compliance System to allow for robust documentation of toxic related information such as health risk results of HRAs
- Prepare toxic policy and procedures to support NSR permitting activities
- Support cumulative impact analysis via the implementation of cancer risk thresholds for OBCs and providing input to the Advisory Council.

Strategic Plan Commitment	Strategic Plan Strategy
4.01.01 Update regulations to ensure permits can be done efficiently and timely.	4.01 - Timely Permits
4.01.02 Better track permit applications, address bottlenecks in permitting process, and improve internal coordination.	4.01 - Timely Permits
4.02.01 Provide more information to applicants and the public throughout permitting process	4.02 - Transparent Permit Process
4.02.02 Create user-friendly reports and enhance publicly accessible, web-based tools for permit applications, online tracking, and easily accessible information on permitted sources, permit activity, and related emissions.	4.02 - Transparent Permit Process
4.02.03 Improve how we communicate information about permits and the permitting process to communities and applicants using more understandable, less technical language.	4.02 - Transparent Permit Process
4.03.01 Review regulations, as they are being developed, to ensure they will be clear and enforceable when included in a permit.	4.03 - Consistent Permits
4.03.02 Review standard permit conditions and our process for translating regulations to permit conditions.	4.03 - Consistent Permits
4.03.04 Explore how to further consider cumulative impacts in our permitting process.	4.03 - Consistent Permits

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	8.45	11.24	11.24	13.90	2.66	23.67%
Personnel Expenditures						
Permanent Salaries	1,575,498	1,886,798	1,886,798	2,304,576	417,778	22.14%
Overtime Salaries	10,971	8,000	8,000	8,000		
Payroll Taxes	24,528	26,978	26,978	32,556	5,578	20.68%
Pension Benefits	332,740	373,607	373,607	465,001	91,394	24.46%
FICA Replacement Benefits	34,554	39,648	39,648	50,599	10,951	27.62%
Group Insurance Benefits	210,582	292,249	292,249	357,734	65,485	22.41%
Transportation Subsidy	4,981	14,430	14,430	13,340	(1,090)	(7.55)%
Workers' Compensation	4,613	4,734	4,734	5,568	834	17.62%
Discretionary Contribution		108,931	108,931	121,986	13,055	11.98%
Total Personnel Expenditures	2,198,467	2,755,375	2,755,375	3,359,360	603,985	21.92%
Services & Supplies Expenditures						
Travel	1,523	2,050	2,050	2,050		
Training & Education		4,600	4,600	4,600		
Postage		39,940	39,940	39,940		
Printing & Reproduction		7,000	7,000	7,000		
Professional Services	41,418	7,500	393,888	7,500	(386,388)	(98.10)%
Computer Hardware & Software		4,000	4,000	4,000		
Stationery & Office Supplies		300	300	300		
Minor Office Equipment		400	400	400		
Total Services & Supplies Expenditures	42,941	65,790	452,178	65,790	(386,388)	(85.45)%
Capital Expenditures						
Total Expenditures	2,241,408	2,821,165	3,207,553	3,425,150	217,597	6.78%

Permit Operations 504

Managing Division:

Engineering

Contact Person:

Fred Tanaka

Program Purpose:

To develop and maintain systems and provide administrative services.This program has responsibilities maintaining the infrastructure of the division's program through data management, document management, maintaining documentation, reporting, administrative support and customer service.

Essential Functions

- Process and maintain data from permitted facilities.
- Update and correct data from permitted facilities.
- Maintain and update database systems.
- Maintain program forms.
- Manage and improve data quality.
- Provide administrative support.
- Maintain permit tracking and management programs.
- Maintain emissions bank and small facility bank.
- Maintain division webpages.
- Manage division records including metadata and documents.

Strategic Plan Commitment	Strategic Plan Strategy
1.07.01 Maximize climate change benefits of regulations and nonregulatory programs.	1.07 - New Climate Solutions
4.02.02 Create user-friendly reports and enhance publicly accessible, web-based tools for permit applications, online tracking, and easily accessible information on permitted sources, permit activity, and related emissions.	4.02 - Transparent Permit Process

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)	3.38	3.58	3.58	5.20	1.62	45.25%
Personnel Expenditures						
Permanent Salaries	527,926	576,594	576,594	1,017,459	440,865	76.46%
Overtime Salaries	2,978	5,000	5,000	5,000		
Payroll Taxes	8,141	8,226	8,226	14,592	6,366	77.39%
Pension Benefits	117,516	116,226	116,226	206,125	89,899	77.35%
FICA Replacement Benefits	11,681	12,621	12,621	18,924	6,303	49.94%
Group Insurance Benefits	71,217	73,344	73,344	139,826	66,482	90.64%
Transportation Subsidy	2,025	4,593	4,593	4,989	396	8.62%
Workers' Compensation	1,546	1,507	1,507	2,082	575	38.16%
Discretionary Contribution		33,262	33,262	54,074	20,812	62.57%
Total Personnel Expenditures	743,030	831,373	831,373	1,463,071	631,698	75.98%
Services & Supplies Expenditures						
Training & Education			4,000		(4,000)	(100.00)%
Printing & Reproduction	23,956	75,166	91,891	75,166	(16,725)	(18.20)%
Professional Services		12,255	24,510		(24,510)	(100.00)%
Shop & Field Supplies		5,172	10,172	17,427	7,255	71.32%
Total Services & Supplies Expenditures	23,956	92,593	130,573	92,593	(37,980)	(29.09)%
Capital Expenditures						
Total Expenditures	766,986	923,966	961,946	1,555,664	593,718	61.72%

Managing Division:

Engineering

Contact Person:

Sanjeev Kamboj

Program Purpose:

Implementation of Federal Operating Permit Program for Major Facilities.

The Title V program involves activities related to Title V of the Federal Clean Air Act (CAA), which requires the Air District to issue federally enforceable permits to major and other designated facilities. The program is intended to enhance compliance with the CAA via permits that explicitly include all Federal, State, and Air District requirements applicable to sources of air pollution at subject facilities.

Essential Functions

- Evaluate and process Title V applications (initial, renewal, revision, administrative amendment and reopening).
- Conduct Title V outreach activities and public hearings, as needed.
- Provide Title V training to the Air District staff.
- Track EPA rulemaking related to Title V, Section 112, compliance monitoring and acid rain.

Strategic Plan Commitment	Strategic Plan Strategy
4.01.01 Update regulations to ensure permits can be done efficiently and timely.	4.01 - Timely Permits
4.02.01 Provide more information to applicants and the public throughout permitting process	4.02 - Transparent Permit Process
4.03.02 Review standard permit conditions and our process for translating regulations to permit conditions.	4.03 - Consistent Permits

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	2.04	3.78	3.78	3.66	(0.12)	(3.17)%
Number of Positions (LTCE)				1.05	1.05	
Personnel Expenditures						
Permanent Salaries	284,225	569,656	569,656	736,018	166,362	29.20%
Overtime Salaries	1,275	5,000	5,000	5,000		
Temporary Salaries		8,006	8,006	8,006		
Payroll Taxes	4,282	8,123	8,123	10,381	2,258	27.80%
Pension Benefits	68,588	109,984	109,984	148,270	38,286	34.81%
FICA Replacement Benefits	6,086	13,327	13,327	17,143	3,816	28.63%
Group Insurance Benefits	37,058	80,574	80,574	117,273	36,699	45.55%
Transportation Subsidy	933	4,850	4,850	4,520	(330)	(6.80)%
Workers' Compensation	832	1,591	1,591	1,886	295	18.54%
Discretionary Contribution		32,817	32,817	38,896	6,079	18.52%
Total Personnel Expenditures	403,279	833,928	833,928	1,087,393	253,465	30.39%
Services & Supplies Expenditures						
Travel	148	378	378	378		
Training & Education	126	907	907	907		
Communications		530	530	530		
Printing & Reproduction		28,873	28,873	28,873		
Professional Services		202,723	202,723	102,723	(100,000)	(49.33)%
Minor Office Equipment		1,717	1,717	1,717		
Total Services & Supplies Expenditures	274	235,128	235,128	135,128	(100,000)	(42.53)%
Capital Expenditures						
Total Expenditures	403,553	1,069,056	1,069,056	1,222,521	153,465	14.36%

Managing Division:

Engineering

Contact Person:

Fred Tanaka

Program Purpose:

To develop the infrastructure for consistent, efficient, and transparent implementation of Engineering Division programs.This program has responsibilities to implement programs that ensure the consistent evaluation of permitting through the maintenance of policy and procedural documentation and training. Programs that relate to but are not directly related to permitting are implemented through this program including public records, public noticing, community-based programs, auditing and data analytics.

Essential Functions

- Develop and maintain District permit rules, guidelines, job aides, policies and procedures.
- Update permitting tools such as Permit Handbook, Best Available Control Technology (BACT) and Toxic Best Available Control Technology (TBACT) Workbook documents.
- Review and improve the point source emissions inventory and other reported data.
- Manage training program.
- Coordinate Public Noticing activities.
- Process Public Records Requests for division records.
- Develop/update permitting programs including emissions factors, standard permit conditions, permit handbook chapters, BACT workbook and other manuals to streamline permitting and increase consistency.
- Develop and implement AB 617 work including inventory, rule development, reporting, technology clearinghouse development, community risk reduction and re-envisioning of permitting in impacted communities.
- Review/improve metrics and analysis for cost recovery and containment.
- Develop tools to improve communication and customer service.

Strategic Plan Commitment	Strategic Plan Strategy
4.01.01 Update regulations to ensure permits can be done efficiently and timely.	4.01 - Timely Permits
4.01.02 Better track permit applications, address bottlenecks in permitting process, and improve internal coordination.	4.01 - Timely Permits
4.02.01 Provide more information to applicants and the public throughout permitting process	4.02 - Transparent Permit Process
4.02.03 Improve how we communicate information about permits and the permitting process to communities and applicants using more understandable, less technical language.	4.02 - Transparent Permit Process
4.03.01 Review regulations, as they are being developed, to ensure they will be clear and enforceable when included in a permit.	4.03 - Consistent Permits
4.03.02 Review standard permit conditions and our process for translating regulations to permit conditions.	4.03 - Consistent Permits

Engineering Special Projects 507

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	7.05	7.58	7.58	9.33	1.75	23.09%
Number of Positions (LTCE)				0.25	0.25	
Personnel Expenditures						
Permanent Salaries	1,095,153	1,244,814	1,244,814	1,611,147	366,333	29.43%
Overtime Salaries	2,802	5,000	5,000	5,000		
Temporary Salaries	3,520					
Payroll Taxes	17,085	17,928	17,928	22,768	4,840	27.00%
Pension Benefits	266,544	242,804	242,804	325,202	82,398	33.94%
FICA Replacement Benefits	24,348	26,737	26,737	34,894	8,157	30.51%
Group Insurance Benefits	148,625	167,843	167,843	219,744	51,901	30.92%
Transportation Subsidy	2,755	9,731	9,731	9,200	(531)	(5.46)%
Workers' Compensation	3,207	3,192	3,192	3,840	648	20.30%
Discretionary Contribution		71,837	71,837	85,312	13,475	18.76%
Total Personnel Expenditures	1,564,039	1,789,886	1,789,886	2,317,107	527,221	29.46%
Services & Supplies Expenditures						
Travel	152	5,000	5,000	5,000		
Training & Education	2,168	65,000	65,000	69,000	4,000	6.15%
Communications	8,475	7,100	7,100	8,100	1,000	14.08%
Printing & Reproduction	9,430	50,000	50,000	50,000		
Professional Services	7,176	50,000	47,747		(47,747)	(100.00)%
Shop & Field Supplies	598	10,000	19,227	60,000	40,773	212.06%
Computer Hardware & Software	585	60,000	65,000	40,000	(25,000)	(38.46)%
Stationery & Office Supplies				15,000	15,000	
Total Services & Supplies Expenditures	28,584	247,100	259,074	247,100	(11,974)	(4.62)%
Capital Expenditures						
Total Expenditures	1,592,623	2,036,986	2,048,960	2,564,207	515,247	25.15%

- Page Intentionally Left Blank -

Source Test

The Source Test Division conducts Air District source testing, along with providing oversight of facility source testing and continuous emissions monitoring, in order to ensure that sources of air pollution report accurate emissions. Compliance with rules and permits is often determined using source test data and information. The Source Test Division also provides subject matter expertise to develop defensible emissions data to support permit actions, rule development, emission inventory, and policy decisions.

Managing Division:

Source Test

Contact Person:

Jerry Bovee

Program Purpose:

Provide Air District performed source testing, facility source emission test oversight, facility CEMS oversight, and subject matter expertise to Air District Divisions. The data and findings generated by the Section are used throughout the organization to support operational actions, such as enforcement, permitting, and rule development, and inform policy decisions.

Essential Functions

- Review facility contractor source test reports, make approve/disapprove determinations, and assess compliance status.
- Review facility CEMS excess emission and monthly reports and make compliance recommendations.
- Provide source testing and technical support for Enforcement and Engineering efforts.
- Provide subject matter expertise in emission measurement, monitoring and CEMS to other Divisions.
- Conduct Field Accuracy Tests (FATs) on CEM systems and oversee facility CEMS programs.
- Conduct particulate or gaseous toxics source tests.
- Conduct source tests on gasoline cargo tanks.
- Conduct source tests at gasoline bulk terminals and bulk plants.
- Conduct instrumental gaseous source tests.
- Conduct Enhanced Vapor Recovery source tests at Gasoline Dispensing Facilities (GDF)

Strategic Plan Commitment	Strategic Plan Strategy
1.01.04 Prioritize actions that reduce inequitable exposures to air pollution.	1.01 - Change Approach to Air Quality
1.05.02 Better quantify emissions that violate regulations and analyze health impacts	1.05 - Enhance Violation Investigations
4.05.01 Target inspections and other compliance activities where they are most needed.	4.05 - Improve Compliance Investigations

Source Test 804

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)	14.50	16.34	16.34	16.00	(0.34)	(2.08)%
Personnel Expenditures						
Permanent Salaries	2,289,009	2,535,176	2,535,176	2,526,213	(8,963)	(0.35)%
Overtime Salaries	2,490	6,000	6,000	4,500	(1,500)	(25.00)%
Payroll Taxes	35,902	36,219	36,219	35,639	(580)	(1.60)%
Pension Benefits	495,231	486,218	486,218	509,042	22,824	4.69%
FICA Replacement Benefits	50,965	57,646	57,646	58,260	614	1.07%
Group Insurance Benefits	310,893	407,586	407,586	427,476	19,890	4.88%
Transportation Subsidy	6,625	20,980	20,980	15,360	(5,620)	(26.79)%
Workers' Compensation	6,703	6,883	6,883	6,411	(472)	(6.86)%
Discretionary Contribution		146,133	146,133	133,539	(12,594)	(8.62)%
Total Personnel Expenditures	3,197,818	3,702,841	3,702,841	3,716,440	13,599	0.37%
Services & Supplies Expenditures						
Travel	2,952	7,350	7,350	7,350		
Training & Education	4,855	10,750	14,100	11,250	(2,850)	(20.21)%
Repair & Maintenance	698	1,700	6,939	1,700	(5,239)	(75.50)%
Communications	12,601	13,000	13,000	15,000	2,000	15.38%
Building Maintenance		2,000	2,000	1,000	(1,000)	(50.00)%
Utilities	27,526	25,000	25,000	30,000	5,000	20.00%
Printing & Reproduction		1,000	1,000	1,000		
Rents & Leases	336,737	360,000	360,000	390,000	30,000	8.33%
Professional Services	17,559	19,000	25,856	19,000	(6,856)	(26.52)%
Shop & Field Supplies	42,552	89,650	108,297	89,650	(18,647)	(17.22)%
Laboratory Supplies		3,000	3,000	2,000	(1,000)	(33.33)%
Stationery & Office Supplies				3,000	3,000	
Minor Office Equipment		1,000	1,000	1,000		
Total Services & Supplies Expenditures	445,480	533,450	567,542	571,950	4,408	0.78%
Capital Expenditures						
Motorized Equipment		60,000	60,000	60,000		
Lab & Monitoring Equipment	12,047	157,000	157,000	149,000	(8,000)	(5.10)%
Total Capital Expenditures	12,047	217,000	217,000	209,000	(8,000)	(3.69)%
Total Expenditures	3,655,345	4,453,291	4,487,383	4,497,390	10,007	0.22%

SERVICE AREA - EQUITY & COMMUNITY PROGRAMS

Civil Rights Office

The Air District Board of Directors approved establishing the Office of Civil Rights in December 2024. The Office of Civil Rights will ensure compliance with key civil rights laws, including Title VI of the Civil Rights Act of 1964 and California Government Code Section 11135. This is accomplished by conducting investigations and audits of civil rights discrimination complaints and advising leadership regarding findings. In addition to ensuring compliance within the Air District's programs and policies, the office will affirmatively raise Title VI and Government Code Section 11135 issues with agencies that receive state and federal funds. By taking this affirmative approach, the Civil Rights Office will work to identify and correct disproportionate, adverse impacts on communities – based on race, color, national origin, or other protected classes.

The Civil Rights Office serves as a key advisor to executive leadership on strategies and initiatives to ensure the Air District's services and programs are equitable, accessible, and shared by all Air District communities and in compliance with civil rights laws, regulations, and district policies. The office tracks and analyzes legislative developments related to civil rights and recommends updates to organizational policies and procedures to ensure ongoing compliance. The office reviews, evaluates, and recommends effective nondiscriminatory policies and procedures and implements training for Air District leaders and staff on the civil rights laws, Title VI programs, and their applicability to the work that is performed by the Air District. The Civil Rights Office will advise outreach efforts and make recommendations to other divisions to incorporate civil rights considerations, to remove barriers to participation in Air District programs.

Managing Division:

Civil Rights

Contact Person:

Kimberly Leefatt

Program Purpose:

The Office of Civil Rights focuses on ensuring that public-facing Air District programs comply with civil rights laws. This includes conducting regular reviews and audits of policies, programs, and practices to identify and rectify any disparities that could impact communities based on race, color, national origin, or other protected characteristics. The office will provide guidance and training to staff to ensure that civil rights considerations are fully integrated into daily operations. In addition to these responsibilities, the Office of Civil Rights will manage civil rights complaints, providing a transparent and accessible process for individuals and communities to report concerns. These complaints will be thoroughly investigated, and the office will ensure that appropriate corrective actions are taken where necessary. The Civil Rights Office will create a framework to evaluate and address potential disparities in permit issuance, ensuring that permits align with equity principles and minimize adverse impacts on vulnerable communities. Additionally, the Office of Civil Rights will review CEQA comment letters to determine whether a civil rights analysis is warranted, ensuring that environmental reviews account for disproportionate impacts on vulnerable communities.

Essential Functions

- Strengthen the Air District's commitment to non-discrimination and civil rights.
- Ensure that all communities, including those with limited English proficiency, can fully engage with the Air District's programs and services.
- Process and respond to civil rights complaints in a timely and effective manner.
- Advise on strategies and initiatives to ensure the Air District's services and programs are equitable, accessible, and in compliance with civil rights laws, regulations, and district policies.

Strategic Plan Commitment	Strategic Plan Strategy
2.06.01 Develop a structured program to meet regularly with community members on compliance and enforcement activities, recent incidents or other air pollution violations, enforcement response, the extent of public harm, and legal actions we may take.	2.06 - Talk With Communities
2.10.01 Review how we issue permits to ensure we are following civil rights laws and regulations	2.10 - Civil Rights Laws
2.10.02 Implement the Air District's Plan for Language Services to Limited English Proficient Populations to ensure compliance with civil rights laws.	2.10 - Civil Rights Laws
2.10.03 Advance non-discrimination in the Air District's operations	2.10 - Civil Rights Laws
2.11.01 Develop and share methods to better understand where cumulative impacts exist and how they should be considered in decision making.	2.11 - Cumulative Health Impacts
2.11.02 Consider cumulative impacts in our programs, including permitting, regulations and compliance.	2.11 - Cumulative Health Impacts
3.04.04 Develop environmental justice teams and have them review compliance with the Civil Rights Act of 1964, including Title VI.	3.04 - Environmental Justice Expertise

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)		1.91	1.91	3.07	1.16	60.73%
Number of Positions (LTCE)				1.00	1.00	
Personnel Expenditures						
Permanent Salaries		327,162	327,162	659,313	332,151	101.52%
Payroll Taxes		4,723	4,723	9,395	4,672	98.92%
Pension Benefits		59,301	59,301	132,945	73,644	124.19%
FICA Replacement Benefits		6,740	6,740	14,831	8,091	120.04%
Group Insurance Benefits		50,191	50,191	88,377	38,186	76.08%
Transportation Subsidy		2,453	2,453	3,910	1,457	59.40%
Workers' Compensation		805	805	1,632	827	102.73%
Discretionary Contribution		18,895	18,895	34,876	15,981	84.58%
Total Personnel Expenditures		470,270	470,270	945,279	475,009	101.01%
Services & Supplies Expenditures						
Travel		10,000	10,000	12,000	2,000	20.00%
Training & Education		8,000	8,000	13,250	5,250	65.63%
Communications		2,000	2,000	2,000		
Printing & Reproduction		1,000	1,000	1,000		
Professional Services		150,000	150,000	150,000		
Stationery & Office Supplies		1,000	1,000	2,500	1,500	150.00%
Books & Journals		600	600	600		
Minor Office Equipment		3,000	3,000	3,000		
Total Services & Supplies Expenditures		175,600	175,600	184,350	8,750	4.98%
Capital Expenditures						
Total Expenditures		645,870	645,870	1,129,629	483,759	74.90%

- Page Intentionally Left Blank -

Community Investments

The Air District established the Community Investments Office to develop and manage tailored programs for funding streams generated by penalties and related funds. In May 2024, the Air District adopted a new policy—the Community Benefits Penalty Funds Policy—that will direct a portion of the money generated through penalties back into communities where the violation occurred. The Community Investment Office will create new approaches that actively engage affected communities in establishing funding priorities and distribution at the local and regional levels.

Managing Division:

Community Investments

Contact Person:

Emi Wang

Program Purpose:

The Community Investments Office will develop and implement regional and local programs that direct funding to communities most impacted by air pollution. This initiative is closely aligned with Strategy 2.8 of the 2024-2029 Strategic Plan, which emphasizes the importance of community-directed funds in addressing local air quality challenges and promoting environmental justice. The Community Investments Office will ensure that these resources advance community priorities with projects such as pollution mitigation efforts, health programs, and the development of green spaces. The goal is to improve environmental quality and public health in areas that have been disproportionately impacted by air pollution.

Essential Functions

- Establish guidelines and create a transparent process for disbursing funds based on identified community needs and priorities.
- Initiate efforts to engage and connect communities with funding opportunities.
- Administer the reinvestment of penalty funds and related streams into impacted communities.

Strategic Plan Commitment	Strategic Plan Strategy
1.04.02 Ask community members what changes they want to see in funding programs.	1.04 - Reimagine Funding
2.08.01 Establish team to administer the portion of penalty funds distributed to affected communities and the broader region, in consultation with the communities and region.	2.08 - Community-Directed Funds
2.08.02 For the Community Benefit Fund, develop a community-led process, in collaboration with the CAC and local community-based organizations, in which communities participate in decisions on how to spend funds.	2.08 - Community-Directed Funds

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	0.47	6.83	3.00	5.82	2.82	94.00%
Number of Positions (LTCE)		3.00	3.00	3.00		
Personnel Expenditures						
Permanent Salaries	88,001	1,500,150	1,500,150	1,371,269	(128,881)	(8.59)%
Overtime Salaries	4,737	37,000	37,000	37,000		
Payroll Taxes	1,193	21,631	21,631	19,542	(2,089)	(9.66)%
Pension Benefits	7,802	273,905	273,905	276,196	2,291	0.84%
FICA Replacement Benefits	1,831	34,664	34,664	32,119	(2,545)	(7.34)%
Group Insurance Benefits	11,379	252,477	252,477	213,192	(39,285)	(15.56)%
Transportation Subsidy	674	12,616	12,616	8,468	(4,148)	(32.88)%
Workers' Compensation	258	4,139	4,139	3,534	(605)	(14.62)%
Discretionary Contribution		86,443	86,443	72,456	(13,987)	(16.18)%
Total Personnel Expenditures	115,875	2,223,025	2,223,025	2,033,776	(189,249)	(8.51)%
Services & Supplies Expenditures						
Travel	81	34,000	34,000	34,000		
Training & Education		15,000	15,000	15,000		
Communications		10,000	10,000	10,000		
Printing & Reproduction		3,500	3,500	3,500		
Professional Services		1,000,000	1,000,000	1,650,000	650,000	65.00%
Computer Hardware & Software		8,000	8,000	8,000		
Stationery & Office Supplies		2,000	2,000	7,000	5,000	250.00%
Books & Journals		600	600	600		
Minor Office Equipment		6,000	6,000	6,000		
Total Services & Supplies Expenditures	81	1,079,100	1,079,100	1,734,100	655,000	60.70%
Capital Expenditures						
Total Expenditures	115,956	3,302,125	3,302,125	3,767,876	465,751	14.10%

- Page Intentionally Left Blank -

Diversity, Equity and Inclusion Office

The work of the Air District requires diverse perspectives, talents, and life experiences to solve some of the most complex technical air quality issues that we face. The Office of Diversity, Equity & Inclusion (Office) is taking meaningful steps to build an antiracist and inclusive environment. The efforts will be informed by working with the Deputy Executive Officer of Equity and Equity and Community Programs, Board of Directors' Community Health, Equity and Justice Committee and staff to shift long-standing environmental justice inequities throughout the region. Key initiatives for the Office will be the development and implementation of an agency-wide Equity Workplan and trainings that encompass equity tools to provide a blueprint of systems and structures to operationalize cross-divisional efforts relative to Air District programs. In addition, the Office will work on internal initiatives by applying an equity lens to programs, policies, practices and procedures related to staffing, recruitment, promotions, inclusive practices in the workplace, contracting for capital projects and services.

Managing Division:

Diversity Equity & Inclusion

Contact Person:

Tim Williams

Program Purpose:

The Air District's Office of Diversity, Equity & Inclusion is responsible for developing initiatives applying an equity lens to programs, policies, practices and procedures. Responsibilities include capacity building related to staffing, recruitment, promotions, inclusive practices in the workplace, contracting for capital projects and services, environmental justice scholarship program and equity training. The Office recognized the contributions of all employees and community members and works to sustain an environment where everyone is valued and respected.

Essential Functions

- Foster cohesion and Inclusion through Training & Leadership Development
- Manage Employee Resource Groups
- Provide Human Resources guidance on inclusive recruitment and retention strategies (e.g. equity language in job postings, job screenings, panel interviews, promotional opportunities for diverse candidates)
- Work cross-agency on policies, practices and initiatives to mitigate inequities. Review equity aspects within division documents and provide suggested amendment(s)
- Support Board of Directors' Community Equity, Health and Justice Committee and Community Advisory Council (CAC) on its workplan, meeting agendas, speakers, and community convening meetings

Strategic Plan Commitment	Strategic Plan Strategy
3.01.01 Establish recruitment, hiring, retention, and advancement policies and practices that promote diversity and inclusion and remove any structural biases, including consideration of an expanded internship program.	3.01 - A Diverse Workforce
3.01.02 Create development programs tailored to employees from diverse backgrounds.	3.01 - A Diverse Workforce
3.02.01 Redouble efforts to consider diversity, equity, and inclusion in our work, including internal and external decision-making, policies, procedures, regulations, funding initiatives, public outreach, planning, and hiring practices.	3.02 - Be Welcoming and Inclusive
3.02.02 Conduct annual diversity and unconscious bias training for all levels of the organization, with a focus on those making hiring and promotional decisions.	3.02 - Be Welcoming and Inclusive
3.03.02 Enhance opportunities for knowledge sharing through more engagement events and collaboration.	3.03 - One Air District Community
3.03.03 Create opportunities for relationship building across divisions to create a One Air District culture.	3.03 - One Air District Community
3.06.01 Develop an expanded mentoring program	3.06 - Support Employee Success

Office of Diversity Equity & Inclusion 113

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	3.64	4.13	4.13	4.08	(0.05)	(1.21)%
Personnel Expenditures						
Permanent Salaries	632,149	741,138	741,138	775,661	34,523	4.66%
Overtime Salaries	638					
Temporary Salaries	2,418					
Payroll Taxes	9,573	10,977	10,977	11,073	96	0.87%
Pension Benefits	101,244	134,461	134,461	157,038	22,577	16.79%
FICA Replacement Benefits	13,859	14,579	14,579	14,846	267	1.83%
Group Insurance Benefits	84,949	103,808	103,808	108,529	4,721	4.55%
Transportation Subsidy	1,955	5,306	5,306	3,914	(1,392)	(26.23)%
Workers' Compensation	1,851	1,741	1,741	1,634	(107)	(6.15)%
Discretionary Contribution		42,841	42,841	41,197	(1,644)	(3.84)%
Total Personnel Expenditures	848,636	1,054,851	1,054,851	1,113,892	59,041	5.60%
Services & Supplies Expenditures						
Travel	478	2,500	2,500	2,500		
Training & Education	7,372	51,500	52,272	51,500	(772)	(1.48)%
Communications	801	631	631	631		
Printing & Reproduction	120	7,000	7,000	7,000		
Professional Services	66,284	401,500	450,569	391,500	(59,069)	(13.11)%
Computer Hardware & Software		2,000	2,000	2,000		
Stationery & Office Supplies	48	700	700	10,700	10,000	1,428.57%
Total Services & Supplies Expenditures	75,103	465,831	515,672	465,831	(49,841)	(9.67)%
Capital Expenditures						
Transfer In/Out	(72,680)					
Total Expenditures	851,059	1,520,682	1,570,523	1,579,723	9,200	0.59%

- Page Intentionally Left Blank -

Environmental Justice Division

The Environmental Justice (EJ) Division supports the Air District's mission by engaging with and supporting impacted communities in the Bay Area to advance public health, equity, and environmental justice. The Division implements programs that engages impacted communities to increase community awareness and transparency of air quality issues, build capacity, increase opportunities for impacted communities to participate in Air District decision-making, and support implementation of community-identified solutions. The Division supports relationship-building between communities and the Air District and supports other divisions by providing guidance with their outreach and engagement with communities.

The Air District Board of Directors created the Community Advisory Council (CAC) to advise the Board and the agency on community related matters, advance an equity focused policy agenda, and provide input grounded in environmental justice principles on key Air District policies and programs. The first CAC cohort served a four-year term from November 2021 to November 2025. Following Board approval, the new CAC members will be onboarded in January 2026. After the council's onboarding and participation in the Board of Directors Special meeting / Annual Retreat in January, the CAC will hold five additional bimonthly meetings in 2026, including ad hoc committees and Co-Chairs meetings, and other program related meetings for selected members.

The AB 617 program supports local air quality plans in four designated communities in the Bay Area and engages other designated AB 617 communities. In FY 2026-2027, the Air District will continue its partnership with West Oakland Environmental Indicators Project (WOEIP) as the organization leads year seven post- Community Emissions Reduction Plan (CERP) implementation under its two-year grant, working with WOCAP Community Steering Committee (CSC), and partner organizations to track, monitor and report on the status of the WOCAP strategies. The Air District and the Richmond-North Richmond-San Pablo CSC will continue its partnership to implement Year 3 of the CERP. The Air District, Co-Lead partner Communities for a Better Environment and the CSC will begin Year 1 of implementation of the East Oakland CERP. The Air District, Co-Lead partner Marie Harrison Community Foundation and the CSC will finalize the CERP.

The Environmental Justice (EJ) Navigators is a new program dedicated to conducting outreach while creating and deepening meaningful relationships with community. In FY 2026-2027, the Air District will attend community events, establish relationships with environmental groups, and general community groups focused on a myriad of air quality challenges. In FY 2026-2027, the EJ Navigators will expand outreach to additional subregions of the Bay Area.

The James Cary Smith Community Grant program seeks to uplift local capacity-building efforts that address air quality disparities in environmental justice communities. In FY 2026-2027, staff will administer the second year of Cycle 2 of the grant program to support local organizations in engaging communities in air pollution reduction efforts.

JCS program staff will support the release of the Peoples Air Grant (PAGP), a one-time grant program that will fund projects to reduce exposure to air pollution and address public health in impacted communities in the Bay Area. The PAGP was developed by the CAC to distribute Community Benefit Fund dollars. Following Board approval in 2025, the EJ Division is leading its launch in March 2026 (FYE 2026). The grant terms run from 2027-2029, starting in FYE 2027.

Environmental Justice 302

Managing Division:

Environmental Justice

Contact Person:

Anna Lee

Program Purpose:

The Environmental Justice (EJ) Division coordinates outreach and engagement activities across communities and creates processes that meaningfully engage communities to increase awareness and transparency, build capacity on air quality issues, increase understanding of Air District processes, build trust and relationships and collaborate with communities to develop programs, strategies and policies that advance environmental justice. The Division seeks opportunities for communities that have been historically under-represented or under-resourced to participate in and shape Air District decisions. The EJ Division leads programs and initiatives to improve air quality and build community capacity in impacted communities for the District, including the Community Advisory Council, Assembly Bill 617 (AB 617) Program, the James Cary Smith Community Grant Program and the EJ Navigators Program. The EJ Division also supports the Marie Harrison Environmental Justice Youth Scholarship and the Norman Mineta Summer Youth Academy.

Essential Functions

- Staff and coordinate activities of the Community Advisory Council
- Administer the AB 617 Program
- Staff the Environmental Justice Navigators Program
- Administer James Cary Smith Community Grant and People's Air Grant Programs
- Administer the Home and School Air Filtration Programs
- Support Marie Harrison Environmental Justice Scholarship Program and Norman Mineta Summer Youth Academy

Strategic Plan Commitment	Strategic Plan Strategy
2.01.01 Expand community partnership models to other communities impacted by air pollution.	2.01 - Community Partnership
2.01.02 Work with community to develop and define community partnership.	2.01 - Community Partnership
2.03.02 Work with community members to better describe available data and understand how they want to access data.	2.03 - Make Data Accessible
2.06.01 Develop a structured program to meet regularly with community members on compliance and enforcement activities, recent incidents or other air pollution violations, enforcement response, the extent of public harm, and legal actions we may take.	2.06 - Talk With Communities
2.08.02 For the Community Benefit Fund, develop a community-led process, in collaboration with the CAC and local community-based organizations, in which communities participate in decisions on how to spend funds.	2.08 - Community-Directed Funds

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	10.25	13.30	13.30	13.08	(0.22)	(1.65)%
Number of Positions (LTCE)		1.00	1.00		(1.00)	(100.00)%
Personnel Expenditures						
Permanent Salaries	1,734,899	2,313,728	2,313,728	2,039,350	(274,378)	(11.86)%
Overtime Salaries	20,361	27,000	27,000	27,000		
Temporary Salaries	225					
Payroll Taxes	26,763	33,712	33,712	28,840	(4,872)	(14.45)%
Pension Benefits	355,600	425,085	425,085	410,796	(14,289)	(3.36)%
FICA Replacement Benefits	38,301	50,464	50,464	47,612	(2,852)	(5.65)%
Group Insurance Benefits	234,767	310,754	310,754	293,358	(17,396)	(5.60)%
Transportation Subsidy	5,371	18,366	18,366	12,553	(5,813)	(31.65)%
Workers' Compensation	5,080	6,025	6,025	5,239	(786)	(13.05)%
Discretionary Contribution		133,482	133,482	107,766	(25,716)	(19.27)%
Total Personnel Expenditures	2,421,367	3,318,616	3,318,616	2,972,514	(346,102)	(10.43)%
Services & Supplies Expenditures						
Travel	5,062	10,300	10,300	11,100	800	7.77%
Training & Education	12,771	20,110	20,110	36,110	16,000	79.56%
Communications	20,473	22,000	22,000	22,000		
Printing & Reproduction		3,500	3,500	3,500		
Professional Services	2,272,587	2,849,040	4,463,965	1,198,435	(3,265,530)	(73.15)%
Shop & Field Supplies		2,000	2,000	2,000		
Stationery & Office Supplies	1,270	1,500	2,570	51,500	48,930	1,903.89%
Total Services & Supplies Expenditures	2,312,163	2,908,450	4,524,445	1,324,645	(3,199,800)	(70.72)%
Capital Expenditures						
Total Expenditures	4,733,530	6,227,066	7,843,061	4,297,159	(3,545,902)	(45.21)%

Managing Division:

Environmental Justice

Contact Person:

Anna Lee

Program Purpose:

The AB 617 program supports the Air District's work to prepare plans to reduce emissions of toxic air contaminants and criteria pollutants or prepare monitoring plans in partnership with environmental justice communities. The District convenes Community Steering Committees that guide the development of local emissions reduction plans. The District also develops community partnerships and ensures a data-informed, equitable and transparent process. In partnership with West Oakland Environmental Indicators Project (WOEIP), the WOCAP moves into year seven of implementation under a new structure, where WOEIP is the sole lead of the project. Additionally, in Richmond-North Richmond–San Pablo, staff are working with the community on Year Two of implementation of the Path to Clean Air (PTCA) Community Emissions Reduction Plan (CERP). Staff are working with Co-Lead partner, Communities for a Better Environment, and the Community Steering Committee members to implement the East Oakland CERP. The District is partnering with Marie Harrison Community Foundation and Community Steering Committee members to complete the Bayview Hunters Point/Southeast San Francisco CERP.

Essential Functions

- Support West Oakland community and priority AB 617 communities
- Support Community Steering Committee with implementation of Richmond-North Richmond-San Pablo Path to Clean Air Plan
- Support Community Steering Committee with Co-Lead partner to implement the East Oakland Community Emissions Reduction Plan
- Support Community Steering Committee with Co-Lead partners to finalize the Bayview Hunters Point Community Emissions Reduction Plan

Strategic Plan Commitment	Strategic Plan Strategy
2.01.02 Work with community to develop and define community partnership.	2.01 - Community Partnership
2.03.02 Work with community members to better describe available data and understand how they want to access data.	2.03 - Make Data Accessible
4.07.01 Strengthen internal organizational knowledge and communication skills	4.07 - Customer Service

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	25.28	36.52	36.52	30.74	(5.78)	(15.83)%
Number of Positions (LTCE)	3.22	2.00	2.00	6.00	4.00	200.00%
Personnel Expenditures						
Permanent Salaries	4,518,157	6,605,237	6,605,237	6,180,931	(424,306)	(6.42)%
Overtime Salaries	35,580	95,000	95,000	95,000		
Payroll Taxes	69,649	94,569	94,569	88,087	(6,482)	(6.85)%
Pension Benefits	954,575	1,237,830	1,237,830	1,247,609	9,779	0.79%
FICA Replacement Benefits	99,575	144,728	144,728	133,793	(10,935)	(7.56)%
Group Insurance Benefits	610,283	983,067	983,067	868,812	(114,255)	(11.62)%
Transportation Subsidy	14,126	52,673	52,673	35,274	(17,399)	(33.03)%
Workers' Compensation	13,236	17,281	17,281	14,723	(2,558)	(14.80)%
Discretionary Contribution		381,030	381,030	327,291	(53,739)	(14.10)%
Total Personnel Expenditures	6,315,181	9,611,415	9,611,415	8,991,520	(619,895)	(6.45)%
Services & Supplies Expenditures						
Travel	450					
Travel Out-of-State	202					
Training & Education	1,404					
Professional Services	1,704,027	2,484,746	3,521,905	1,914,700	(1,607,205)	(45.63)%
Total Services & Supplies Expenditures	1,706,083	2,484,746	3,521,905	1,914,700	(1,607,205)	(45.63)%
Capital Expenditures						
Total Expenditures	8,021,264	12,096,161	13,133,320	10,906,220	(2,227,100)	(16.96)%

- Page Intentionally Left Blank -

Strategic Incentives Division

General Fund

The Strategic Incentives Division mainly administers Special Revenue funds that are used to accelerate voluntary emissions reductions by incentivizing the replacement of older dirtier equipment that primarily targets mobile sources that total approximately $100 million for project funds and $8 million for Air District administrative costs. Strategic Incentives staff conducts outreach and solicits grant applications, evaluates grant applications according to established criteria, recommends allocation of the funding, prepares contracts with grantees, monitors progress in implementing funded projects, and reports on the use of funds.

In addition to this work, the Division also oversees programs and activities that are paid for at least in part by the General Fund (historically approximately $570,000 annually) as match and to pay for projects and activities performed by staff that cannot be fully reimbursed by Special Revenue sources, such as development of applications for new sources of funding (i.e., federal or state), oversight of air district sponsored projects that are not eligible for funding from other sources, and activities that are also not eligible for reimbursement by other sources. Additional information on Strategic Incentive Division Budget can be found in the Special Revenue Fund section of the budget.

Woodsmoke Reduction Incentive Program 311

Managing Division:

Strategic Incentives

Contact Person:

Adam Shapiro

Program Purpose:

Implement the Clean Heating Efficiently with Electric Technology (Clean HEET) program to reduce emissions from residential wood burning devices through the administration of General Funds and US Environmental Protection Agency (EPA) Targeted Airshed Grant funds.

Essential Functions

- Update program policies and procedures, guidance documents, and administrative operating procedures.
- Conduct program development and outreach.
- Review and evaluate project applications to determine eligibility according to Board of Directors-approved eligibility and priority funding criteria.
- Prepare grant awards and correspondence; monitor, inspect, and audit projects and programs to ensure compliance with EPA and District guidelines, policies, work plan, legal, and regulatory requirements; process reimbursement requests; and ensure project files are complete and up to date.
- Prepare and submit reports and disbursement requests to EPA and coordinate with EPA on workplan, contract, and program requirements.
- Prepare technical, financial, and staff reports; attend meetings; and participate in internal and external audits.
- Coordinate with IT contractors to develop, enhance, and maintain data management systems.

Strategic Plan Commitment	Strategic Plan Strategy
1.04.04 Work with communities on new project ideas and find funding sources.	1.04 - Reimagine Funding

Woodsmoke Reduction Incentive Program 311

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)	0.92	0.95	0.95	1.02	0.07	7.37%
Number of Positions (LTCE)	0.01	0.05	0.05		(0.05)	(100.00)%
Personnel Expenditures						
Permanent Salaries	132,062	149,961	149,961	148,162	(1,799)	(1.20)%
Overtime Salaries	298					
Payroll Taxes	2,055	2,184	2,184	2,085	(99)	(4.53)%
Pension Benefits	24,969	27,958	27,958	29,783	1,825	6.53%
FICA Replacement Benefits	2,935	3,534	3,534	3,714	180	5.09%
Group Insurance Benefits	17,925	20,382	20,382	22,488	2,106	10.33%
Transportation Subsidy	339	1,286	1,286	979	(307)	(23.87)%
Workers' Compensation	387	422	422	409	(13)	(3.08)%
Discretionary Contribution		8,638	8,638	7,813	(825)	(9.55)%
Total Personnel Expenditures	180,970	214,365	214,365	215,433	1,068	0.50%
Services & Supplies Expenditures						
Travel		1,000	1,000	1,000		
Training & Education		1,500	1,500	1,500		
Printing & Reproduction		5,000	5,000	5,000		
Professional Services	36,461	35,000	58,366	65,000	6,634	11.37%
Stationery & Office Supplies		500	500	500		
Minor Office Equipment		1,000	1,000	1,000		
Total Services & Supplies Expenditures	36,461	44,000	67,366	74,000	6,634	9.85%
Capital Expenditures						
Computer & Network		50,000	50,000		(50,000)	(100.00)%
Total Capital Expenditures		50,000	50,000		(50,000)	(100.00)%
Total Expenditures	217,431	308,365	331,731	289,433	(42,298)	(12.75)%

Grant Program Development and Support 313

Managing Division:

Strategic Incentives

Contact Person:

Chengfeng Wang

Program Purpose:

Support the expansion of available funding for emissions and exposure reduction projects in the Bay Area by identifying and securing new sources of funding. Implement and manage projects and programs that are funded by the Air District General Fund and work that supports the Bay Area Clean Air Foundation.

Essential Functions

- Identify new sources of funding and prepare grant applications to secure new funding sources.
- Form partnerships to leverage Air District funding resources.
- Obtain Board of Directors approval of acceptance of new funding; review, execute, and manage grant agreements with funding agencies.
- Manage Air District funded programs: conduct outreach, evaluate applications and award funding to eligible recipients, and process reimbursement requests.

Strategic Plan Commitment	Strategic Plan Strategy
1.04.01 Use information from Strategy 1.1. to inform changes to funding programs.	1.04 - Reimagine Funding
1.04.02 Ask community members what changes they want to see in funding programs.	1.04 - Reimagine Funding
1.04.03 Review funding programs to reduce barriers to applying for funds and develop creative solutions for more variety of projects.	1.04 - Reimagine Funding
1.04.04 Work with communities on new project ideas and find funding sources.	1.04 - Reimagine Funding
1.04.05 Partner with communities on grant application and implementation.	1.04 - Reimagine Funding
1.07.01 Maximize climate change benefits of regulations and nonregulatory programs.	1.07 - New Climate Solutions
4.10.01 Put processes in place to ensure the successful launch and implementation of new rules and regulations, policy and program changes, new initiatives, and modifications to the strategic plan.	4.10 - Ensure Success
4.10.03 Develop and apply standard and best operating procedures and practices across the organization.	4.10 - Ensure Success
4.10.04 Apply continuous process improvement models to operations and procedures.	4.10 - Ensure Success
4.11.03 Be intentional in matching spending to be in alignment with achieving real impact by adopting new approaches to air quality management that focus on understanding and reducing disparities in local air pollution.	4.11 - Align Resources
4.12.01 Track progress in implementing the 2024-2029 Strategic Plan.	4.12 - Report Progress

Grant Program Development and Support 313

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	0.29	1.45	1.45	1.95	0.50	34.48%
Number of Positions (LTCE)	0.02	0.05	0.05	0.15	0.10	200.00%
Personnel Expenditures						
Permanent Salaries	55,900	253,429	253,429	326,093	72,664	28.67%
Overtime Salaries	75					
Payroll Taxes	836	3,705	3,705	4,623	918	24.78%
Pension Benefits	10,984	48,365	48,365	65,679	17,314	35.80%
FICA Replacement Benefits	1,214	5,282	5,282	7,645	2,363	44.74%
Group Insurance Benefits	7,469	35,642	35,642	49,057	13,415	37.64%
Transportation Subsidy	206	1,923	1,923	2,016	93	4.84%
Workers' Compensation	164	631	631	841	210	33.28%
Discretionary Contribution		14,634	14,634	17,230	2,596	17.74%
Total Personnel Expenditures	76,848	363,611	363,611	473,184	109,573	30.13%
Services & Supplies Expenditures						
Travel		13,500	13,500	14,000	500	3.70%
Training & Education		9,500	9,500	11,000	1,500	15.79%
Professional Services	20,411	25,000	60,672	110,000	49,328	81.30%
Shop & Field Supplies		1,000	1,000	1,000		
Computer Hardware & Software		10,000	10,000	10,000		
Stationery & Office Supplies				2,000	2,000	
Total Services & Supplies Expenditures	20,411	59,000	94,672	148,000	53,328	56.33%
Capital Expenditures						
Computer & Network		100,000	100,000	200,000	100,000	100.00%
Total Capital Expenditures		100,000	100,000	200,000	100,000	100.00%
Total Expenditures	97,259	522,611	558,283	821,184	262,901	47.09%

- Page Intentionally Left Blank -

Technology Implementation Office

General Fund

The Technology Implementation Office (TIO) mission is to advance emerging, cost-effective solutions to achieve greenhouse gas emissions reductions for the transportation and industrial source sectors. TIO will connect climate technologies and customers by providing financial incentives (through grants and loans) as well as technical and matchmaking support. Climate technology areas include zero emissions vehicles and infrastructure, zero emissions energy storage and backup systems, composting, and waste-to-energy projects, amongst other GHG reduction solutions. By supporting the scale-up of climate technologies, TIO can help achieve state and regional greenhouse gas emissions targets, reduce emissions in impacted communities, while also making technologies cost-effective even in regions without strong climate policies.

Greenhouse Gas Technologies 126

Managing Division:

Technology Implementation

Contact Person:

Anthony Fournier

Program Purpose:

The Air District's Climate Investments program advances emerging and cost-effective solutions to achieve greenhouse gas emissions reduction. The program's goal is to support the 2017 Clean Air Plan goal of a carbon-free Bay Area by 2050 and mainstream technologies so they can be scaled up throughout and beyond the Bay Area.

Essential Functions

- Oversee loan and loan guarantee partnership and projects.
- Perform evaluations of climate technologies.
- Identify technologies and customers and provide technical support and financing to implement technologies.
- Convene stakeholders for technology matchmaking and peer-to-peer information exchanges.
- Implement grant program to fund the purchase of air filtration units for publicly accessible Clean Air Centers.

Strategic Plan Commitment	Strategic Plan Strategy
1.04.03 Review funding programs to reduce barriers to applying for funds and develop creative solutions for more variety of projects.	1.04 - Reimagine Funding
1.07.01 Maximize climate change benefits of regulations and nonregulatory programs.	1.07 - New Climate Solutions
1.07.03 Assess and improve Climate Tech Finance program.	1.07 - New Climate Solutions

Greenhouse Gas Technologies 126

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	2.48	2.99	2.99	3.08	0.09	3.01%
Personnel Expenditures						
Permanent Salaries	360,495	466,973	466,973	483,643	16,670	3.57%
Overtime Salaries	275	25,000	25,000	25,000		
Temporary Salaries		110,000	110,000	20,000	(90,000)	(81.82)%
Payroll Taxes	5,655	6,743	6,743	6,822	79	1.17%
Pension Benefits	73,251	84,555	84,555	97,445	12,890	15.24%
FICA Replacement Benefits	7,998	10,539	10,539	11,199	660	6.26%
Group Insurance Benefits	45,369	80,468	80,468	99,712	19,244	23.92%
Transportation Subsidy	970	3,836	3,836	2,953	(883)	(23.02)%
Workers' Compensation	1,056	1,258	1,258	1,232	(26)	(2.07)%
Discretionary Contribution		26,922	26,922	25,563	(1,359)	(5.05)%
Total Personnel Expenditures	495,069	816,294	816,294	773,569	(42,725)	(5.23)%
Services & Supplies Expenditures						
Travel	2,302	22,000	22,000	22,000		
Training & Education		14,000	14,000	14,000		
Communications	1,393	3,000	3,000	3,000		
Professional Services	104,242	490,000	524,020	350,000	(174,020)	(33.21)%
Computer Hardware & Software	439	5,000	5,000	5,000		
Stationery & Office Supplies	345	1,000	1,000	6,000	5,000	500.00%
Total Services & Supplies Expenditures	108,721	535,000	569,020	400,000	(169,020)	(29.70)%
Capital Expenditures						
Total Expenditures	603,790	1,351,294	1,385,314	1,173,569	(211,745)	(15.28)%

SERVICE AREA - FINANCE & ADMINISTRATION

Administrative Resources Division

The Administrative Resources Division provides administrative and operational support functions for the Air District, and is comprised of the Business Office, fleet, and facilities teams., The Business Office is responsible for contracts, procurement, insurance risk management, mailroom services, and office support services. The Fleet team is responsible for the lease, acquisition, and maintenance of all Air District pool and fleet vehicles as well as management of vehicle accidents The Facilities team is responsible for the planning, maintenance, construction oversight and operations of all Air District facilities, and manage security and safety measures.

Managing Division:

Administrative Resources

Contact Person:

Erica Flahan

Program Purpose:

The Facilities Program ensures the strategic planning, maintenance, and efficient management of Air District-owned facilities, leased satellite offices, and related equipment and supplies. These efforts provide safe, functional, and sustainable work environments that enable the Air District to deliver on its mission of protecting air quality and public health. Through proactive planning and operational efficiencies, the program aligns facility management with long-term goals, regulatory compliance, and resource stewardship, strengthening the Air District's capacity to support staff and core programs.

Essential Functions

- Conference room setup for Board, Committee, Advisory Councils, and Hearing Board meetings.
- Oversee security for Board, Committee, Advisory Councils, and Hearing Board meetings, public workshops, and similar events.
- Oversee tradesperson vendors for select renovations and repairs at all Air District locations.
- Administer help desk responding to facility-related requests from all staff.
- Collaborate with BAHA on administration of facility-related work at Beale Street.
- Administer assigned seating and workspace hoteling programs at Beale Street.
- Support frontline teams with routine maintenance, service, and repairs at satellite locations.
- Provide office and pantry supplies at all Air District locations.

Strategic Plan Commitment	Strategic Plan Strategy
4.07.01 Strengthen internal organizational knowledge and communication skills	4.07 - Customer Service
4.10.02 Develop detailed operational plans and business processes that estimate the required resources and timelines, with clear responsibilities.	4.10 - Ensure Success
4.10.03 Develop and apply standard and best operating procedures and practices across the organization.	4.10 - Ensure Success
4.10.04 Apply continuous process improvement models to operations and procedures.	4.10 - Ensure Success

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	4.99	5.74	5.74	6.01	0.27	4.70%
Number of Positions (LTCE)				0.70	0.70	
Personnel Expenditures						
Permanent Salaries	652,956	807,722	807,722	1,040,483	232,761	28.82%
Overtime Salaries	12,081	10,000	10,000		(10,000)	(100.00)%
Payroll Taxes	9,893	11,672	11,672	14,773	3,101	26.57%
Pension Benefits	121,878	158,104	158,104	209,557	51,453	32.54%
FICA Replacement Benefits	14,252	20,255	20,255	24,426	4,171	20.59%
Group Insurance Benefits	87,299	134,981	134,981	174,595	39,614	29.35%
Transportation Subsidy	2,009	7,372	7,372	6,440	(932)	(12.64)%
Workers' Compensation	1,912	2,418	2,418	2,688	270	11.17%
Discretionary Contribution		46,459	46,459	54,974	8,515	18.33%
Total Personnel Expenditures	902,280	1,198,983	1,198,983	1,527,936	328,953	27.44%
Services & Supplies Expenditures						
Travel		1,000	1,000	8,850	7,850	785.00%
Training & Education	2,126	3,000	3,000	6,875	3,875	129.17%
Communications	60,761	65,000	65,000	65,000		
Building Maintenance	329,210	730,000	1,149,455	637,000	(512,455)	(44.58)%
Utilities	1,392	1,300	1,300	2,000	700	53.85%
Postage	33					
Rents & Leases	27,805	106,000	106,000	50,000	(56,000)	(52.83)%
Professional Services	142,871	480,250	631,016	125,500	(505,516)	(80.11)%
Shop & Field Supplies	23					
Computer Hardware & Software				33,000	33,000	
Stationery & Office Supplies				200	200	
Minor Office Equipment				5,000	5,000	
Total Services & Supplies Expenditures	564,221	1,386,550	1,956,771	933,425	(1,023,346)	(52.30)%
Capital Expenditures						
Transfer In/Out	(78,852)					
Total Expenditures	1,387,649	2,585,533	3,155,754	2,461,361	(694,393)	(22.00)%

Managing Division:

Administrative Resources

Contact Person:

Erica Flahan

Program Purpose:

The Mailroom Services Program ensures the efficient, cost-effective management of mail distribution, document reproduction, and printing to support the Air District's operations. These efforts provide reliable communication and document services that enable the Air District to maintain continuity and deliver on its mission of protecting air quality and public health. Through streamlined processes and resource optimization, the program aligns mail and reproduction services with operational needs and regulatory compliance, strengthening the Air District's capacity to support staff and core programs.

Essential Functions

- Process incoming and outgoing Air District mail.
- Receive and deliver incoming packages and deliveries.
- Process reproduction and print requests, including document binding and package preparation.
- Prepare, reproduce, and mail board packets, asbestos reports, permits, permit invoices, data update forms, and other materials as requested.

Strategic Plan Commitment	Strategic Plan Strategy
4.10.03 Develop and apply standard and best operating procedures and practices across the organization.	4.10 - Ensure Success
4.10.04 Apply continuous process improvement models to operations and procedures.	4.10 - Ensure Success

Mailroom Services 703

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	1.08	1.23	1.23	1.07	(0.16)	(13.01)%
Personnel Expenditures						
Permanent Salaries	137,680	163,978	163,978	148,702	(15,276)	(9.32)%
Payroll Taxes	2,257	2,340	2,340	2,090	(250)	(10.68)%
Pension Benefits	30,249	29,894	29,894	29,854	(40)	(0.13)%
FICA Replacement Benefits	3,153	4,333	4,333	3,885	(448)	(10.34)%
Group Insurance Benefits	19,381	19,368	19,367	16,836	(2,531)	(13.07)%
Transportation Subsidy	391	1,577	1,577	1,024	(553)	(35.07)%
Workers' Compensation	403	517	517	427	(90)	(17.41)%
Discretionary Contribution		9,420	9,420	7,832	(1,588)	(16.86)%
Total Personnel Expenditures	193,514	231,427	231,426	210,650	(20,776)	(8.98)%
Services & Supplies Expenditures						
Repair & Maintenance				28,000	28,000	
Communications	170,502	280,000	280,000	250,000	(30,000)	(10.71)%
Postage	27,148	80,000	94,989	60,000	(34,989)	(36.83)%
Printing & Reproduction				60,000	60,000	
Equipment Rental	44,966	128,000	128,000	55,000	(73,000)	(57.03)%
Professional Services	103,815	300,355	347,121		(347,121)	(100.00)%
Total Services & Supplies Expenditures	346,431	788,355	850,110	453,000	(397,110)	(46.71)%
Capital Expenditures						
Transfer In/Out	(16,920)					
Total Expenditures	523,025	1,019,782	1,081,536	663,650	(417,886)	(38.64)%

Headquarters East (Richmond) 707

Managing Division:

Administrative Resources

Contact Person:

Erica Flahan

Program Purpose:

The Headquarters East Program covers the operating and maintenance costs for the Air District's Richmond office, ensuring a safe, functional, and efficient workspace for staff. These efforts support core programs and services by providing a reliable facility that enables the Air District to deliver on its mission of protecting air quality and public health. Through proactive management and resource stewardship, the program aligns facility operations with long-term planning and regulatory compliance, strengthening organizational continuity.

Essential Functions

- Provide on-site support to ensure meeting rooms and facilities have the necessary services and resources.
- Oversee maintenance contracts to ensure the building is properly maintained, safe, and compliant with standards.
- Manage HOA coordination to confirm compliance and that all required services are delivered.

Strategic Plan Commitment	Strategic Plan Strategy
4.10.02 Develop detailed operational plans and business processes that estimate the required resources and timelines, with clear responsibilities.	4.10 - Ensure Success
4.10.04 Apply continuous process improvement models to operations and procedures.	4.10 - Ensure Success

Headquarters East (Richmond) 707

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Personnel Expenditures						
Services & Supplies Expenditures						
Building Maintenance		6,000	6,000	114,000	108,000	1,800.00%
Utilities	151,368	140,000	140,000	174,000	34,000	24.29%
Professional Services	88,218	485,000	485,000	450,000	(35,000)	(7.22)%
Total Services & Supplies Expenditures	239,586	631,000	631,000	738,000	107,000	16.96%
Capital Expenditures						
Total Expenditures	239,586	631,000	631,000	738,000	107,000	16.96%

Managing Division:

Administrative Resources

Contact Person:

Erica Flahan

Program Purpose:

The Procurement Program ensures the strategic, efficient, and cost-effective acquisition of equipment, supplies, and services to support the Air District's operations. Through strategic sourcing and process efficiencies, the program aligns resource management with long-term planning and regulatory compliance. These efforts enable operational continuity and strengthen the Air District's capacity to deliver on its mission to protect public health and air quality.

Essential Functions

- Conduct formal solicitations to procure general and professional services.
- Administer Air District service contracts and lease agreements.
- Approve the purchase of necessary office supplies as requested by Air District personnel.
- Process purchase order requests.
- Manage Air District insurance policies and associated claims.

Strategic Plan Commitment	Strategic Plan Strategy
4.07.01 Strengthen internal organizational knowledge and communication skills	4.07 - Customer Service
4.10.03 Develop and apply standard and best operating procedures and practices across the organization.	4.10 - Ensure Success
4.10.04 Apply continuous process improvement models to operations and procedures.	4.10 - Ensure Success

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	4.23	5.59	5.59	5.36	(0.23)	(4.11)%
Personnel Expenditures						
Permanent Salaries	672,908	868,233	868,233	861,684	(6,549)	(0.75)%
Overtime Salaries	8,446					
Temporary Salaries	8,299					
Payroll Taxes	10,508	12,538	12,538	12,221	(317)	(2.53)%
Pension Benefits	125,433	164,350	164,350	173,720	9,370	5.70%
FICA Replacement Benefits	14,854	19,737	19,737	19,515	(222)	(1.12)%
Group Insurance Benefits	90,965	101,441	101,441	126,976	25,535	25.17%
Transportation Subsidy	2,261	7,183	7,183	5,145	(2,038)	(28.37)%
Workers' Compensation	1,970	2,357	2,357	2,147	(210)	(8.91)%
Discretionary Contribution		50,047	50,047	45,573	(4,474)	(8.94)%
Total Personnel Expenditures	935,644	1,225,886	1,225,886	1,246,981	21,095	1.72%
Services & Supplies Expenditures						
Travel	1,487		4,494	9,900	5,406	120.29%
Training & Education	595	4,000	1,724	8,250	6,526	378.54%
Communications	480			500	500	
Printing & Reproduction	1,004	23,400	23,400		(23,400)	(100.00)%
Professional Services	119,949	251,000	283,525	281,000	(2,525)	(0.89)%
General Insurance	828,451	985,000	985,000	1,185,000	200,000	20.30%
Computer Hardware & Software		50,000	50,000	53,000	3,000	6.00%
Stationery & Office Supplies	19,019	40,000	42,682	10,000	(32,682)	(76.57)%
Total Services & Supplies Expenditures	970,985	1,353,400	1,390,825	1,547,650	156,825	11.28%
Capital Expenditures						
Transfer In/Out	(81,809)					
Total Expenditures	1,824,820	2,579,286	2,616,711	2,794,631	177,920	6.80%

Headquarters West (Beale Street) 709

Managing Division:

Administrative Resources

Contact Person:

Erica Flahan

Program Purpose:

The Headquarters West Program funds the Air District's share of operating costs for business operations and technology services jointly managed with the Metropolitan Transportation Commission and the Association of Bay Area Governments at 375 Beale Street. It also covers lease payments associated with the Air District's ownership interest in its portion of the facility. These efforts ensure a collaborative, efficient workspace that supports regional coordination and enables the Air District to deliver on its mission of protecting air quality and public health.

Essential Functions

- Maintain service level agreements with partner agencies.
- Maintain communication plan for building protocols.
- Maintain and develop training materials for new technologies and services available at 375 Beale Street.
- Maintain Shared Services budget and responsibilities.

Strategic Plan Commitment	Strategic Plan Strategy
4.10.02 Develop detailed operational plans and business processes that estimate the required resources and timelines, with clear responsibilities.	4.10 - Ensure Success
4.10.04 Apply continuous process improvement models to operations and procedures.	4.10 - Ensure Success

Headquarters West (Beale Street) 709

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Personnel Expenditures						
Services & Supplies Expenditures						
Utilities	3,711	4,000	4,000	4,000		
Rents & Leases	1,200,000	1,200,000	1,200,000	1,200,000		
Professional Services	3,273,057	4,250,000	4,250,000	5,120,000	870,000	20.47%
Total Services & Supplies Expenditures	4,476,768	5,454,000	5,454,000	6,324,000	870,000	15.95%
Capital Expenditures						
Office Equipment				150,000	150,000	
Total Capital Expenditures				150,000	150,000	
Total Expenditures	4,476,768	5,454,000	5,454,000	6,474,000	1,020,000	18.70%

Fleet Services 710

Managing Division:

Administrative Resources

Contact Person:

Karen Schkolnick

Program Purpose:

The Fleet Program supports staff who rely on vehicles to perform their duties across the Air District's programs and services by maintaining the fleet and providing access to rentals as needed. This includes comprehensive vehicle lifecycle management—acquisition, assignment, maintenance, regulatory compliance, insurance, and the disposition of retired vehicles—to ensure operational readiness and safety. In alignment with the Air District's Strategic Plan, the program is advancing fleet greening and asset integrity initiatives, including an electrification strategy to reduce emissions and support climate goals.

Essential Functions

- Administration of service/maintenance program for the District's over 100-vehicle fleet.
- Administration of short-term pool/rental vehicle program.
- Administer help desk responding to fleet-related requests from all staff.
- Process insurance claims and repair/replacement of impacted units.
- Completion of annual smog check reporting to State of California.
- Vehicle acquisition and retirement.
- Maintain regulatory compliance oversight for the District's over 100-vehicle fleet.
- Administration of the lifecycle of the District's over 100-vehicle fleet.

Strategic Plan Commitment	Strategic Plan Strategy
4.07.01 Strengthen internal organizational knowledge and communication skills	4.07 - Customer Service
4.10.01 Put processes in place to ensure the successful launch and implementation of new rules and regulations, policy and program changes, new initiatives, and modifications to the strategic plan.	4.10 - Ensure Success
4.10.04 Apply continuous process improvement models to operations and procedures.	4.10 - Ensure Success

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	4.00	3.59	3.59	3.70	0.11	3.06%
Number of Positions (LTCE)				0.30	0.30	
Personnel Expenditures						
Permanent Salaries	609,195	590,097	590,097	680,002	89,905	15.24%
Overtime Salaries	3,587					
Payroll Taxes	9,616	8,577	8,577	9,633	1,056	12.31%
Pension Benefits	119,579	114,474	114,474	137,297	22,823	19.94%
FICA Replacement Benefits	13,555	12,670	12,670	14,555	1,885	14.88%
Group Insurance Benefits	82,528	75,911	75,911	95,853	19,942	26.27%
Transportation Subsidy	1,740	4,611	4,611	3,837	(774)	(16.79)%
Workers' Compensation	1,784	1,513	1,513	1,602	89	5.88%
Discretionary Contribution		34,054	34,054	36,018	1,964	5.77%
Total Personnel Expenditures	841,584	841,907	841,907	978,797	136,890	16.26%
Services & Supplies Expenditures						
Travel	3,389	10,000	10,000	9,050	(950)	(9.50)%
Training & Education		2,000	2,000	4,825	2,825	141.25%
Repair & Maintenance	54,438	60,000	70,342	60,000	(10,342)	(14.70)%
Communications	2,446	2,500	2,500	300	(2,200)	(88.00)%
Printing & Reproduction		5,000	5,000		(5,000)	(100.00)%
Rents & Leases	553,890	1,500,000	1,953,419	900,000	(1,053,419)	(53.93)%
Professional Services		50,000	50,000	1,100	(48,900)	(97.80)%
General Insurance	1,125	39,000	39,325	136,000	96,675	245.84%
Shop & Field Supplies		200	200	55,000	54,800	27,400.00%
Gasoline & Variable Fuel	154,181	550,000	732,282	250,000	(482,282)	(65.86)%
Computer Hardware & Software				3,000	3,000	
Total Services & Supplies Expenditures	769,469	2,218,700	2,865,068	1,419,275	(1,445,793)	(50.46)%
Capital Expenditures						
Transfer In/Out	(73,408)					
Total Expenditures	1,537,645	3,060,607	3,706,975	2,398,072	(1,308,903)	(35.31)%

- Page Intentionally Left Blank -

Executive Office

The Air District's Executive Office provides the leadership and administrative oversight necessary to fulfill the Air District's mission of protecting public health, reducing historical and current environmental inequities, and mitigating climate change. Under the direction of the Executive Officer/APCO and Board of Directors, the office coordinates all divisions in their efforts to implement the organization's strategic objectives and to execute science-based policies with integrity and transparency, utilizing both traditional management and innovative approaches.

To fulfill the "Be Accountable" objective in the strategic plan, the Executive Office develops standardized procedures and operational plans that ensure effective program launches. It also maintains organizational transparency by establishing performance metrics, tracking progress, and publishing annual reports that assess strategic plan implementation progress and address challenges.

Furthermore, the Executive Office ensures the seamless operation of the Air District's Board of Directors and Hearing Board. It manages logistics, materials, archives, and member transitions for the Board of Directors, while providing the Hearing Board with specialized support for hearings, records, and fee processing. The office also extends its administrative oversight to the Bay Area Clean Air Foundation to support its mission-driven initiatives.

Finally, the Executive Office plays a crucial role in developing and maintaining strategic partnerships with community groups, non-profits, regional agencies, state and federal regulatory agencies, and associations, as well as the state legislature. Strong partnerships are vital for fulfilling our mission and translating state initiatives into regional action.

Managing Division:

Executive

Contact Person:

Vanessa Johnson

Program Purpose:

Provides administration and direction of Air District programs. Develops and implements standard procedures for effective program launches, tracks performance metrics, assesses and reports on strategic progress. Provides administrative oversight to the Bay Area Clean Air Foundation and develops and maintains strategic partnerships.

Essential Functions

- Oversee, implement and coordinate implementation of key initiatives aligned with strategic goals.
- Coordinate legislative agenda development and implementation.
- Foster internal and external collaboration and coordination.
- Partner with and act as a liaison between community groups, regional, state and federal agencies.
- Provide administrative support to the Bay Area Clean Air Foundation.
- Develop and implement standard management and operational processes for major initiatives and strategic plan implementation.
- Track, assess, and report organizational progress on strategic objectives.

Strategic Plan Commitment	Strategic Plan Strategy
3.03.01 Build employees' knowledge of the Air District's activities	3.03 - One Air District Community
3.03.03 Create opportunities for relationship building across divisions to create a One Air District culture.	3.03 - One Air District Community
4.06.05 Work with local government partners and Board of Directors to establish an increased presence in all nine Bay Area counties.	4.06 - Inspire Action
4.07.01 Strengthen internal organizational knowledge and communication skills	4.07 - Customer Service
4.10.01 Put processes in place to ensure the successful launch and implementation of new rules and regulations, policy and program changes, new initiatives, and modifications to the strategic plan.	4.10 - Ensure Success
4.10.02 Develop detailed operational plans and business processes that estimate the required resources and timelines, with clear responsibilities.	4.10 - Ensure Success
4.10.03 Develop and apply standard and best operating procedures and practices across the organization.	4.10 - Ensure Success
4.10.04 Apply continuous process improvement models to operations and procedures.	4.10 - Ensure Success
4.12.02 Do an annual progress review.	4.12 - Report Progress
4.12.03 Create measurable performance metrics for each strategy and associated actions	4.12 - Report Progress
4.12.04 Identify challenges or resources needed to accomplish each strategy, as part of annual review.	4.12 - Report Progress

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)	18.11	14.89	14.89	13.68	(1.21)	(8.13)%
Personnel Expenditures						
Permanent Salaries	4,304,163	2,925,265	2,925,265	2,824,888	(100,377)	(3.43)%
Overtime Salaries	10,963	15,000	15,000		(15,000)	(100.00)%
Temporary Salaries	109,454	154,000	154,000		(154,000)	(100.00)%
Payroll Taxes	68,523	44,809	44,809	43,574	(1,235)	(2.76)%
Pension Benefits	1,002,942	552,328	552,328	572,955	20,627	3.73%
FICA Replacement Benefits	96,591	52,523	52,523	49,800	(2,723)	(5.18)%
Group Insurance Benefits	590,695	299,059	299,059	306,858	7,799	2.61%
Transportation Subsidy	10,866	19,115	19,115	13,130	(5,985)	(31.31)%
Workers' Compensation	12,604	6,271	6,271	5,480	(791)	(12.61)%
Discretionary Contribution		169,358	169,358	150,306	(19,052)	(11.25)%
Total Personnel Expenditures	6,206,801	4,237,728	4,237,728	3,966,991	(270,737)	(6.39)%
Services & Supplies Expenditures						
Travel	41,959	67,000	67,000	79,000	12,000	17.91%
Training & Education	40,732	40,500	40,500	53,500	13,000	32.10%
Communications	18,231	16,500	16,500	19,000	2,500	15.15%
Postage	68	450	450	350	(100)	(22.22)%
Printing & Reproduction	205	2,500	2,500	3,000	500	20.00%
Rents & Leases	36,427					
Professional Services	1,221,657	2,045,432	2,777,096	1,895,000	(882,096)	(31.76)%
Computer Hardware & Software	2,393	6,800	6,800	6,800		
Stationery & Office Supplies	2,089	4,000	4,775	5,000	225	4.71%
Books & Journals	3,995	2,500	2,500	4,000	1,500	60.00%
Total Services & Supplies Expenditures	1,367,756	2,185,682	2,918,121	2,065,650	(852,471)	(29.21)%
Capital Expenditures						
Transfer In/Out	(345,718)					
Total Expenditures	7,228,839	6,423,410	7,155,849	6,032,641	(1,123,208)	(15.70)%

Managing Division:

Executive

Contact Person:

Vanessa Johnson

Program Purpose:

Oversee Activities of the Board of Directors.

Essential Functions

- Manage meeting logistics and materials for all Board meetings and Committee meetings annually.
- Archive Board documents and maintain relevant sections of the Air District website.
- Handle Board correspondence, and ensure compliance with financial processes.
- Facilitate new member orientation and training, including ethics and bias training.
- Oversee Board transitions, including Committee assignments.

Strategic Plan Commitment	Strategic Plan Strategy
3.06.02 Create more detailed and comprehensive onboarding.	3.06 - Support Employee Success
4.06.05 Work with local government partners and Board of Directors to establish an increased presence in all nine Bay Area counties.	4.06 - Inspire Action
4.07.01 Strengthen internal organizational knowledge and communication skills	4.07 - Customer Service
4.10.01 Put processes in place to ensure the successful launch and implementation of new rules and regulations, policy and program changes, new initiatives, and modifications to the strategic plan.	4.10 - Ensure Success
4.10.04 Apply continuous process improvement models to operations and procedures.	4.10 - Ensure Success

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	1.57	1.18	1.18	1.32	0.14	11.86%
Personnel Expenditures						
Permanent Salaries	195,329	148,366	148,366	173,308	24,942	16.81%
Overtime Salaries	3,576					
Temporary Salaries	1,386					
Payroll Taxes	3,036	2,115	2,115	2,431	316	14.94%
Pension Benefits	41,669	28,007	28,007	34,728	6,721	24.00%
FICA Replacement Benefits	4,393	4,167	4,167	4,797	630	15.12%
Group Insurance Benefits	27,063	22,795	22,795	33,927	11,132	48.84%
Transportation Subsidy	484	1,517	1,517	1,265	(252)	(16.61)%
Workers' Compensation	572	498	498	528	30	6.02%
Discretionary Contribution		8,510	8,510	9,110	600	7.05%
Board Stipends	46,300		60,000	60,000		
Total Personnel Expenditures	323,808	215,975	275,975	320,094	44,119	15.99%
Services & Supplies Expenditures						
Travel	34,118	124,000	99,000	95,000	(4,000)	(4.04)%
Training & Education	14,969	23,000	23,000	59,500	36,500	158.70%
Printing & Reproduction	193			250	250	
Rents & Leases	92					
Professional Services	43,696	37,000	67,000	155,000	88,000	131.34%
Books & Journals		2,500	2,500	1,500	(1,000)	(40.00)%
Total Services & Supplies Expenditures	93,068	186,500	191,500	311,250	119,750	62.53%
Capital Expenditures						
Total Expenditures	416,876	402,475	467,475	631,344	163,869	35.05%

Managing Division:

Executive

Contact Person:

Vanessa Johnson

Program Purpose:

Records, documents, and maintains records of actions of the quasi-judicial Hearing Board.

Essential Functions

- Arrange logistics and maintain the calendar for Hearing Board activities.
- Attend hearings and draft orders for review.
- Archive records of actions, process fees, and handle follow-up actions.
- Provide administrative support, including member reimbursement.
- Update website content related to Hearing Board operations.

Strategic Plan Commitment	Strategic Plan Strategy
1.05.01 Develop enhanced investigation procedure for violations.	1.05 - Enhance Violation Investigations
1.05.03 Investigate duration of violations and avoided costs.	1.05 - Enhance Violation Investigations
4.05.01 Target inspections and other compliance activities where they are most needed.	4.05 - Improve Compliance Investigations

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)	0.24	0.29	0.29	0.26	(0.03)	(10.34)%
Personnel Expenditures						
Permanent Salaries	29,922	38,072	38,072	34,316	(3,756)	(9.87)%
Overtime Salaries	1,380					
Payroll Taxes	454	543	543	482	(61)	(11.23)%
Pension Benefits	8,584	7,030	7,030	6,879	(151)	(2.15)%
FICA Replacement Benefits	652	1,015	1,015	940	(75)	(7.39)%
Group Insurance Benefits	3,971	4,498	4,497	5,664	1,167	25.95%
Transportation Subsidy	115	370	370	248	(122)	(32.97)%
Workers' Compensation	88	121	121	103	(18)	(14.88)%
Discretionary Contribution		2,187	2,187	1,805	(382)	(17.47)%
Board Stipends	16,400		20,000	20,000		
Total Personnel Expenditures	61,566	53,836	73,835	70,437	(3,398)	(4.60)%
Services & Supplies Expenditures						
Travel	1,202	43,000	43,000	28,000	(15,000)	(34.88)%
Training & Education	682	2,500	2,500	3,000	500	20.00%
Postage	39	150	150	150		
Printing & Reproduction		700	700	750	50	7.14%
Professional Services	479	800	800	800		
Total Services & Supplies Expenditures	2,402	47,150	47,150	32,700	(14,450)	(30.65)%
Capital Expenditures						
Total Expenditures	63,968	100,986	120,985	103,137	(17,848)	(14.75)%

Managing Division:

Executive

Contact Person:

Vanessa Johnson

Program Purpose:

The Advisory Council studies and makes recommendations on specific matters referred from the Board of Directors or the Air Pollution Control Officer. Matters can include technical, social, economic and environmental aspects of air quality issues. The Community Advisory Council will advise the Board of Directors and the Executive Officer on technical, community, health, and policy matters.

Essential Functions

- Organize logistics and distribute materials for all Council meetings.
- Archive meeting materials and maintain the Air District's website.
- Coordinate member recruitment and process reimbursements.
- Support community-focused activities, including equity policies and engagement guidelines.
- Assist the Councils with research and policy recommendations.

Strategic Plan Commitment	Strategic Plan Strategy
2.11.01 Develop and share methods to better understand where cumulative impacts exist and how they should be considered in decision making.	2.11 - Cumulative Health Impacts
2.11.02 Consider cumulative impacts in our programs, including permitting, regulations and compliance.	2.11 - Cumulative Health Impacts

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	0.12	0.17	0.17	0.75	0.58	341.18%
Personnel Expenditures						
Permanent Salaries	16,077	20,633	20,633	157,655	137,022	664.09%
Overtime Salaries	657					
Payroll Taxes	248	294	294	2,324	2,030	690.48%
Pension Benefits	3,287	3,915	3,915	31,986	28,071	717.01%
FICA Replacement Benefits	338	592	592	2,737	2,145	362.33%
Group Insurance Benefits	2,052	2,706	2,706	21,189	18,483	683.04%
Transportation Subsidy	50	215	215	722	507	235.81%
Workers' Compensation	47	71	71	301	230	323.94%
Discretionary Contribution		1,183	1,183	8,391	7,208	609.30%
Board Stipends	75,249		150,000	150,000		
Total Personnel Expenditures	98,005	29,609	179,609	375,305	195,696	108.96%
Services & Supplies Expenditures						
Travel	11,091	47,705	47,705	43,000	(4,705)	(9.86)%
Training & Education	502	4,000	4,000	3,500	(500)	(12.50)%
Professional Services		24,500	24,500	8,500	(16,000)	(65.31)%
Total Services & Supplies Expenditures	11,593	76,205	76,205	55,000	(21,205)	(27.83)%
Capital Expenditures						
Total Expenditures	109,598	105,814	255,814	430,305	174,491	68.21%

- Page Intentionally Left Blank -

Finance Division

The Finance Division is responsibile for managing the organization's financial resources, ensuring accurate recording, reporting, and auditing of financial transactions in accordance with the standards set by the Governmental Accounting Standards Board (GASB) and Generally Accepted Accounting Principles (GAAP). Its primary objective is to oversee the financial well-being of the agency, ensuring financial stability within established budgetary limits. Key functions: Budget Development & Financial Planning – Prepares and administers the annual budget, forecast revenue and expenditures, and ensures financial sustainability. Accounting & Financial Reporting – Maintains accurate financial records, processes transactions, and prepares financial statements in compliance with regulatory standards. Grants & Revenue Management – Administers grant funding, monitors financial performance, and ensures proper use of funds for air quality programs. Payroll & Accounts Payable/Receivable – Manages payroll processing, vendor payments, and revenue collections to support financial operations. Internal Controls & Audit Compliance – Implements financial controls, conducts audits, and ensures adherence to financial policies and procedures

Managing Division:

Finance

Contact Person:

Jun Pan

Program Purpose:

The Payroll Program is dedicated to ensuring accurate and timely compensation for all District employees. This program is responsible for administering every aspect of the payroll process, including calculating and processing employee salaries, managing leave accruals, and overseeing deductions for taxes, retirement contributions, and other withholdings. The Payroll Program also provides support for resolving payroll-related inquiries, maintains accurate payroll records, and collaborates with the Human Resources Office to ensure alignment with the District's policies and financial objectives.

Essential Functions

- Ensure accurate and timely processing of employee wages, including tax withholdings, deductions, and direct deposits, in compliance with all applicable laws and regulations.
- Generate payroll reports and analyses to support management decisions, budget planning, audits, and compliance reviews.
- Maintain accurate payroll records, ensure compliance with labor laws and payroll regulations, and prepare documentation for audits and reporting requirements.
- Manage benefit deductions such as health insurance, retirement plans, and flexible spending accounts.
- Prepare and file payroll tax reports (e.g., W-2s, 1099s, quarterly tax filings).
- Provide training on payroll processes, ensure staff awareness of compliance requirements, and stay updated on changes to laws, regulations, and payroll systems.
- Track employee leave accruals, usage, and balances (e.g., sick leave, vacation, PTO).

Strategic Plan Commitment	Strategic Plan Strategy
4.07.01 Strengthen internal organizational knowledge and communication skills	4.07 - Customer Service
4.10.03 Develop and apply standard and best operating procedures and practices across the organization.	4.10 - Ensure Success

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)	3.27	4.54	4.54	3.28	(1.26)	(27.75)%
Personnel Expenditures						
Permanent Salaries	556,850	733,469	733,469	542,526	(190,943)	(26.03)%
Overtime Salaries	6,411	5,000	5,000	7,000	2,000	40.00%
Temporary Salaries	26,282					
Payroll Taxes	9,263	10,589	10,589	7,663	(2,926)	(27.63)%
Pension Benefits	102,653	140,390	140,390	109,458	(30,932)	(22.03)%
FICA Replacement Benefits	13,057	16,015	16,015	11,951	(4,064)	(25.38)%
Group Insurance Benefits	80,586	132,847	132,847	103,341	(29,506)	(22.21)%
Transportation Subsidy	1,331	5,829	5,829	3,151	(2,678)	(45.94)%
Workers' Compensation	1,631	1,912	1,912	1,315	(597)	(31.22)%
Discretionary Contribution		42,314	42,314	28,715	(13,599)	(32.14)%
Total Personnel Expenditures	798,064	1,088,365	1,088,365	815,120	(273,245)	(25.11)%
Services & Supplies Expenditures						
Travel	3,263	5,750	5,750	8,300	2,550	44.35%
Training & Education	2,148	9,450	9,450	16,500	7,050	74.60%
Professional Services	428,586	477,200	504,399	498,000	(6,399)	(1.27)%
Total Services & Supplies Expenditures	433,997	492,400	519,599	522,800	3,201	0.62%
Capital Expenditures						
Transfer In/Out	(69,054)					
Total Expenditures	1,163,007	1,580,765	1,607,964	1,337,920	(270,044)	(16.79)%

Managing Division:

Finance

Contact Person:

Jun Pan

Program Purpose:

The Finance/Accounting Program oversees the Air District's fiscal stewardship and ensures financial accountability. Its responsibilities include managing accounting operations, processing vendor payments, handling permit fee receipts, overseeing asset management, and overseeing financial audits and reporting. Additionally, this Program prepares the annual budget, prepares annual financial statements, performs cost recovery analyses, and manages financial reporting for all federal and state grants.

Essential Functions

- Compiles and prepares the annual Air District's budget
- Conduct and compile the annual cost recovery analysis.
- Prepare quarterly comparison statements for the Finance and Administration Committee presentation.
- Prepare for the annual audit of the District's financial records.
- Prepared financial reports and analsis for stakeholders
- Receives and process permit, property tax, and grant revenues
- Process vendor invoices and issue payments

Strategic Plan Commitment	Strategic Plan Strategy
2.08.01 Establish team to administer the portion of penalty funds distributed to affected communities and the broader region, in consultation with the communities and region.	2.08 - Community-Directed Funds
4.10.02 Develop detailed operational plans and business processes that estimate the required resources and timelines, with clear responsibilities.	4.10 - Ensure Success
4.10.03 Develop and apply standard and best operating procedures and practices across the organization.	4.10 - Ensure Success
4.10.04 Apply continuous process improvement models to operations and procedures.	4.10 - Ensure Success
4.11.02 Re-orient annual budget process, including the allocation of funds, to the specific objectives, strategies, and actions in the plan.	4.11 - Align Resources

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)	13.77	14.69	14.69	15.63	0.94	6.40%
Personnel Expenditures						
Permanent Salaries	2,020,942	2,246,340	2,246,340	2,519,467	273,127	12.16%
Overtime Salaries	2,364	5,000	5,000	5,000		
Temporary Salaries	6,090					
Payroll Taxes	31,653	32,461	32,461	35,888	3,427	10.56%
Pension Benefits	495,563	429,507	429,507	507,970	78,463	18.27%
FICA Replacement Benefits	44,856	51,827	51,827	56,924	5,097	9.83%
Group Insurance Benefits	274,477	386,623	386,623	435,081	48,458	12.53%
Transportation Subsidy	6,097	18,862	18,862	15,008	(3,854)	(20.43)%
Workers' Compensation	5,918	6,188	6,188	6,264	76	1.23%
Discretionary Contribution		129,445	129,445	133,258	3,813	2.95%
Total Personnel Expenditures	2,887,960	3,306,253	3,306,253	3,714,860	408,607	12.36%
Services & Supplies Expenditures						
Travel	16,100	10,300	10,300	21,850	11,550	112.14%
Training & Education	7,190	26,750	26,930	36,500	9,570	35.54%
Communications	686					
Printing & Reproduction	5,177	8,300	8,300	9,000	700	8.43%
Professional Services	420,770	455,719	517,985	371,399	(146,586)	(28.30)%
Computer Hardware & Software	229	2,500	2,500	6,241	3,741	149.64%
Stationery & Office Supplies	203	1,800	1,800	2,000	200	11.11%
Total Services & Supplies Expenditures	450,355	505,369	567,815	446,990	(120,825)	(21.28)%
Capital Expenditures						
Transfer In/Out	(229,962)					
Total Expenditures	3,108,353	3,811,622	3,874,068	4,161,850	287,782	7.43%

- Page Intentionally Left Blank -

Human Resources Division

The Human Resources Division is responsible for developing, implementing, and managing personnel policies and programs that support the organization's workforce. HR ensures compliance with labor laws and regulations while fostering a work environment that promotes employee engagement, equity, and professional growth.

Key Responsibilities:

Talent Acquisition & Workforce Planning – Recruitment, selection, and onboarding processes to attract and retain a skilled and diverse workforce. Fostering an inclusive organizational culture.

Compensation & Benefits Administration – Managing competitive salary structures, benefits programs, and compliance with applicable labor agreements.

Employee Relations & Labor Negotiations – Facilitating positive employee relations, managing grievances, and negotiating collective bargaining agreements.

Training & Development – Providing professional development opportunities, leadership training, and employee performance management.

HR Compliance & Risk Management – Ensuring adherence to federal, state, and local employment laws, workplace safety regulations, and equal employment opportunity (EEO) guidelines.

Benefits Administration 107

Managing Division:

Human Resources

Contact Person:

Judy Yu

Program Purpose:

Administers employee and retiree benefits programs, including health, retirement, leave, and workers' compensation, to ensure accurate, compliant, and timely delivery of services. The program supports employee well-being while maintaining benefits systems, records, and regulatory compliance.

Essential Functions

- Administer benefits for employees and retirees in compliance with policies and procedures.
- Administer health, dental, vision, life and long term disability plans.
- Administer retirement and pension plans.
- Administer flexible spending accounts, employee assistance program, and transit subsidy.
- Administer onboarding and separation.
- Maintain human resources information systems.
- Administer leave program.
- Administer worker's compensation, safety, and ergonomics program.
- Conduct a variety of benefits, safety, and special trainings and events.
- Administer requirements for fitness medical examinations.

Strategic Plan Commitment	Strategic Plan Strategy
3.01.04 Regularly assess recruitment, retention, and promotion rates for under-represented employees, especially in leadership positions.	3.01 - A Diverse Workforce
3.05.01 Develop and implement an employee achievement incentive program which could include awards or bonuses.	3.05 - Recognize Employees
3.05.02 Better recognize employees who lead by example and exemplify the core values.	3.05 - Recognize Employees
3.06.02 Create more detailed and comprehensive onboarding.	3.06 - Support Employee Success

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	2.29	2.23	2.23	2.92	0.69	30.94%
Personnel Expenditures						
Permanent Salaries	328,147	338,706	338,706	450,395	111,689	32.98%
Overtime Salaries	4,407					
Temporary Salaries	29,774			100,000	100,000	
Payroll Taxes	7,062	4,849	4,849	6,370	1,521	31.37%
Pension Benefits	63,077	62,575	62,575	90,700	28,125	44.95%
FICA Replacement Benefits	7,213	7,880	7,880	10,620	2,740	34.77%
Group Insurance Benefits	4,116,122	3,767,323	3,767,323	4,829,863	1,062,540	28.20%
Transportation Subsidy	1,017	2,868	2,868	2,800	(68)	(2.37)%
Workers' Compensation	18,814	941	941	1,169	228	24.23%
Discretionary Contribution		19,514	19,514	23,794	4,280	21.93%
Total Personnel Expenditures	4,575,633	4,204,656	4,204,656	5,515,711	1,311,055	31.18%
Services & Supplies Expenditures						
Travel	7,881	10,000	10,000	10,000		
Training & Education	19,058	35,000	35,108	35,000	(108)	(0.31)%
Professional Services	92,138	150,000	209,455	150,000	(59,455)	(28.39)%
Shop & Field Supplies	12,123	35,000	39,955	35,000	(4,955)	(12.40)%
Stationery & Office Supplies				10,000	10,000	
Total Services & Supplies Expenditures	131,200	230,000	294,518	240,000	(54,518)	(18.51)%
Capital Expenditures						
Transfer In/Out	(398,114)					
Total Expenditures	4,308,719	4,434,656	4,499,174	5,755,711	1,256,537	27.93%

Managing Division:

Human Resources

Contact Person:

Judy Yu

Program Purpose:

Strengthens organizational capacity through workforce planning, leadership development, training, and performance management initiatives. The program supports continuous learning, effective supervision, and alignment of staff skills with the Air District's strategic priorities.

Essential Functions

- Provide Air District-wide and Division-specific trainings.
- Develop leadership development program and mentorship program as part of overall succession planning.
- Provide Ethics, Harassment Prevention, and any required compliance trainings.
- Provide coaching and development support to management and staff as needed.
- Administer the performance evaluation program.
- Administer the educational reimbursement and loan program.
- Coordinate and implement the various wellness activities and events.
- Coordinate the employee viewpoint survey.
- Monitor and comply with federal, state, and local regulations related to training.
- Administer Form 700.

Strategic Plan Commitment	Strategic Plan Strategy
3.01.02 Create development programs tailored to employees from diverse backgrounds.	3.01 - A Diverse Workforce
3.05.03 Recognize employees through performance evaluations that reward and encourage employees to engage in cross-functional learning, collaboration, innovation, and skill development opportunities.	3.05 - Recognize Employees
3.06.01 Develop an expanded mentoring program	3.06 - Support Employee Success
3.06.03 Develop comprehensive training and cross-training on Air District programs for employees.	3.06 - Support Employee Success
4.07.02 Develop an organization-wide curriculum for existing and new employees.	4.07 - Customer Service

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	2.53	2.34	2.34	3.67	1.33	56.84%
Personnel Expenditures						
Permanent Salaries	388,686	378,139	378,139	645,661	267,522	70.75%
Overtime Salaries	3,793					
Temporary Salaries	1,176					
Payroll Taxes	5,927	5,514	5,514	9,340	3,826	69.39%
Pension Benefits	80,361	68,946	68,946	130,478	61,532	89.25%
FICA Replacement Benefits	8,575	8,252	8,252	13,350	5,098	61.78%
Group Insurance Benefits	52,724	53,264	53,264	76,987	23,723	44.54%
Transportation Subsidy	1,427	3,003	3,003	3,520	517	17.22%
Workers' Compensation	1,138	985	985	1,469	484	49.14%
Discretionary Contribution		21,815	21,815	34,229	12,414	56.91%
Total Personnel Expenditures	543,807	539,918	539,918	915,034	375,116	69.48%
Services & Supplies Expenditures						
Travel	1,944	5,000	5,000	10,000	5,000	100.00%
Training & Education	122,746	285,000	536,627	480,000	(56,627)	(10.55)%
Printing & Reproduction	900					
Professional Services	31,943	200,000	227,912	110,000	(117,912)	(51.74)%
Stationery & Office Supplies	66					
Total Services & Supplies Expenditures	157,599	490,000	769,539	600,000	(169,539)	(22.03)%
Capital Expenditures						
Transfer In/Out	(46,445)					
Total Expenditures	654,961	1,029,918	1,309,457	1,515,034	205,577	15.70%

Managing Division:

Human Resources

Contact Person:

Judy Yu

Program Purpose:

Supports positive labor-management relationships and fair, consistent application of personnel policies. The program manages employee relations matters, labor negotiations, disciplinary processes, and grievance resolution while ensuring compliance with applicable employment laws and labor agreements.

Essential Functions

- Administer, interpret, and implement the Memorandum of Understanding (MOU) and Personnel Policies and Procedures of the Administrative Code.
- Provide management and staff consultation.
- Meet and negotiate with Employee Association on appropriate subjects.
- Administer EEO Policy.
- Provide support of grievance/arbitration processes.
- Maintain accurate employment records.
- Provide discipline counseling.
- Monitor and comply with federal, state, and local regulations related to labor.

Strategic Plan Commitment	Strategic Plan Strategy
3.03.01 Build employees' knowledge of the Air District's activities	3.03 - One Air District Community
3.03.02 Enhance opportunities for knowledge sharing through more engagement events and collaboration.	3.03 - One Air District Community
3.03.03 Create opportunities for relationship building across divisions to create a One Air District culture.	3.03 - One Air District Community
3.06.02 Create more detailed and comprehensive onboarding.	3.06 - Support Employee Success
4.07.01 Strengthen internal organizational knowledge and communication skills	4.07 - Customer Service

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	1.99	1.83	1.83	2.07	0.24	13.11%
Number of Positions (LTCE)		1.00	1.00	1.00		
Personnel Expenditures						
Permanent Salaries	388,385	503,933	503,933	644,317	140,384	27.86%
Overtime Salaries	3,471					
Payroll Taxes	5,885	7,365	7,365	9,604	2,239	30.40%
Pension Benefits	84,140	93,916	93,916	130,725	36,809	39.19%
FICA Replacement Benefits	8,480	9,981	9,981	11,185	1,204	12.06%
Group Insurance Benefits	52,213	55,215	55,215	85,345	30,130	54.57%
Transportation Subsidy	1,716	3,633	3,633	2,949	(684)	(18.83)%
Workers' Compensation	1,137	1,192	1,192	1,231	39	3.27%
Discretionary Contribution		29,126	29,126	34,294	5,168	17.74%
Total Personnel Expenditures	545,427	704,361	704,361	919,650	215,289	30.57%
Services & Supplies Expenditures						
Travel	2,246	12,000	12,000	10,000	(2,000)	(16.67)%
Training & Education	4,623	11,000	11,000	11,000		
Professional Services	1,089,205	532,000	706,766	757,000	50,234	7.11%
Total Services & Supplies Expenditures	1,096,074	555,000	729,766	778,000	48,234	6.61%
Capital Expenditures						
Transfer In/Out	(46,980)					
Total Expenditures	1,594,521	1,259,361	1,434,127	1,697,650	263,523	18.38%

Managing Division:

Human Resources

Contact Person:

Judy Yu

Program Purpose:

Leads recruitment, selection, and classification processes to attract, assess, and hire a qualified and diverse workforce. The program administers job examinations and testing to ensure merit-based, equitable, and timely hiring that meets organizational staffing needs.

Essential Functions

- Conduct merit-based testing and incorporate diversity, equity, and inclusion as part of the process.
- Advertise and outreach vacant positions in various mediums to diversify applicant pool.
- Work with hiring managers to determine recruitment strategies.
- Perform background checks, reference checks, DMV checks and physical abilities checks.
- Participate in local, state and federal job fairs and similar outreach activities.
- Contract professional services for specialized executive management recruitments.
- Maintain online applicant tracking system.
- Monitor and comply with federal, state, and local regulations related to testing
- Conduct District-wide classification and compensation study.
- Utilize various recruitment tools to streamline and conform with best hiring practices

Strategic Plan Commitment	Strategic Plan Strategy
3.01.01 Establish recruitment, hiring, retention, and advancement policies and practices that promote diversity and inclusion and remove any structural biases, including consideration of an expanded internship program.	3.01 - A Diverse Workforce
3.01.04 Regularly assess recruitment, retention, and promotion rates for under-represented employees, especially in leadership positions.	3.01 - A Diverse Workforce
3.02.02 Conduct annual diversity and unconscious bias training for all levels of the organization, with a focus on those making hiring and promotional decisions.	3.02 - Be Welcoming and Inclusive
3.06.02 Create more detailed and comprehensive onboarding.	3.06 - Support Employee Success

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	2.39	4.78	4.78	4.16	(0.62)	(12.97)%
Number of Positions (LTCE)				1.00	1.00	
Personnel Expenditures						
Permanent Salaries	425,572	756,329	756,329	860,934	104,605	13.83%
Overtime Salaries	3,746					
Temporary Salaries	262,857	100,000	100,000	100,000		
Payroll Taxes	8,796	10,797	10,797	12,184	1,387	12.85%
Pension Benefits	122,379	145,666	145,666	173,739	28,073	19.27%
FICA Replacement Benefits	12,026	16,863	16,863	18,796	1,933	11.46%
Group Insurance Benefits	76,461	99,636	99,635	118,125	18,490	18.56%
Transportation Subsidy	1,671	6,137	6,137	4,956	(1,181)	(19.24)%
Workers' Compensation	1,246	2,013	2,013	2,068	55	2.73%
Discretionary Contribution		43,614	43,614	45,578	1,964	4.50%
Total Personnel Expenditures	914,754	1,181,055	1,181,054	1,336,380	155,326	13.15%
Services & Supplies Expenditures						
Travel	199	10,000	10,000	10,000		
Training & Education	10,538	12,000	12,218	12,000	(218)	(1.78)%
Communications	49,877	60,000	60,998	75,000	14,002	22.95%
Professional Services	482,890	100,000	100,000	180,000	80,000	80.00%
Stationery & Office Supplies				15,000	15,000	
Total Services & Supplies Expenditures	543,504	182,000	183,216	292,000	108,784	59.37%
Capital Expenditures						
Transfer In/Out	(79,742)					
Total Expenditures	1,378,516	1,363,055	1,364,270	1,628,380	264,110	19.36%

SERVICE AREA - GENERAL COUNSEL

Legal Division

The Legal Division, headed by the General Counsel, manages all of the Air District's legal affairs, providing legal advice, counseling and representation to the Board of Directors and its Committees, the Executive Officer/APCO, Air District staff, and the Advisory Council and Community Advisory Council in the execution of their respective statutory mandates and responsibilities.

The Legal Division's most prominent publicly visible role is in prosecuting enforcement cases to hold regulated entities accountable when they violate air quality regulations. The Air District's attorneys pursue financial penalties for violations referred by the Compliance and Enforcement Division, and in cases with ongoing violations, obtain orders from the Air District's independent Hearing Board and/or the California courts requiring the violator to come into compliance or shut down. The Legal Division regularly partners with other enforcement agencies such as the California Attorney General and local District Attorneys to bring appropriate litigation resources to bear, and it also has outside litigation firms on call if needed for bigger cases. The Legal Division also has a team of three small-claims case specialists who address more minor violations by smaller companies, which are prosecuted in small claims court if the violator refuses to pay their fine voluntarily.

The Legal Division also manages all litigation involving the Air District. In some cases this work is handled in-house by the Legal Division's attorneys, and in some cases the Legal Division manages representation by outside counsel where specialized expertise or additional litigation resources are required. The Legal Division also joins in coalitions with the California Attorney General, the California Air Resources Board, and others in challenging illegal rollbacks of air quality and climate protections, such as denial or revocation of California's Clean Air Act "waivers" authorizing more stringent tailpipe standards for motor vehicles than the federal baseline.

In addition to litigation, the Legal Division plays an equally important role in advising the Board of Directors, the Executive Officer/APCO, and Air District staff on compliance with the myriad legal requirements that govern the agency's various program areas, including rulemaking, permitting, planning, grants and incentives, and AB 617 implementation, among others. Close engagement on legal compliance and risk management strategies is the best way to avoid litigation, and to put the Air District in the best position to prevail in the event litigation does arise.

The Legal Division also supports all of the Air District's business functions, including advising on personnel and human resources issues, drafting and reviewing contracts, handling insurance, tax, and real estate issues, and counseling on labor negotiations – either directly or through managing specialized outside counsel on specific issues. The Legal Division similarly provides counsel on important public agency legal requirements such as the Ralph M. Brown open meetings act, government ethics laws, and the California Public Records Act. The Air District's Public Records Coordinator resides within the Legal Division.

This fiscal year, the Legal Division's main focus will be on implementation of the Air District's Strategic Plan. Highlights include a new Enforcement Policy that incorporates environmental justice principles, and reflects community voices, experiences and perspectives, to ensure that the we hold violators accountable to the maximum extent authorized by law; enhanced permitting approaches to ensure that the Air District is compliant with civil rights laws when it issues air permits; and implementing our new Environmental Justice Law Fellowship Program to provide new attorneys with experience in the Air District's equity and Environmental Justice work. The Air District's attorneys will also provide legal support to agency staff in all other areas of Strategic Plan implementation, as highlighted throughout this budget document.

Managing Division:

Legal

Contact Person:

Carrie Schilling

Program Purpose:

To advise, counsel and assist the Board of Directors, the Advisory Council and Community Advisory Council, and the Executive Officer/APCO and Air District staff on all legal matters related to the Air District's clean air mission and operations.

Essential Functions

- Staff all meetings of the Board of Directors, Board Committee, Advisory Council, and Community Advisory Council and provide legal advice and direction, as necessary, at such meetings.
- Draft all necessary resolutions for adoption by the Board of Directors.
- Provide all legal opinions, reports and correspondence requested by the Board of Directors, the Advisory Council, the Community Advisory Council, and the Executive Officer/APCO.
- Review and comment on all legislative proposals affecting the Air District.
- Provide legal advice and review of all rule adoptions and amendments including CEQA analysis.
- Staff all meetings with District staff, members of the public, representatives of other public agencies, environmental groups, industry, the press and legislative representatives involving District permitting, rule development, and enforcement.
- Provide legal advice, direction and contract drafting to support administration of grants and incentive programs.
- Advise and assist the Executive Officer/APCO and Air District staff in legal matters involving contracts, the Public Records Act, conflicts of interest, leases and copyrights.
- Advise Air District staff and the Board of Directors on all issues related to the Federal Clean Air Act, California Health & Safety Code authorities, and associated State and Federal regulations.
- Provide all staff support functions associated with the above activities.

Strategic Plan Commitment	Strategic Plan Strategy
1.01.04 Prioritize actions that reduce inequitable exposures to air pollution.	1.01 - Change Approach to Air Quality
2.10.01 Review how we issue permits to ensure we are following civil rights laws and regulations	2.10 - Civil Rights Laws
2.11.02 Consider cumulative impacts in our programs, including permitting, regulations and compliance.	2.11 - Cumulative Health Impacts
3.04.03 Recruit candidates with environmental justice expertise.	3.04 - Environmental Justice Expertise
4.01.03 Establish permit project teams for complex permits.	4.01 - Timely Permits

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)	6.42	7.43	7.43	7.62	0.19	2.56%
Personnel Expenditures						
Permanent Salaries	1,397,387	1,614,854	1,614,854	1,673,349	58,495	3.62%
Overtime Salaries	352			1,000	1,000	
Temporary Salaries	134,197	195,000	195,000	145,000	(50,000)	(25.64)%
Payroll Taxes	22,194	25,157	25,157	25,543	386	1.53%
Pension Benefits	333,012	305,615	305,615	339,818	34,203	11.19%
FICA Replacement Benefits	31,484	26,212	26,212	27,757	1,545	5.89%
Group Insurance Benefits	193,186	156,680	156,680	180,848	24,168	15.43%
Transportation Subsidy	4,598	9,540	9,540	7,318	(2,222)	(23.29)%
Workers' Compensation	4,092	3,130	3,130	3,054	(76)	(2.43)%
Discretionary Contribution		93,639	93,639	89,146	(4,493)	(4.80)%
Total Personnel Expenditures	2,120,502	2,429,827	2,429,827	2,492,833	63,006	2.59%
Services & Supplies Expenditures						
Travel	3,552	5,750	6,950	10,100	3,150	45.32%
Training & Education	4,877	20,300	19,100	14,000	(5,100)	(26.70)%
Communications	711	900	900	900		
Postage	18	100	100	100		
Printing & Reproduction	161					
Professional Services	297,668	222,000	496,671	231,500	(265,171)	(53.39)%
Stationery & Office Supplies	1,052	1,600	2,533	2,500	(33)	(1.30)%
Books & Journals	80,011	145,000	150,610	125,500	(25,110)	(16.67)%
Total Services & Supplies Expenditures	388,050	395,650	676,864	384,600	(292,264)	(43.18)%
Capital Expenditures						
Transfer In/Out	(141,837)					
Total Expenditures	2,366,715	2,825,477	3,106,691	2,877,433	(229,258)	(7.38)%

Hearing Board Proceedings 202

Managing Division:

Legal

Contact Person:

Alexandra Kamel

Program Purpose:

To represent the APCO in all proceedings involving variances, orders of abatement, and permit appeals before the Air District's Hearing Board.

Essential Functions

- Review and advise Air District staff regarding the legal and factual sufficiency of variance requests.
- Prepare and/or review all required written correspondence, pleadings and orders.
- Represent the Air District in all Hearing Board matters, including preparing all written submissions for these cases.
- Prepare Air District witnesses for hearings.
- Provide staff support functions associated with the above activities.

Strategic Plan Commitment	Strategic Plan Strategy
1.01.04 Prioritize actions that reduce inequitable exposures to air pollution.	1.01 - Change Approach to Air Quality
1.06.01 Develop enforcement policy that considers environmental justice principles, community voices, experiences, and perspectives.	1.06 - New Enforcement Policy
2.07.01 Build relationships and partnerships with communities to understand their experience and knowledge about what air pollution they are experiencing and where it might come from.	2.07 - Understand Local Air Pollution

Hearing Board Proceedings 202

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)	0.10	0.14	0.14	0.02	(0.12)	(85.71)%
Personnel Expenditures						
Permanent Salaries	23,995	33,902	33,902	4,623	(29,279)	(86.36)%
Payroll Taxes	377	517	517	72	(445)	(86.07)%
Pension Benefits	12,851	6,969	6,969	941	(6,028)	(86.50)%
FICA Replacement Benefits	553	509	509	67	(442)	(86.84)%
Group Insurance Benefits	3,380	2,171	2,171	394	(1,777)	(81.85)%
Transportation Subsidy	20	185	185	18	(167)	(90.27)%
Workers' Compensation	70	61	61	7	(54)	(88.52)%
Discretionary Contribution		1,968	1,968	247	(1,721)	(87.45)%
Total Personnel Expenditures	41,246	46,282	46,282	6,369	(39,913)	(86.24)%
Services & Supplies Expenditures						
Capital Expenditures						
Total Expenditures	41,246	46,282	46,282	6,369	(39,913)	(86.24)%

Legal Enforcement & Penalty Assessment 203

Managing Division:

Legal

Contact Person:

Alexandra Kamel

Program Purpose:

To hold those who violate Air District regulations accountable by assessing monetary penalties as provided for in the California Health and Safety Code, by pursuing injunctive relief to address any ongoing noncompliance, by removing any economic benefit gained from the noncompliance, and by providing an effective deterrence against future violations.

Essential Functions

- Administer Mutual Settlement Program.
- Pursue Small Claims Court actions to collect civil penalties.
- Provide full time clerical staff support for this program.
- Prepare witnesses and documentary evidence for administrative hearings and civil litigation associated with actions to recover civil penalties.
- Meet and confer with District staff and defendants to discuss settlement or to advance litigation.
- Represent the District in all court hearings, settlement conferences and civil discovery.
- Coordinate the referral of cases for civil and criminal prosecution to District Attorney offices and other agencies with jurisdiction over air quality issues.
- Prepare all correspondence and prepare and file all pleadings in civil and administrative actions.
- Settle or pursue enforcement actions on all Notices of Violation (NOVs).

Strategic Plan Commitment	Strategic Plan Strategy
1.05.01 Develop enhanced investigation procedure for violations.	1.05 - Enhance Violation Investigations
1.06.01 Develop enforcement policy that considers environmental justice principles, community voices, experiences, and perspectives.	1.06 - New Enforcement Policy
2.06.01 Develop a structured program to meet regularly with community members on compliance and enforcement activities, recent incidents or other air pollution violations, enforcement response, the extent of public harm, and legal actions we may take.	2.06 - Talk With Communities
2.07.01 Build relationships and partnerships with communities to understand their experience and knowledge about what air pollution they are experiencing and where it might come from.	2.07 - Understand Local Air Pollution
4.05.01 Target inspections and other compliance activities where they are most needed.	4.05 - Improve Compliance Investigations

Legal Enforcement & Penalty Assessment 203

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)	8.63	9.76	9.76	10.07	0.31	3.18%
Personnel Expenditures						
Permanent Salaries	1,771,519	2,045,038	2,045,038	2,224,854	179,816	8.79%
Temporary Salaries	10,092					
Payroll Taxes	27,664	31,022	31,022	33,893	2,871	9.25%
Pension Benefits	367,886	387,272	387,272	451,875	64,603	16.68%
FICA Replacement Benefits	39,458	34,416	34,416	36,664	2,248	6.53%
Group Insurance Benefits	242,047	197,208	197,208	220,636	23,428	11.88%
Transportation Subsidy	5,385	12,526	12,526	9,666	(2,860)	(22.83)%
Workers' Compensation	5,187	4,109	4,109	4,035	(74)	(1.80)%
Discretionary Contribution		118,519	118,519	118,542	23	0.02%
Total Personnel Expenditures	2,469,238	2,830,110	2,830,110	3,100,165	270,055	9.54%
Services & Supplies Expenditures						
Professional Services	27,947	225,000	271,890	245,000	(26,890)	(9.89)%
Total Services & Supplies Expenditures	27,947	225,000	271,890	245,000	(26,890)	(9.89)%
Capital Expenditures						
Total Expenditures	2,497,185	3,055,110	3,102,000	3,345,165	243,165	7.84%

Managing Division:

Legal

Contact Person:

Carrie Schilling

Program Purpose:

To represent and oversee Air District representation in litigation in State and Federal courts.

Essential Functions

- Represent Air District in State court actions.
- Represent Air District in Federal court actions.
- Provide litigation status reports to Air District Board of Directors.
- Legal research for litigation matters.
- Monitor and direct activities of outside counsel in general litigation and specialized legal areas such as labor law, employment law and tort actions.
- Provide clerical support for litigation matters.

Strategic Plan Commitment	Strategic Plan Strategy
1.01.04 Prioritize actions that reduce inequitable exposures to air pollution.	1.01 - Change Approach to Air Quality
1.06.01 Develop enforcement policy that considers environmental justice principles, community voices, experiences, and perspectives.	1.06 - New Enforcement Policy
2.11.02 Consider cumulative impacts in our programs, including permitting, regulations and compliance.	2.11 - Cumulative Health Impacts

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)	0.89	0.84	0.84	0.85	0.01	1.19%
Personnel Expenditures						
Permanent Salaries	196,433	171,950	171,950	215,764	43,814	25.48%
Temporary Salaries	43,842					
Payroll Taxes	3,675	2,677	2,677	3,322	645	24.09%
Pension Benefits	42,182	33,771	33,771	43,935	10,164	30.10%
FICA Replacement Benefits	5,119	2,953	2,953	3,093	140	4.74%
Group Insurance Benefits	31,976	17,827	17,827	24,679	6,852	38.44%
Transportation Subsidy	575	1,075	1,075	815	(260)	(24.19)%
Workers' Compensation	575	353	353	340	(13)	(3.68)%
Discretionary Contribution		9,962	9,962	11,526	1,564	15.70%
Total Personnel Expenditures	324,377	240,568	240,568	303,474	62,906	26.15%
Services & Supplies Expenditures						
Travel	262	100	100	250	150	150.00%
Postage		100	100	100		
Professional Services	388,699	157,000	1,123,457	455,000	(668,457)	(59.50)%
Books & Journals		7,000	7,000		(7,000)	(100.00)%
Minor Office Equipment		1,000	1,000	1,000		
Total Services & Supplies Expenditures	388,961	165,200	1,131,657	456,350	(675,307)	(59.67)%
Capital Expenditures						
Total Expenditures	713,338	405,768	1,372,225	759,824	(612,401)	(44.63)%

SERVICE AREA – INFORMATION MANAGEMENT

The Systems Development team supports five major objectives for the Air District. The first objective is to modernize permitting, compliance, and enforcement systems through business process improvement to enhance efficiency and effectiveness. The second objective is to maintain a secure, reliable, and accessible public web presence, including proactive digital notifications, equity through access to information, 508 compliance, and language translation services to meet diverse community needs. The third objective focuses on creating and supporting a seamless digital payment experience for customers, driving online adoption, enhancing business continuity, and expanding capabilities to incorporate outbound digital payments. The fourth objective involves providing support and governance for low-code and no-code platforms, empowering business users with agile development tools while ensuring security, compliance, and alignment with the District's IT standards. Lastly, the team is responsible for managing records and supporting Public Records Act (PRA) compliance through IT systems. This includes ensuring the retention, accessibility, and secure management of records to meet legal and regulatory obligations while supporting transparency and responsiveness to public records requests.

Managing Division:

Enterprise Technology Solutions

Contact Person:

John Chiladakis

Program Purpose:

This program provides oversight for internally managed software development and maintenance of internally developed solutions.

Essential Functions

- Software Development
- Business Analysis
- Software Testing and QA

Strategic Plan Commitment	Strategic Plan Strategy
2.05.01 Explore new ways to provide complaint information to the public.	2.05 - Air Quality Complaints
4.01.02 Better track permit applications, address bottlenecks in permitting process, and improve internal coordination.	4.01 - Timely Permits
4.02.01 Provide more information to applicants and the public throughout permitting process	4.02 - Transparent Permit Process
4.02.02 Create user-friendly reports and enhance publicly accessible, web-based tools for permit applications, online tracking, and easily accessible information on permitted sources, permit activity, and related emissions.	4.02 - Transparent Permit Process
4.02.03 Improve how we communicate information about permits and the permitting process to communities and applicants using more understandable, less technical language.	4.02 - Transparent Permit Process
4.10.03 Develop and apply standard and best operating procedures and practices across the organization.	4.10 - Ensure Success

Software Development and Maintenance 125

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)	10.19	11.39	11.39	14.80	3.41	29.94%
Number of Positions (LTCE)		1.00	1.00		(1.00)	(100.00)%
Personnel Expenditures						
Permanent Salaries	1,937,524	2,241,178	2,241,178	2,671,724	430,546	19.21%
Overtime Salaries	7,681					
Temporary Salaries	408,167					
Payroll Taxes	33,812	32,492	32,492	38,254	5,762	17.73%
Pension Benefits	396,445	434,796	434,796	540,242	105,446	24.25%
FICA Replacement Benefits	47,588	43,694	43,693	53,881	10,188	23.32%
Group Insurance Benefits	296,204	256,454	256,454	366,544	110,090	42.93%
Transportation Subsidy	6,744	15,902	15,902	14,205	(1,697)	(10.67)%
Workers' Compensation	5,673	5,217	5,217	5,929	712	13.65%
Discretionary Contribution		129,571	129,571	141,724	12,153	9.38%
Total Personnel Expenditures	3,139,838	3,159,304	3,159,303	3,832,503	673,200	21.31%
Services & Supplies Expenditures						
Travel	1,255	13,000	13,000	13,000		
Training & Education		16,000	16,000	16,000		
Communications	4,378	2,777	2,777	2,777		
Professional Services	928,810	166,000	432,741	166,000	(266,741)	(61.64)%
Computer Hardware & Software	118,640	104,000	200,240	90,000	(110,240)	(55.05)%
Total Services & Supplies Expenditures	1,053,083	301,777	664,758	287,777	(376,981)	(56.71)%
Capital Expenditures						
Computer & Network	4,056,044	3,600,000	4,007,330	3,600,000	(407,330)	(10.16)%
Total Capital Expenditures	4,056,044	3,600,000	4,007,330	3,600,000	(407,330)	(10.16)%
Total Expenditures	8,248,965	7,061,081	7,831,391	7,720,280	(111,111)	(1.42)%

Website Development & Maintenance 309

Managing Division:

Enterprise Technology Solutions

Contact Person:

Anja Page

Program Purpose:

This program supports and maintains the agency's online presence providing the public with 24/7 access to information about air quality.

Essential Functions

- Collaborate on efforts to increase multilingual translation, accessibility, and legal compliance for Air District websites
- Support, assist, and train Division Content Editors in the use of the web content management system
- Develop, test, and implement new features and website components while providing technical support for online services
- Maintain and manage website systems with ongoing upgrades and improvements
- Monitor visitor usage through statistics and logs to inform priorities and decisions on feature development
- Document website processes, issue resolution, and functionality

Strategic Plan Commitment	Strategic Plan Strategy
2.03.03 Customize approach to sharing data to meet specific needs of individual communities.	2.03 - Make Data Accessible
2.10.02 Implement the Air District's Plan for Language Services to Limited English Proficient Populations to ensure compliance with civil rights laws.	2.10 - Civil Rights Laws
4.10.03 Develop and apply standard and best operating procedures and practices across the organization.	4.10 - Ensure Success

Website Development & Maintenance 309

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)	1.99	3.10	3.10	2.13	(0.97)	(31.29)%
Personnel Expenditures						
Permanent Salaries	360,597	482,243	482,243	398,916	(83,327)	(17.28)%
Overtime Salaries	487					
Payroll Taxes	5,623	6,905	6,905	5,760	(1,145)	(16.58)%
Pension Benefits	84,065	93,131	93,131	80,732	(12,399)	(13.31)%
FICA Replacement Benefits	7,925	10,926	10,926	7,763	(3,163)	(28.95)%
Group Insurance Benefits	48,444	80,499	80,499	62,220	(18,279)	(22.71)%
Transportation Subsidy	1,069	3,977	3,977	2,047	(1,930)	(48.53)%
Workers' Compensation	1,056	1,305	1,305	854	(451)	(34.56)%
Discretionary Contribution		27,800	27,800	21,179	(6,621)	(23.82)%
Total Personnel Expenditures	509,266	706,786	706,786	579,471	(127,315)	(18.01)%
Services & Supplies Expenditures						
Training & Education		5,400	5,400	5,500	100	1.85%
Communications	1,581	1,828	1,828	1,828		
Printing & Reproduction	2,023	200,000	218,000	101,988	(116,012)	(53.22)%
Professional Services	707,648	324,000	604,164	451,733	(152,431)	(25.23)%
Computer Hardware & Software	42,873	137,389	247,389	94,903	(152,486)	(61.64)%
Total Services & Supplies Expenditures	754,125	668,617	1,076,781	655,952	(420,829)	(39.08)%
Capital Expenditures						
Computer & Network				700,000	700,000	
Total Capital Expenditures				700,000	700,000	
Transfer In/Out	(44,528)					
Total Expenditures	1,218,863	1,375,403	1,783,567	1,935,423	151,856	8.51%

Records Management Systems 712

Managing Division:

Enterprise Technology Solutions

Contact Person:

Magen Holloway

Program Purpose:

To provide archival and retrieval processes, procedures and related services for the Air District's official records

Essential Functions

- Manage and Support of Physical and Electronic Storage of District Records.
- Maintaining and updating OnBase software.
- Train Division Records Custodians on OnBase software.
- Maintain official records in accordance the Record Retention Schedule.
- Develop Administrative Procedures in alignment with California State guidelines for the electronic storage of official records.

Strategic Plan Commitment	Strategic Plan Strategy
4.07.02 Develop an organization-wide curriculum for existing and new employees.	4.07 - Customer Service
4.10.03 Develop and apply standard and best operating procedures and practices across the organization.	4.10 - Ensure Success
4.10.04 Apply continuous process improvement models to operations and procedures.	4.10 - Ensure Success

Records Management Systems 712

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	1.66	1.03	1.03	2.03	1.00	97.09%
Personnel Expenditures						
Permanent Salaries	273,177	211,982	211,982	325,871	113,889	53.73%
Overtime Salaries	271					
Temporary Salaries	24,436					
Payroll Taxes	4,588	3,045	3,045	4,635	1,590	52.22%
Pension Benefits	55,595	43,970	43,970	65,692	21,722	49.40%
FICA Replacement Benefits	6,454	3,642	3,642	7,400	3,758	103.19%
Group Insurance Benefits	39,997	28,600	28,600	67,439	38,839	135.80%
Transportation Subsidy	1,000	1,326	1,326	1,951	625	47.13%
Workers' Compensation	800	435	435	814	379	87.13%
Discretionary Contribution		12,281	12,281	17,233	4,952	40.32%
Total Personnel Expenditures	406,318	305,281	305,281	491,035	185,754	60.85%
Services & Supplies Expenditures						
Travel	556					
Training & Education		10,000	10,000	25,000	15,000	150.00%
Communications	2,078					
Utilities	464					
Printing & Reproduction	10,025	100,000	176,865	100,000	(76,865)	(43.46)%
Rents & Leases	16,678					
Professional Services	134,903	200,000	202,965	200,000	(2,965)	(1.46)%
Shop & Field Supplies		10,000	10,028	10,000	(28)	(0.28)%
Computer Hardware & Software	12,373	75,000	75,388	170,000	94,612	125.50%
Stationery & Office Supplies	552	6,000	6,000	6,000		
Total Services & Supplies Expenditures	177,629	401,000	481,246	511,000	29,754	6.18%
Capital Expenditures						
Office Equipment		110,000	110,000		(110,000)	(100.00)%
Total Capital Expenditures		110,000	110,000		(110,000)	(100.00)%
Transfer In/Out	(30,269)					
Total Expenditures	553,678	816,281	896,527	1,002,035	105,508	11.77%

Contracted Software Management 725

Managing Division:

Enterprise Technology Solutions

Contact Person:

Joy Chen

Program Purpose:

This program provides oversight for contracted development and funding for Data Services, Reporting and third-party application maintenance

Essential Functions

- Data Quality Assurance
- Data Services Management
- Development and Maintenance of Reporting Systems
- Development Operations Infrastructure and Workflow Management

Strategic Plan Commitment	Strategic Plan Strategy
1.04.05 Partner with communities on grant application and implementation.	1.04 - Reimagine Funding
2.01.02 Work with community to develop and define community partnership.	2.01 - Community Partnership
2.03.02 Work with community members to better describe available data and understand how they want to access data.	2.03 - Make Data Accessible
2.05.01 Explore new ways to provide complaint information to the public.	2.05 - Air Quality Complaints
4.02.01 Provide more information to applicants and the public throughout permitting process	4.02 - Transparent Permit Process
4.02.02 Create user-friendly reports and enhance publicly accessible, web-based tools for permit applications, online tracking, and easily accessible information on permitted sources, permit activity, and related emissions.	4.02 - Transparent Permit Process
4.10.03 Develop and apply standard and best operating procedures and practices across the organization.	4.10 - Ensure Success
4.12.01 Track progress in implementing the 2024-2029 Strategic Plan.	4.12 - Report Progress

Contracted Software Management 725

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	2.72	3.04	3.04	4.60	1.56	51.32%
Number of Positions (LTCE)				2.00	2.00	
Personnel Expenditures						
Permanent Salaries	409,191	506,290	506,290	1,071,338	565,048	111.61%
Overtime Salaries	8,585					
Temporary Salaries	23,653					
Payroll Taxes	6,778	7,268	7,268	15,231	7,963	109.56%
Pension Benefits	123,424	96,680	96,680	216,047	119,367	123.47%
FICA Replacement Benefits	9,565	10,707	10,707	24,014	13,307	124.28%
Group Insurance Benefits	59,320	50,395	50,395	146,959	96,564	191.61%
Transportation Subsidy	1,042	3,897	3,897	6,331	2,434	62.46%
Workers' Compensation	1,198	1,278	1,278	2,643	1,365	106.81%
Discretionary Contribution		29,226	29,226	56,677	27,451	93.93%
Total Personnel Expenditures	642,756	705,741	705,741	1,539,240	833,499	118.10%
Services & Supplies Expenditures						
Training & Education	6,300	16,342	17,242	50,000	32,758	189.99%
Communications		189	189		(189)	(100.00)%
Professional Services	570,569	575,000	579,431	575,000	(4,431)	(0.76)%
Computer Hardware & Software		27,781	27,781	80,000	52,219	187.97%
Total Services & Supplies Expenditures	576,869	619,312	624,643	705,000	80,357	12.86%
Capital Expenditures						
Computer & Network				2,300,000	2,300,000	
Total Capital Expenditures				2,300,000	2,300,000	
Total Expenditures	1,219,625	1,325,053	1,330,384	4,544,240	3,213,856	241.57%

- Page Intentionally Left Blank -

Information Services Division

The Information Services Division is responsible for managing the Air District's technology infrastructure, cybersecurity, and user support, enabling secure, efficient, and reliable operations. This includes the design, implementation, and maintenance of critical IT systems such as servers, email, telecommunications, networks, file storage, and disaster recovery solutions. By prioritizing security and operational resilience, the division enables consistent and reliable functionality across the Air District's technological landscape.

The division provides comprehensive technical assistance to staff, supporting their effective use of technology and ensuring timely resolution of technical challenges. Through proactive cybersecurity measures—such as vulnerability assessments, continuous monitoring, incident response, and employee training—the division safeguards the Air District's digital assets and systems from evolving threats. By integrating robust IT management, advanced cybersecurity practices, and responsive user support, the Information Services Division plays a vital role in enabling the Air District to achieve its mission and strategic goals.

IT Engineering, Operations and DevOps 726

Managing Division:

Information Services

Contact Person:

Kenny Carlson

Program Purpose:

The Engineering, Operations, and DevOps Program is responsible for designing, implementing, securing, and maintaining the Air District's core IT infrastructure and application platforms. This includes managing servers, email systems, telecommunications, networks, file storage, source code repositories, CI/CD pipelines, and business continuity and disaster recovery solutions, as well as enabling secure remote connectivity. The program supports modern development and deployment practices through DevOps automation and collaboration, while prioritizing security, reliability, and operational efficiency to deliver resilient and uninterrupted services.

Essential Functions

- Administration of telecommunications equipment
- Administration of Virtual servers.
- Configuration and administration of network routers, switches, firewalls and internet access.
- Support and administer DNS servers.
- Administration of desktop operating system and applications software.
- Administration of Windows Active Directory and servers.
- Administration and maintenance of Information Storage
- Administration of MS Exchange-Online, Internet and remote access systems.
- Administration of Multi-Agency Shared Services Printing and Scanning systems

Strategic Plan Commitment	Strategic Plan Strategy
4.07.02 Develop an organization-wide curriculum for existing and new employees.	4.07 - Customer Service
4.10.03 Develop and apply standard and best operating procedures and practices across the organization.	4.10 - Ensure Success
4.10.04 Apply continuous process improvement models to operations and procedures.	4.10 - Ensure Success

IT Engineering, Operations and DevOps 726

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	3.71	8.16	8.16	7.17	(0.99)	(12.13)%
Number of Positions (LTCE)		1.00	1.00		(1.00)	(100.00)%
Personnel Expenditures						
Permanent Salaries	632,831	1,504,197	1,504,197	1,143,742	(360,455)	(23.96)%
Overtime Salaries	21,234					
Payroll Taxes	9,894	21,748	21,748	16,320	(5,428)	(24.96)%
Pension Benefits	142,039	281,103	281,103	230,537	(50,566)	(17.99)%
FICA Replacement Benefits	13,887	32,322	32,322	26,095	(6,227)	(19.27)%
Group Insurance Benefits	84,369	258,372	258,372	178,052	(80,320)	(31.09)%
Transportation Subsidy	2,008	11,764	11,764	6,880	(4,884)	(41.52)%
Workers' Compensation	1,853	3,859	3,859	2,872	(987)	(25.58)%
Discretionary Contribution		86,805	86,805	60,478	(26,327)	(30.33)%
Total Personnel Expenditures	908,115	2,200,170	2,200,170	1,664,976	(535,194)	(24.33)%
Services & Supplies Expenditures						
Travel		22,600	22,600	22,600		
Training & Education	6,790	60,000	113,210	60,000	(53,210)	(47.00)%
Repair & Maintenance	1,599,296	640,800	1,037,703	1,040,000	2,297	0.22%
Communications	13,628	22,000	22,000		(22,000)	(100.00)%
Professional Services	567,916	470,000	829,880	300,000	(529,880)	(63.85)%
Computer Hardware & Software	230,701	1,278,850	1,422,302	2,395,000	972,698	68.39%
Total Services & Supplies Expenditures	2,418,331	2,494,250	3,447,695	3,817,600	369,905	10.73%
Capital Expenditures						
Computer & Network	1,556,679					
Communications Equipment	50,109		79,027		(79,027)	(100.00)%
Total Capital Expenditures	1,606,788		79,027		(79,027)	(100.00)%
Transfer In/Out	(79,402)					
Total Expenditures	4,853,832	4,694,420	5,726,892	5,482,576	(244,316)	(4.27)%

User Support Desk 727

Managing Division:

Information Services

Contact Person:

Duane Vazquez

Program Purpose:

The User Support Program provides comprehensive technical assistance to District staff and other stakeholders. This program enables timely resolution of technical issues, offering training and guidance for the effective use of the Air District's technology platforms. The program also enables secure workflows, authorizations and compliance for all Information Services tasks through a specialized ticketing system.

Essential Functions

- Administration and licensing of desktop operating system and applications software.
- Administration of telephone and voice mail system.
- Configuration and administration of MFC printers, voip handsets, cellular devices, misc handheld & peripheral devices
- Purchase, installation, upgrade, maintenance, and repair of desktop workstations, printers and third party application licensing.
- Agency wide ticketing and tracking of user support incidents
- Agency wide tracking of technology equipment performance, maintenance and failure rate
- Management of approvals and authroization for IT change management

Strategic Plan Commitment	Strategic Plan Strategy
4.07.02 Develop an organization-wide curriculum for existing and new employees.	4.07 - Customer Service
4.10.03 Develop and apply standard and best operating procedures and practices across the organization.	4.10 - Ensure Success
4.10.04 Apply continuous process improvement models to operations and procedures.	4.10 - Ensure Success

User Support Desk 727

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)	5.00	5.16	5.16	5.20	0.04	0.78%
Personnel Expenditures						
Permanent Salaries	715,248	784,827	784,827	825,030	40,203	5.12%
Overtime Salaries	3,685					
Temporary Salaries	15,610					
Payroll Taxes	11,307	11,260	11,260	11,820	560	4.97%
Pension Benefits	154,569	148,388	148,388	166,273	17,885	12.05%
FICA Replacement Benefits	15,996	18,210	18,210	18,922	712	3.91%
Group Insurance Benefits	98,040	104,089	104,089	119,172	15,083	14.49%
Transportation Subsidy	2,303	6,628	6,628	4,989	(1,639)	(24.73)%
Workers' Compensation	2,094	2,174	2,174	2,082	(92)	(4.23)%
Discretionary Contribution		45,220	45,220	43,619	(1,601)	(3.54)%
Total Personnel Expenditures	1,018,852	1,120,796	1,120,796	1,191,907	71,111	6.34%
Services & Supplies Expenditures						
Travel		2,000	2,000	2,000		
Training & Education	3,147		35,000	70,000	35,000	100.00%
Repair & Maintenance	2,628	18,000	18,000	10,000	(8,000)	(44.44)%
Communications	1,815	20,000	36,964	200,000	163,036	441.07%
Professional Services	286,694	100,000	262,644	460,000	197,356	75.14%
Computer Hardware & Software	267,507	630,000	874,037	613,800	(260,237)	(29.77)%
Total Services & Supplies Expenditures	561,791	770,000	1,228,645	1,355,800	127,155	10.35%
Capital Expenditures						
Computer & Network				300,000	300,000	
Total Capital Expenditures				300,000	300,000	
Transfer In/Out	(89,084)					
Total Expenditures	1,491,559	1,890,796	2,349,441	2,847,707	498,266	21.21%

Managing Division:

Information Services

Contact Person:

John Chiladakis

Program Purpose:

The Cybersecurity Program protects the Air District's information systems through threat monitoring, vulnerability management, access control, and coordinated incident response. The program develops and maintains security policies, supports regulatory and internal compliance, and embeds security practices into daily IT operations. Ongoing investments in training, threat analysis, and security technologies strengthen the Air District's overall cyber and information security posture and protect critical information assets.

Essential Functions

- Access Control and Identity Management: Implement and manage role-based access controls and authentication mechanisms to safeguard sensitive data.
- Compliance and Policy Enforcement: Ensure adherence to regulatory standards and enforce security policies across the organization.
- Incident Management: Develop and execute response plans, including root cause analysis and recovery, to handle security breaches effectively.
- Threat Detection and Response: Monitor systems for suspicious activity, investigate incidents, and rapidly mitigate threats to minimize impact.
- Vulnerability Management: Conduct assessments, manage patches, and address security gaps to reduce risk.

Strategic Plan Commitment	Strategic Plan Strategy
4.07.02 Develop an organization-wide curriculum for existing and new employees.	4.07 - Customer Service
4.10.03 Develop and apply standard and best operating procedures and practices across the organization.	4.10 - Ensure Success
4.10.04 Apply continuous process improvement models to operations and procedures.	4.10 - Ensure Success

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)		2.07	2.07	3.06	0.99	47.83%
Personnel Expenditures						
Permanent Salaries		364,669	364,669	524,671	160,002	43.88%
Payroll Taxes		5,230	5,230	7,490	2,260	43.21%
Pension Benefits		70,714	70,714	105,952	35,238	49.83%
FICA Replacement Benefits		7,285	7,285	11,160	3,875	53.19%
Group Insurance Benefits		55,105	55,105	78,030	22,925	41.60%
Transportation Subsidy		2,651	2,651	2,942	291	10.98%
Workers' Compensation		870	870	1,228	358	41.15%
Discretionary Contribution		21,074	21,074	27,795	6,721	31.89%
Total Personnel Expenditures		527,598	527,598	759,268	231,670	43.91%
Services & Supplies Expenditures						
Travel		2,000	2,000	4,000	2,000	100.00%
Training & Education		5,000	5,000	15,000	10,000	200.00%
Professional Services		120,000	120,000	160,000	40,000	33.33%
Total Services & Supplies Expenditures		127,000	127,000	179,000	52,000	40.94%
Capital Expenditures						
Total Expenditures		654,598	654,598	938,268	283,670	43.33%

SERVICE AREA - POLICY

Planning & Climate Protection Division

The Planning and Climate Protection Division (Division) is responsible for preparing plans to meet state and federal air quality standards and assisting local communities, cities, counties, and regional agencies improve air quality and advance climate protection efforts. Division staff work on the Air District's Community Health Protection Program implementing Assembly Bill 617; partner with impacted and overburdened communities and their local governments to reduce local air pollution, climate impacts and improve health outcomes; and work collaboratively to integrate air quality, health and climate protection into local and regional air quality plans, projects, and programs. The Division is responsible for developing the Air District's California Environmental Quality Act (CEQA) air quality and climate impact thresholds of significance and for developing and keeping current data, tools and guidelines to assist lead agencies complete air quality and climate impact analyses.

The Planning and Climate Division is organized into four programmatic areas: The Local Government Support program works with local governments and their community partners to develop and implement plans, policies and projects to improve air quality, reduce climate impacts and contributions to climate change, address environmental justice and health equity. The program creates and disseminates air quality planning and policy tools, guidance, and resources including CEQA Thresholds and Guidelines for air quality and climate impacts. The Region-wide Planning program leads the development and implementation of regional air quality plans in collaboration with other agencies and community stakeholders; coordinates efforts to meet new or revised ambient air quality standards requirements; and provides consultation on transportation and general conformity. The program also leads the Implementation Working Group (IWG) for the Zero NOx Building Appliance Rules. The Climate Solutions program leads the development and implementation of regional climate plans that center equity and focus on health protection and air pollution co-benefits. The program coordinates clean building efforts, works to accelerate regional efforts to decarbonize existing buildings, supports partner implementation of energy efficiency enhancements, electrification, and efforts to increase health protection and climate resilience. The Community Planning program leads the development and implementation of AB 617 Community Emission Reduction Plans in partnership with community co-leads, community steering committees, community members and state, local and regional agencies. Currently, there are four AB 617 designated communities in the Bay Area: West Oakland, East Oakland, Richmond-North Richmond-San Pablo, and Bayview Hunters Point/Southeast San Francisco.

Implement Plans, Policies & Measures 605

Managing Division:	
Planning & Climate Protection	
Contact Person:	
Alison Kirk	
Program Purpose:	
This program will be closed in FYE26 as it is no longer needed. All budget functions for Planning and Climate Protection will be centralized into Program Acct 608 (formerly Climate Protection)	
Essential Functions	
Strategic Plan Commitment	**Strategic Plan Strategy**

Implement Plans, Policies & Measures 605

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)	4.92					
Personnel Expenditures						
Permanent Salaries	874,657					
Overtime Salaries	220					
Temporary Salaries	8,346					
Payroll Taxes	13,737					
Pension Benefits	196,951					
FICA Replacement Benefits	19,461					
Group Insurance Benefits	118,594					
Transportation Subsidy	2,176					
Workers' Compensation	2,561					
Total Personnel Expenditures	1,236,703					
Services & Supplies Expenditures						
Travel	4,446					
Training & Education	975					
Professional Services	455,054		91,939		(91,939)	(100.00)%
Computer Hardware & Software	1,353		347		(347)	(100.00)%
Total Services & Supplies Expenditures	461,828		92,286		(92,286)	(100.00)%
Capital Expenditures						
Total Expenditures	1,698,531		92,286		(92,286)	(100.00)%

Managing Division:

Planning & Climate Protection

Contact Person:

Wendy Goodfriend

Program Purpose:

The Air Quality and Climate Planning program provides leadership and support to local, regional and state agencies, community partners, and other stakeholders to address disproportionate impacts in overburdened and frontline communities. The program leads development and implementation of plans, policies and projects to attain and maintain air quality standards, address local emissions and exposures, and accelerate climate pollutant reductions.

Essential Functions

- Lead development of air quality and climate plans in collaboration with partner agencies and community stakeholders.
- Coordinate implementation of air quality and climate plans in collaboration with partner agencies and community stakeholders.
- Lead development and implementation of AB 617 Community Emissions Reductions Plans in partnership with community and partner agencies.
- Work with local governments to improve air quality, reduce climate pollutants, and address environmental justice and health equity.
- Provide guidance, technical support and assistance to CEQA lead agencies, local governments and community partners
- Participate in regulatory development and implementation, providing policy and technical support on priority initiatives.
- Support efforts to accelerate existing building electrification, energy efficiency, health protection, and climate resilience.

Strategic Plan Commitment	Strategic Plan Strategy
1.01.02 Partner with communities to determine which sources most impact them.	1.01 - Change Approach to Air Quality
1.01.04 Prioritize actions that reduce inequitable exposures to air pollution.	1.01 - Change Approach to Air Quality
1.07.01 Maximize climate change benefits of regulations and nonregulatory programs.	1.07 - New Climate Solutions
3.03.02 Enhance opportunities for knowledge sharing through more engagement events and collaboration.	3.03 - One Air District Community
4.09.01 Develop, share, and support the use of technical resources, data, tools, and best practices.	4.09 - Land Use Impacts

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	8.82	16.89	16.89	17.61	0.72	4.26%
Number of Positions (LTCE)	0.86	1.00	1.00		(1.00)	(100.00)%
Personnel Expenditures						
Permanent Salaries	1,661,893	3,052,700	3,052,700	3,146,266	93,566	3.07%
Overtime Salaries	8,187	5,000	5,000		(5,000)	(100.00)%
Temporary Salaries	35,434					
Payroll Taxes	25,779	43,951	43,951	44,744	793	1.80%
Pension Benefits	344,890	582,409	582,409	636,034	53,625	9.21%
FICA Replacement Benefits	36,862	63,129	63,129	64,126	997	1.58%
Group Insurance Benefits	225,959	384,107	384,107	388,490	4,383	1.14%
Transportation Subsidy	5,650	22,976	22,976	16,906	(6,070)	(26.42)%
Workers' Compensation	4,866	7,538	7,538	7,057	(481)	(6.38)%
Discretionary Contribution		176,297	176,297	166,854	(9,443)	(5.36)%
Total Personnel Expenditures	2,349,520	4,338,107	4,338,107	4,470,477	132,370	3.05%
Services & Supplies Expenditures						
Travel	10,169	18,000	18,000	18,000		
Training & Education	3,924	13,500	13,500	13,500		
Communications	2,967					
Printing & Reproduction	241	2,000	2,000	2,000		
Professional Services	358,372	340,000	1,227,547	1,090,000	(137,547)	(11.21)%
Computer Hardware & Software		1,000	1,000	1,000		
Stationery & Office Supplies		250	250	250		
Minor Office Equipment		200	200	200		
Total Services & Supplies Expenditures	375,673	374,950	1,262,497	1,124,950	(137,547)	(10.89)%
Capital Expenditures						
Total Expenditures	2,725,193	4,713,057	5,600,604	5,595,427	(5,177)	(0.09)%

- Page Intentionally Left Blank -

Regulatory Development

The Regulatory Development Division is responsible for the development of regulations to implement Air District plans to attain federal and State air quality standards, and to protect public health. In addition to development of rules derived from planning documents, staff assists with the preparation of air quality plans. Other measures are developed under the direction of the Board of Directors to further protect public health and safety and reduce emissions of greenhouse gases. In addition, staff reviews existing regulations and develops revisions to improve clarity, efficiency and effectiveness. For each control measure, staff assesses potential emission reductions, technological feasibility, socioeconomic impacts, cost-effectiveness, and environmental impacts under CEQA. Staff conducts public workshops and other public involvement processes, prepares staff reports, and makes presentations and recommendations to the Board of Directors at public hearings and committee meetings. Staff also manages and coordinates the rule development process for other Divisions.

Managing Division:

Regulatory Development

Contact Person:

Victor Douglas

Program Purpose:

The primary purpose of this program is to develop and propose emissions reductions strategies to reduce air pollutant emissions in the Bay Area.

Essential Functions

- Research and evaluate sources for potential emissions control strategies
- Develop and propose new rules and amendments to existing rules
- Engage and educate interested stakeholders on rule development efforts and other related projects
- Support identification and development of regulatory strategies for air quality plans and community plans
- Support implementation of air quality rules and community plans

Strategic Plan Commitment	Strategic Plan Strategy
1.02.01 Review and update regulations to ensure health protection and stringency.	1.02 - Stronger Regulations
1.02.02 Develop new regulations, as needed to ensure health protection.	1.02 - Stronger Regulations
1.02.03 Review regulations on regular basis, for health protection stringency	1.02 - Stronger Regulations
1.03.01 Explore ways to minimize flaring	1.03 - Minimize Flaring
1.03.02 Increase public engagement on flaring.	1.03 - Minimize Flaring
4.01.01 Update regulations to ensure permits can be done efficiently and timely.	4.01 - Timely Permits
4.03.04 Explore how to further consider cumulative impacts in our permitting process.	4.03 - Consistent Permits

Rule Development 611

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)	10.55	14.21	14.21	16.25	2.04	14.36%
Number of Positions (LTCE)	0.23	1.60	1.60	1.00	(0.60)	(37.50)%
Personnel Expenditures						
Permanent Salaries	1,836,416	2,563,640	2,563,640	3,114,751	551,111	21.50%
Overtime Salaries	3,629					
Temporary Salaries	8,248					
Payroll Taxes	28,224	36,752	36,752	44,407	7,655	20.83%
Pension Benefits	391,089	473,194	473,194	629,824	156,630	33.10%
FICA Replacement Benefits	40,590	55,760	55,760	62,823	7,063	12.67%
Group Insurance Benefits	249,919	392,134	392,134	397,239	5,105	1.30%
Transportation Subsidy	6,127	20,293	20,293	16,563	(3,730)	(18.38)%
Workers' Compensation	5,378	6,658	6,658	6,913	255	3.83%
Discretionary Contribution		147,908	147,908	165,225	17,317	11.71%
Total Personnel Expenditures	2,569,620	3,696,339	3,696,339	4,437,745	741,406	20.06%
Services & Supplies Expenditures						
Travel	10,207	9,500	9,500	9,500		
Training & Education	1,444	12,000	12,000	12,000		
Communications	659					
Printing & Reproduction	1,105	22,000	23,421	22,000	(1,421)	(6.07)%
Professional Services	47,362	690,000	1,301,320	630,000	(671,320)	(51.59)%
Shop & Field Supplies		500	500	500		
Computer Hardware & Software		4,000	4,000	4,000		
Stationery & Office Supplies		250	250	3,250	3,000	1,200.00%
Books & Journals		250	250	250		
Total Services & Supplies Expenditures	60,777	738,500	1,351,241	681,500	(669,741)	(49.56)%
Capital Expenditures						
Total Expenditures	2,630,397	4,434,839	5,047,580	5,119,245	71,665	1.42%

SERVICE AREA - PUBLIC AFFAIRS

Communications Office

The Communications Office coordinates all agency media outreach, Air District messaging, crisis communications, media relations as well as print, digital and social media outreach for the Air District. The Office provides media and public outreach about the Air District's programs, operations and emergency response.

The Office manages advertising and outreach for Spare the Air, the Employer Program, and the Commuter Benefits Program. The Office oversees the Air District and Spare the Air social media sites, strategies and programs. The Office maintains the Spare the Air website and related sites and the Spare the Air mobile apps. The Office represents the Air District at community events for Spare the Air throughout the region.

Office functions include production of publications and digital collateral for the general public and target audiences. This includes publishing newsletters, the annual report, videos and collateral materials. The Office also provides and oversees graphic design services, social media content creation, translation services and videography. The Office also provides Air District presentations and tours for international delegations, organizations and school groups.

Media Relations 301

Managing Division:

Communications

Contact Person:

Miranda Iglesias

Program Purpose:

Provide proactive outreach to media to inform the public about air quality issues, agency programs and initiatives and maintain positive media relations. Act as the Air District's main point of contact to the public through media and social media. Increase public awareness and understanding of the Spare the Air program and other Air District programs, initiatives, and regulations. Promote public behavior change to reduce air pollution and the impacts of climate change. Provide consistent internal communications messaging to agency staff. Support incident response by notifying the media and public about air quality incidents.

Essential Functions

- Maintain up-to-date and relevant air quality information on the Air District website.
- Conduct Spare the Air public opinion surveys to evaluate program and measure behavior change.
- Produce publications including plans, brochures, booklets and other Air District documents.
- Issue press releases and host media events highlighting Air District accomplishments
- Develop and implement media, social media and communication strategies around major Air District policies and issues
- Develop and maintain effective working relationships with members of the media and social media influencers
- Track and analyze print, internet, radio, social media and television coverage of the Air District
- Provide development opportunities for staff related to activities and objectives of the Air District
- Develop an internal communications program and create templates and brand guides to standardize agency-wide materials

Strategic Plan Commitment	Strategic Plan Strategy
1.03.03 Share timely, accessible information.	1.03 - Minimize Flaring
2.05.01 Explore new ways to provide complaint information to the public.	2.05 - Air Quality Complaints
3.03.01 Build employees' knowledge of the Air District's activities	3.03 - One Air District Community
3.03.05 Develop an internal communications program, building a One Air District story	3.03 - One Air District Community
4.06.01 Develop an expanded public information campaign.	4.06 - Inspire Action
4.06.02 Increase social media presence to expand youth outreach and engage young people	4.06 - Inspire Action
4.06.03 Expand our engagement through local media outlets in communities across the region.	4.06 - Inspire Action
4.06.04 Increase advertising to share more information about the ways to reduce pollution and the associated health benefits of cleaner air, especially at the local level.	4.06 - Inspire Action
4.06.05 Work with local government partners and Board of Directors to establish an increased presence in all nine Bay Area counties.	4.06 - Inspire Action
4.07.01 Strengthen internal organizational knowledge and communication skills	4.07 - Customer Service

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)	6.90	6.79	6.79	7.89	1.10	16.20%
Personnel Expenditures						
Permanent Salaries	1,157,439	1,214,475	1,214,475	1,346,748	132,273	10.89%
Overtime Salaries	6,491	7,000	7,000	10,000	3,000	42.86%
Temporary Salaries	8,764					
Payroll Taxes	17,877	18,140	18,140	19,198	1,058	5.83%
Pension Benefits	258,770	237,611	237,611	271,944	34,333	14.45%
FICA Replacement Benefits	25,419	23,958	23,958	28,716	4,758	19.86%
Group Insurance Benefits	155,812	158,240	158,240	207,733	49,493	31.28%
Transportation Subsidy	3,660	8,720	8,720	7,571	(1,149)	(13.18)%
Workers' Compensation	3,391	2,861	2,861	3,160	299	10.45%
Discretionary Contribution		70,198	70,198	71,340	1,142	1.63%
Total Personnel Expenditures	1,637,623	1,741,203	1,741,203	1,966,410	225,207	12.93%
Services & Supplies Expenditures						
Travel	1,060	14,000	14,000	14,000		
Training & Education	689	11,500	22,735	17,500	(5,235)	(23.03)%
Communications	14,348	52,000	54,196	54,000	(196)	(0.36)%
Postage		4,000	4,000	4,000		
Printing & Reproduction	784	42,500	42,500	42,500		
Professional Services	433,249	1,125,000	1,811,284	1,106,200	(705,084)	(38.93)%
Shop & Field Supplies		500	500	500		
Computer Hardware & Software	2,616					
Stationery & Office Supplies		4,000	4,000	4,000		
Minor Office Equipment		1,000	1,000	1,000		
Total Services & Supplies Expenditures	452,746	1,254,500	1,954,215	1,243,700	(710,515)	(36.36)%
Capital Expenditures						
Transfer In/Out	(95,350)					
Total Expenditures	1,995,019	2,995,703	3,695,418	3,210,110	(485,308)	(13.13)%

Spare the Air (winter) 303

Managing Division:

Communications

Contact Person:

Kristina Chu

Program Purpose:

The Spare the Air winter program informs the public about the Wood Burning Rule, the health impacts of wood smoke pollution and alternative, cleaner forms of heat and change-out incentives.

Essential Functions

- Develop and disseminate a Spare the Air winter campaign to inform the public about the health impacts of wood smoke.
- Prepare and issue media releases, respond to media inquiries and plan media events/deskside & editorial board visits.
- Conduct public opinion surveys to evaluate program and measure behavior change.
- Manage notification methods for Spare the Air Alerts, including automated phone alerts, text and email alerts, online banners, iPhone/Android app and widget.
- Deliver public outreach, advertising and media relations campaigns.
- Provide public outreach at community events throughout the Bay Area.
- Door to door outreach/surveys
- Conduct outreach on amendments to Wood Burning Rule
- Provide outreach about the Spare the Air winter program.
- Promote cleaner heating options and available incentives.

Strategic Plan Commitment	Strategic Plan Strategy
2.07.05 Report on air pollution data we collect.	2.07 - Understand Local Air Pollution
4.06.01 Develop an expanded public information campaign.	4.06 - Inspire Action
4.06.02 Increase social media presence to expand youth outreach and engage young people	4.06 - Inspire Action
4.06.03 Expand our engagement through local media outlets in communities across the region.	4.06 - Inspire Action
4.06.04 Increase advertising to share more information about the ways to reduce pollution and the associated health benefits of cleaner air, especially at the local level.	4.06 - Inspire Action

Spare the Air (winter) 303

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)	1.08	1.86	1.86	1.51	(0.35)	(18.82)%
Personnel Expenditures						
Permanent Salaries	166,535	320,145	320,145	246,041	(74,104)	(23.15)%
Overtime Salaries	16,391	5,000	5,000	15,000	10,000	200.00%
Payroll Taxes	2,577	4,730	4,730	3,481	(1,249)	(26.41)%
Pension Benefits	30,772	61,749	61,749	49,625	(12,124)	(19.63)%
FICA Replacement Benefits	3,543	6,570	6,570	5,482	(1,088)	(16.56)%
Group Insurance Benefits	21,708	46,871	46,871	38,757	(8,114)	(17.31)%
Transportation Subsidy	22	2,391	2,391	1,445	(946)	(39.57)%
Workers' Compensation	488	784	784	603	(181)	(23.09)%
Discretionary Contribution		18,491	18,491	13,018	(5,473)	(29.60)%
Total Personnel Expenditures	242,036	466,731	466,731	373,452	(93,279)	(19.99)%
Services & Supplies Expenditures						
Travel	320		1,000		(1,000)	(100.00)%
Professional Services	957,154	1,125,000	1,210,759	1,125,000	(85,759)	(7.08)%
Total Services & Supplies Expenditures	957,474	1,125,000	1,211,759	1,125,000	(86,759)	(7.16)%
Capital Expenditures						
Total Expenditures	1,199,510	1,591,731	1,678,490	1,498,452	(180,038)	(10.73)%

Spare The Air (CMAQ) 305

Managing Division:

Communications Office

Contact Person:

Kristina Chu

Program Purpose:

Due to the loss of CMAQ funds, program 305 will no longer be active. Moving forward, the Spare the Air program will be funded through general funds from program 301 and TFCA funds from program 306.

Essential Functions

Strategic Plan Commitment	Strategic Plan Strategy

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Personnel Expenditures						
Services & Supplies Expenditures						
Professional Services	130,682					
Total Services & Supplies Expenditures	130,682					
Capital Expenditures						
Total Expenditures	130,682					

- Page Intentionally Left Blank -

External Affairs Office

The External Affairs Office works with local governments, the Board of Directors and other regional agencies to promote Air District rules, programs and activities. Projects include development and maintenance of the Stakeholder Directory, Talking Points development guide and tool and key message library. The Office directs the Air District external sponsorship program to ensure transparency, goals and benefits are met in accordance with Air District requirements. The Office is developing a district-wide partnership program to expand messaging reach and information sharing with local, county and state agencies, and NGOs. External Affairs works with interna and external partners to develop and deliver informational events and conferences.

General Fund Sponsorships 127

Managing Division:

External Affairs

Contact Person:

Lisa Fasano

Program Purpose:

Review and approve Air District General Fund sponsorships to increase Air District visibility, promote programs and provide staff training opportunities. Memberships are processed and tracked through the sponsorship account. Sponsorships are reported annually to the Board through an annual report.

Essential Functions

- Review and track sponsorship funding requests, gather additional information as necessary, fund projects when approved.
- Track sponsorship requests and funded events.
- Confirm deliverables are fulfilled and met.
- Per the Air District Sponsorship Policy, develop and, annual sponsorship summary report for the Board of Directors and to support budget request for next year's budget.
- Include events/programs funded, summary of deliverables met, overall event impact and number of attendees.
- Managing Air District profession/association memberships

Strategic Plan Commitment	Strategic Plan Strategy
1.07.01 Maximize climate change benefits of regulations and nonregulatory programs.	1.07 - New Climate Solutions
4.05.02 Streamline process inspectors use to document violations.	4.05 - Improve Compliance Investigations
4.06.01 Develop an expanded public information campaign.	4.06 - Inspire Action
4.10.04 Apply continuous process improvement models to operations and procedures.	4.10 - Ensure Success
4.12.01 Track progress in implementing the 2024-2029 Strategic Plan.	4.12 - Report Progress

General Fund Sponsorships 127

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)		0.54	0.54	0.75	0.21	38.89%
Personnel Expenditures						
Permanent Salaries		99,839	99,839	126,179	26,340	26.38%
Payroll Taxes		1,547	1,547	1,783	236	15.26%
Pension Benefits		19,406	19,406	25,469	6,063	31.24%
FICA Replacement Benefits		1,918	1,918	2,731	813	42.39%
Group Insurance Benefits		19,319	19,319	26,127	6,808	35.24%
Transportation Subsidy		698	698	720	22	3.15%
Workers' Compensation		229	229	301	72	31.44%
Discretionary Contribution		5,774	5,774	6,681	907	15.71%
Total Personnel Expenditures		148,730	148,730	189,991	41,261	27.74%
Services & Supplies Expenditures						
Professional Services	208,155	450,000	487,495	250,000	(237,495)	(48.72)%
Total Services & Supplies Expenditures	208,155	450,000	487,495	250,000	(237,495)	(48.72)%
Capital Expenditures						
Total Expenditures	208,155	598,730	636,225	439,991	(196,234)	(30.84)%

Managing Division:

External Affairs

Contact Person:

Lisa Fasano

Program Purpose:

The External Affairs Office manages the Commuter Benefits Program, Flex Your Commute messaging campaign, directs the Air District external partners program advancing local, state and regional partnerships, develops speaking points and external presentations for the Executive Team, management and staff, develops messaging to further solutions to reduce air pollution from commuting and single occupancy driving, and oversees the Air District's sponsorship program. The program works at building partnerships between employers, municipalities, and transit agencies.

Essential Functions

- Air District Liaison for local, regional and national meetings and conferences. Attend, develop/maintain partnerships, gather information and report outcomes to Executive Office.
- Develop and produce events to support Air District programs and mission.
- Manage and track Air District sponsorships of events, conferences and meetings. Maximize the Air District's visibility and messaging through events.
- Promote and advance compliance with the Bay Area Commuter Benefits Program encouraging active commute engagement with employees.
- Using advertising, media relations and employer events to encourage employers to expand and promote commuter benefits within their organizations.
- Working with Bay Area employer programs to promote commuting options to reduce single-occupancy driving.

Strategic Plan Commitment	Strategic Plan Strategy
1.04.03 Review funding programs to reduce barriers to applying for funds and develop creative solutions for more variety of projects.	1.04 - Reimagine Funding
2.01.01 Expand community partnership models to other communities impacted by air pollution.	2.01 - Community Partnership
2.01.02 Work with community to develop and define community partnership.	2.01 - Community Partnership
2.07.01 Build relationships and partnerships with communities to understand their experience and knowledge about what air pollution they are experiencing and where it might come from.	2.07 - Understand Local Air Pollution
2.09.04 Share how the Air District and communities are partnering together to improve local air quality	2.09 - Address Legal Barriers

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	1.91	2.09	2.09	3.97	1.88	89.95%
Number of Positions (LTCE)		1.00	1.00	1.00		
Personnel Expenditures						
Permanent Salaries	356,499	540,338	540,338	777,843	237,505	43.95%
Overtime Salaries	1,644					
Temporary Salaries	7,617					
Payroll Taxes	5,604	8,008	8,008	11,057	3,049	38.07%
Pension Benefits	73,517	101,196	101,196	156,699	55,503	54.85%
FICA Replacement Benefits	7,875	10,891	10,891	18,101	7,210	66.20%
Group Insurance Benefits	48,131	65,402	65,402	132,288	66,886	102.27%
Transportation Subsidy	1,210	3,964	3,964	4,772	808	20.38%
Workers' Compensation	1,044	1,301	1,300	1,992	692	53.23%
Discretionary Contribution		31,220	31,220	41,108	9,888	31.67%
Total Personnel Expenditures	503,141	762,320	762,319	1,143,860	381,541	50.05%
Services & Supplies Expenditures						
Travel	321					
Training & Education	59					
Professional Services	45,806	401,000	439,125	300,000	(139,125)	(31.68)%
Total Services & Supplies Expenditures	46,186	401,000	439,125	300,000	(139,125)	(31.68)%
Capital Expenditures						
Total Expenditures	549,327	1,163,320	1,201,444	1,443,860	242,416	20.18%

- Page Intentionally Left Blank -

Legislative and Government Affairs Office

The Legislative Office mission is to advocate for Air District policy and budget priorities at both the state and federal levels. The Legislative Office is responsible for tracking and developing positions on state and federal legislation and budget proposals, meeting with legislators and legislative staff about policy proposals and updating them on Air District activities, representing the Air District at legislative hearings, and interacting with stakeholder groups, state and local agencies, and members of the public. The Legislative Office works closely with other divisions within the Air District to help achieve the Air District's commitment to reducing air pollution in California and the Bay Area region by sharing information on current legislative policy and budget proposals that affect Air District programs and policies.

Legislative Program 129

Managing Division:

Legislative and Government Affairs

Contact Person:

Alan Abbs

Program Purpose:

State and Federal legislative advocacy.

Essential Functions

- Legislative Advocacy
- Information sharing with Air District staff
- Outreach to Legislature on Air District activities

Strategic Plan Commitment	Strategic Plan Strategy
2.09.02 Work with state legislature on ideas and advocacy for changes to laws that can benefit overburdened communities.	2.09 - Address Legal Barriers
2.09.03 Bring state and federal representatives into the conversation on the local impacts of air pollution.	2.09 - Address Legal Barriers
2.09.04 Share how the Air District and communities are partnering together to improve local air quality	2.09 - Address Legal Barriers

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	2.00	2.18	2.18	2.11	(0.07)	(3.21)%
Personnel Expenditures						
Permanent Salaries	393,230	448,930	448,930	444,686	(4,244)	(0.95)%
Payroll Taxes	6,014	6,988	6,988	6,447	(541)	(7.74)%
Pension Benefits	89,383	81,634	81,634	90,233	8,599	10.53%
FICA Replacement Benefits	8,583	7,672	7,672	7,675	3	0.04%
Group Insurance Benefits	52,375	69,785	69,785	71,331	1,546	2.22%
Transportation Subsidy	1,262	2,792	2,792	2,023	(769)	(27.54)%
Workers' Compensation	1,151	916	916	845	(71)	(7.75)%
Discretionary Contribution		26,011	26,011	23,671	(2,340)	(9.00)%
Total Personnel Expenditures	551,998	644,728	644,728	646,911	2,183	0.34%
Services & Supplies Expenditures						
Travel	3,998	11,950	11,950	11,950		
Training & Education	2,514	4,000	4,000	5,700	1,700	42.50%
Communications	642	1,000	1,000	1,000		
Professional Services	134,740	249,830	282,612	274,000	(8,612)	(3.05)%
Stationery & Office Supplies	101	250	350	250	(100)	(28.57)%
Books & Journals		600	600	600		
Total Services & Supplies Expenditures	141,995	267,630	300,512	293,500	(7,012)	(2.33)%
Capital Expenditures						
Transfer In/Out	(48,250)					
Total Expenditures	645,743	912,358	945,240	940,411	(4,829)	(0.51)%

SERVICE AREA - SCIENCE

Assessment, Inventory & Modeling Division

The Assessment, Inventory, and Modeling (AIM) Division develops comprehensive emissions inventories and conducts air quality modeling and analysis at both regional and community scales throughout the Bay Area. These efforts support technical assessments to evaluate equity in air pollution exposures and health impacts, supporting the Air District's regulatory programs and policy development.

AIM coordinates and implements programs to improve and report emissions estimates for criteria pollutants, toxic air contaminants, and climate-forcing pollutants. AIM assesses emissions, conducts air quality modeling using regulatory models or regional photochemical models, and estimates human exposures to particulate matter, toxic air contaminants, and other pollutants to inform mitigation strategies that reduce air pollution impacts regionally and within communities. These efforts inform the development of Air District's Clean Air Plan/State Implementation Plan and Community Emission Reduction Plans (CERPs) required under Assembly Bill (AB) 617. AIM also creates health risk screening tools and develops technical guidance to assist project sponsors when preparing air quality assessments compliant with the California Environmental Quality Act (CEQA). On an as-needed basis, AIM supports and provides technical advice to the Health Officer who guides the Advisory Council in developing a cumulative impacts methodology to ensure health protection for all Bay Area communities. In FYE 2027, AIM will continue to lead and contribute to multiple programs, including Emissions Inventory and Reporting, Air Quality Analysis and Support, Air Quality Modeling Management, and Exposure and Health Impact Assessment, in support of the Air District's 2024-2029 Strategic Plan.

• Under Air District's Strategies 1.1 (change approach to air quality) and 2.3 (make data accessible), AIM continues to improve and update the annual permitted stationary sources inventory and the regional emissions inventory by collaborating with other Divisions to review emissions inventory products, developing quality assurance protocols, updating emissions estimation methods, and creating accessible dashboards to meet reporting and rule development requirements while enhancing user's experience and access to the data.

• Under Air District's Strategy 2.7 (understand local air pollution), AIM conducts photochemical and local air dispersion modeling to support source apportionment analyses and to improve understanding of local air quality, inter-regional transport, and their impacts on the Bay Area's air quality. AIM continues to develop and process modeling scenarios in support of the Air District's programs, including air quality planning, rule development, grant programs, permitting, and climate protection.

• AIM continues to manage the Air District's regional modeling resources and improve modeling performance. AIM will further improve the meteorological and photochemical modeling platform by optimizing model performance, refining and updating model inputs, and investigating advanced features and approaches.

• Under Air District's Strategies 2.4 and 2.7 (provide communities with better health information to understand their local air pollution), AIM continues to conduct local assessments and exposure analysis to better understand the population exposure and health impacts of air pollutants in the Bay Area. AIM performs community-scale air quality and exposure assessment in support of CERP development under the AB 617 program, coordinate with community co-leads Steering Committees to reduce emissions and exposures, and provide technical products that inform local CERP strategies. AIM continues to support the Air District's CEQA program by creating health risk screening tools, providing technical guidance to project sponsors, lead agencies, and other stakeholders and reviewing air quality analysis of environmental clearance documents.

Emissions Inventory and Reporting 601

Managing Division:

Assessment, Inventory & Modeling

Contact Person:

Virginia Lau

Program Purpose:

Compile emissions data for permitted stationary sources and develop regional inventories for criteria air pollutants (CAPs), toxic air contaminants (TACs) and greenhouse gases (GHGs) to support air quality planning, rule development, modeling and exposure assessments, and public information; assessing emissions estimates to support programs to reduce health impacts from air pollution and to reduce levels of climate-forcing pollutants.

Essential Functions

- Develop and update emissions inventories for criteria air pollutants to support the Air District's Clean Air Plan development.
- Develop methodology that will be the foundation for creating the emissions inventories for toxic air contaminants to support regional and community-scale modeling and exposure assessments.
- Prepare and improve emissions estimates for permitted facilities to ensure consistent reporting compliant with state regulations.
- Collect and update source-specific activity data and characteristics to meet reporting requirements and support Air District's regulatory programs.

Strategic Plan Commitment	Strategic Plan Strategy
1.01.01 Analyze existing data and do modeling to determine which sources cause highest level of air pollution.	1.01 - Change Approach to Air Quality
1.01.02 Partner with communities to determine which sources most impact them.	1.01 - Change Approach to Air Quality
2.03.01 Prepare inventory of available data from the Air District and other sources (monitoring data, permit data, enforcement process data, complaint data).	2.03 - Make Data Accessible
2.03.02 Work with community members to better describe available data and understand how they want to access data.	2.03 - Make Data Accessible

Emissions Inventory and Reporting 601

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	6.77	7.04	7.04	7.64	0.60	8.52%
Personnel Expenditures						
Permanent Salaries	1,266,853	1,211,548	1,211,548	1,397,019	185,471	15.31%
Overtime Salaries	510	5,000	5,000	5,000		
Payroll Taxes	20,239	17,364	17,364	19,930	2,566	14.78%
Pension Benefits	275,005	229,081	229,081	282,571	53,490	23.35%
FICA Replacement Benefits	28,604	24,819	24,819	27,829	3,010	12.13%
Group Insurance Benefits	175,506	196,569	196,569	199,344	2,775	1.41%
Transportation Subsidy	2,896	9,033	9,033	7,337	(1,696)	(18.78)%
Workers' Compensation	3,710	2,963	2,963	3,062	99	3.34%
Discretionary Contribution		69,981	69,981	74,128	4,147	5.93%
Total Personnel Expenditures	1,773,323	1,766,358	1,766,358	2,016,220	249,862	14.15%
Services & Supplies Expenditures						
Travel	598	5,200	5,200	5,200		
Training & Education	1,113	23,000	23,000	23,000		
Professional Services	1,614	101,000	1,000	101,000	100,000	10,000.00%
Computer Hardware & Software	20,863	22,000	22,000	22,000		
Stationery & Office Supplies		200	200	200		
Books & Journals		600	600	600		
Minor Office Equipment	478	1,000	1,000	1,000		
Total Services & Supplies Expenditures	24,666	153,000	53,000	153,000	100,000	188.68%
Capital Expenditures						
Total Expenditures	1,797,989	1,919,358	1,819,358	2,169,220	349,862	19.23%

Managing Division:

Assessment, Inventory & Modeling

Contact Person:

Stephen Reid

Program Purpose:

Perform air quality modeling and data analyses to support the Air District's efforts to attain and maintain air quality standards and to reduce inequities in air pollution exposure.

Essential Functions

- Conduct regional air quality modeling and data analysis to support the Air District's Clean Air Plan development.
- Conduct community-scale air quality modeling and data analysis to support the Assembly Bill 617 (AB 617) Community Air Protection Program.
- Conduct air quality modeling to support Air District's rulemaking activities.
- Develop meteorological data inputs for modeling analysis of permitted facilities.

Strategic Plan Commitment	Strategic Plan Strategy
1.01.01 Analyze existing data and do modeling to determine which sources cause highest level of air pollution.	1.01 - Change Approach to Air Quality
1.01.02 Partner with communities to determine which sources most impact them.	1.01 - Change Approach to Air Quality
1.01.03 Determine which actions have the greatest impact in reducing pollution.	1.01 - Change Approach to Air Quality
2.07.03 Use modeling programs to get a more complete picture of local air pollution.	2.07 - Understand Local Air Pollution

Air Quality Analysis and Support 603

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	2.94	2.72	2.72	5.98	3.26	119.85%
Personnel Expenditures						
Permanent Salaries	493,847	465,596	465,596	1,060,415	594,819	127.75%
Payroll Taxes	7,705	6,699	6,699	15,132	8,433	125.88%
Pension Benefits	115,952	91,074	91,074	214,333	123,259	135.34%
FICA Replacement Benefits	10,909	9,600	9,600	21,761	12,161	126.68%
Group Insurance Benefits	66,712	67,449	67,449	164,092	96,643	143.28%
Transportation Subsidy	1,425	3,494	3,494	5,737	2,243	64.20%
Workers' Compensation	1,446	1,146	1,146	2,395	1,249	108.99%
Discretionary Contribution		26,890	26,890	56,227	29,337	109.10%
Total Personnel Expenditures	697,996	671,948	671,948	1,540,092	868,144	129.20%
Services & Supplies Expenditures						
Travel		5,000	5,000	5,000		
Training & Education		8,000	8,000	8,000		
Repair & Maintenance		6,000	6,000	6,000		
Professional Services	215,774	80,000	198,431	80,000	(118,431)	(59.68)%
Stationery & Office Supplies		500	500	500		
Total Services & Supplies Expenditures	215,774	99,500	217,931	99,500	(118,431)	(54.34)%
Capital Expenditures						
Total Expenditures	913,770	771,448	889,879	1,639,592	749,713	84.25%

Air Quality Modeling Management 604

Managing Division:

Assessment, Inventory & Modeling

Contact Person:

Stephen Reid

Program Purpose:

Maintain, update, and improve the Air District's modeling software, data inputs, and computer systems to support air quality modeling and data analysis efforts.

Essential Functions

- Maintain and update the Air District's regional photochemical grid modeling platform and resources.
- Evaluate and improve regional air quality modeling performance for multi-pollutant applications.

Strategic Plan Commitment	Strategic Plan Strategy
1.01.01 Analyze existing data and do modeling to determine which sources cause highest level of air pollution.	1.01 - Change Approach to Air Quality
2.07.03 Use modeling programs to get a more complete picture of local air pollution.	2.07 - Understand Local Air Pollution

Air Quality Modeling Management 604

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)	3.10	3.18	3.18	1.21	(1.97)	(61.95)%
Personnel Expenditures						
Permanent Salaries	512,531	548,348	548,348	241,047	(307,301)	(56.04)%
Payroll Taxes	7,925	7,867	7,867	3,651	(4,216)	(53.59)%
Pension Benefits	107,361	107,205	107,205	48,851	(58,354)	(54.43)%
FICA Replacement Benefits	11,347	11,201	11,201	4,411	(6,790)	(60.62)%
Group Insurance Benefits	69,448	83,648	83,648	38,024	(45,624)	(54.54)%
Transportation Subsidy	1,569	4,076	4,076	1,163	(2,913)	(71.47)%
Workers' Compensation	1,500	1,337	1,337	485	(852)	(63.72)%
Discretionary Contribution		31,675	31,675	12,815	(18,860)	(59.54)%
Total Personnel Expenditures	711,681	795,357	795,357	350,447	(444,910)	(55.94)%
Services & Supplies Expenditures						
Travel		4,200	4,200	4,200		
Training & Education	600	3,000	3,000	3,000		
Repair & Maintenance	747	12,000	12,000	12,000		
Printing & Reproduction		2,000	2,000	2,000		
Professional Services		15,000	15,000	15,000		
Computer Hardware & Software	420	12,000	12,000	12,000		
Total Services & Supplies Expenditures	1,767	48,200	48,200	48,200		
Capital Expenditures						
Computer & Network	8,876					
Total Capital Expenditures	8,876					
Total Expenditures	722,324	843,557	843,557	398,647	(444,910)	(52.74)%

Exposure Assessment 609

Managing Division:

Assessment, Inventory & Modeling

Contact Person:

Virginia Lau

Program Purpose:

Evaluate community health impacts from exposure to toxic air contaminants (TACs), fine particulate matter (PM), and other pollutants. Develop tools and guidance for assessing areas with disproportionate air quality impacts and support evaluation of mitigation measures of local sources.

Essential Functions

- Conduct regional exposure and health impact assessments to support the Air District's Clean Air Plan development.
- Conduct local exposure and health impact assessments to support the Assembly Bill 617 (AB 617) Community Air Protection Program.
- Identify sources contributing to areas of high air pollution, exposure, and health risk and evaluate potential mitigation measures.
- Support the Air District's Advisory Council in policy discussion and implementation of cumulative impact assessment.

Strategic Plan Commitment	Strategic Plan Strategy
1.01.01 Analyze existing data and do modeling to determine which sources cause highest level of air pollution.	1.01 - Change Approach to Air Quality
1.01.04 Prioritize actions that reduce inequitable exposures to air pollution.	1.01 - Change Approach to Air Quality
2.07.03 Use modeling programs to get a more complete picture of local air pollution.	2.07 - Understand Local Air Pollution
2.11.02 Consider cumulative impacts in our programs, including permitting, regulations and compliance.	2.11 - Cumulative Health Impacts
2.11.03 Provide tools and guidance to local governments to address cumulative impacts.	2.11 - Cumulative Health Impacts

Exposure Assessment 609

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	0.81	1.71	1.71	2.31	0.60	35.09%
Personnel Expenditures						
Permanent Salaries	176,296	325,569	325,569	469,765	144,196	44.29%
Overtime Salaries		3,000	3,000	3,000		
Payroll Taxes	2,693	4,699	4,699	6,774	2,075	44.16%
Pension Benefits	55,886	61,621	61,621	95,249	33,628	54.57%
FICA Replacement Benefits	3,827	6,045	6,045	8,406	2,361	39.06%
Group Insurance Benefits	23,333	47,833	47,833	62,339	14,506	30.33%
Transportation Subsidy	517	2,200	2,200	2,216	16	0.73%
Workers' Compensation	516	722	722	925	203	28.12%
Discretionary Contribution		18,838	18,838	24,987	6,149	32.64%
Total Personnel Expenditures	263,068	470,527	470,527	673,661	203,134	43.17%
Services & Supplies Expenditures						
Travel	1,423	5,200	5,200	5,200		
Training & Education	799	8,500	10,597	8,500	(2,097)	(19.79)%
Repair & Maintenance		5,000	5,000	5,000		
Communications	1,348	3,000	3,000	3,000		
Printing & Reproduction		2,000	2,000	2,000		
Professional Services	87,399	200,500	351,484	200,500	(150,984)	(42.96)%
Computer Hardware & Software	13,990	19,000	24,946	19,000	(5,946)	(23.84)%
Stationery & Office Supplies		200	200	200		
Books & Journals	35	500	500	500		
Minor Office Equipment		100	100	100		
Total Services & Supplies Expenditures	104,994	244,000	403,027	244,000	(159,027)	(39.46)%
Capital Expenditures						
Total Expenditures	368,062	714,527	873,554	917,661	44,107	5.05%

- Page Intentionally Left Blank -

Meteorology & Measurement Division

The Meteorology and Measurement Division (M&M) provides air quality and meteorological data; chemical analysis; and forecasting to support Air District actions and programs, including for enforcement, permitting, planning, regulatory development, communications and environmental justice. In addition to operating monitoring instruments and conducting testing and analysis, the M&M Division staff develop rigorous monitoring and testing plans, develop and maintain data systems, conduct quality assurance and quality control, and analyze and communicate data. The resulting data is used to:

•determine if the Bay Area is in attainment with state and federal standards, in accordance with the Clean Air Act,

•determine if facilities are in compliance with Air District regulations,

•provide a scientific basis for Air District rule-making and programmatic decisions,

•identify areas with higher levels of pollutants of concern and community-level disparities in air pollution, and

•communicate about air quality with the public, including through air quality advisories and Spare the Air alerts.

Air Monitoring - Operations 802

Managing Division:

Meteorology & Measurement

Contact Person:

Ila Perkins

Program Purpose:

Provide long-term stationary ambient air monitoring data including data to determine and measure progress towards the Bay Area's attainment of National and State ambient air quality standards.Architect, secure and modernize the mission-critical systems that acquire, validate, and manage environmental data from the District's monitoring network, directly supporting strategic goals for operational efficiency, regulatory compliance, and data-driven decision-making.

Essential Functions

- Operate and maintain the air monitoring network to provide a minimum of 90% valid data each quarter to determine the attainment status for National and State ambient air quality standards.
- Operate and maintain non-criteria pollutant monitors to provide data on ozone precursors, data for ozone forecasting, and data for fine particulate forecasting.
- Operate a Photochemical Assessment Monitoring Station (PAMS) network that meets EPA requirements.
- Operate a gaseous toxics network to provide data for State and Air District programs.
- Operate a minimum of two Near Road monitoring stations as mandated by EPA. Currently, the Air District operates four Near Road monitoring stations: three in the San Francisco-Oakland-Fremont CBSA, including a supplemental Near Road site along the Interstate 580 corridor, and one required Near Road monitoring station in the San Jose-Sunnyvale-Santa Clara CBSA.
- Aid in the quality development and evaluation of existing technologies for air quality measurements.
- MDS : Support ongoing operations and maintenance of data acquisition systems, data management systems, and telecommunications for regulatory air monitoring programs.

Strategic Plan Commitment	Strategic Plan Strategy
4.04.01 Update air monitoring data systems.	4.04 - Improve Air Monitoring
4.04.02 Strengthen quality control systems	4.04 - Improve Air Monitoring
4.04.04 Consider changes to the air monitoring network.	4.04 - Improve Air Monitoring

Air Monitoring - Operations 802

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)	19.40	21.59	21.59	21.10	(0.49)	(2.27)%
Personnel Expenditures						
Permanent Salaries	2,802,840	3,143,534	3,143,534	3,291,512	147,978	4.71%
Overtime Salaries	4,991					
Payroll Taxes	43,687	44,858	44,858	46,521	1,663	3.71%
Pension Benefits	612,226	588,349	588,349	663,026	74,677	12.69%
FICA Replacement Benefits	62,169	76,152	76,152	76,847	695	0.91%
Group Insurance Benefits	380,374	449,113	449,113	465,356	16,243	3.62%
Transportation Subsidy	8,720	27,715	27,715	20,260	(7,455)	(26.90)%
Workers' Compensation	8,208	9,093	9,093	8,456	(637)	(7.01)%
Discretionary Contribution		180,953	180,953	173,935	(7,018)	(3.88)%
Total Personnel Expenditures	3,923,215	4,519,767	4,519,767	4,745,913	226,146	5.00%
Services & Supplies Expenditures						
Travel	30,339	45,500	45,500	68,000	22,500	49.45%
Training & Education		65,000	65,000	177,000	112,000	172.31%
Repair & Maintenance	50,568	70,000	86,317	80,000	(6,317)	(7.32)%
Communications	63,952	43,500	43,500	110,000	66,500	152.87%
Building Maintenance	4,406					
Utilities	119,652	167,834	167,834	151,550	(16,284)	(9.70)%
Rents & Leases	634,700	656,520	656,520	683,450	26,930	4.10%
Professional Services	153,683	447,078	418,718	891,030	472,312	112.80%
Shop & Field Supplies	140,692	352,000	395,608	312,705	(82,903)	(20.96)%
Laboratory Supplies	47,410	98,500	126,113	75,250	(50,863)	(40.33)%
Stationery & Office Supplies				21,000	21,000	
Total Services & Supplies Expenditures	1,245,402	1,945,932	2,005,110	2,569,985	564,875	28.17%
Capital Expenditures						
Lab & Monitoring Equipment	847,484	1,200,996	1,221,374	2,140,622	919,248	75.26%
Total Capital Expenditures	847,484	1,200,996	1,221,374	2,140,622	919,248	75.26%
Total Expenditures	6,016,101	7,666,695	7,746,251	9,456,520	1,710,269	22.08%

Managing Division:

Meteorology & Measurement

Contact Person:

Mairi Beacon

Program Purpose:

Provide laboratory analyses and technical interpretation to support Air District actions and programs including fixed-site ambient air monitoring, air monitoring projects and technology, source testing, permitting, enforcement, and regulatory development.

Essential Functions

- Perform preparation, analysis, and Level I review for fixed site ambient air monitoring network samples.
- Perform gravimetric analyses on various filter media for other Air Districts.
- Provide analytical support, technical expertise, and advice to other Air District sections and divisions regarding internal and external laboratory methods and capabilities.
- Maintain laboratory equipment, instrumentation, and supplies to support analyses.
- Maintain laboratory quality assurance and quality control (QA/QC) program.
- Maintain laboratory safety program.
- Perform ongoing training and cross-training of laboratory staff.

Strategic Plan Commitment	Strategic Plan Strategy
4.04.01 Update air monitoring data systems.	4.04 - Improve Air Monitoring
4.04.02 Strengthen quality control systems	4.04 - Improve Air Monitoring

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	8.08	8.53	8.53	8.67	0.14	1.64%
Number of Positions (LTCE)	0.12	1.00	1.00	1.00		
Personnel Expenditures						
Permanent Salaries	1,215,663	1,484,967	1,484,967	1,577,230	92,263	6.21%
Overtime Salaries	823	5,000	5,000	5,000		
Temporary Salaries	57,210					
Payroll Taxes	20,881	21,248	21,248	22,350	1,102	5.19%
Pension Benefits	288,533	282,581	282,581	318,099	35,518	12.57%
FICA Replacement Benefits	26,913	33,603	33,603	35,219	1,616	4.81%
Group Insurance Benefits	164,810	210,066	210,066	241,774	31,708	15.09%
Transportation Subsidy	3,853	12,230	12,230	9,285	(2,945)	(24.08)%
Workers' Compensation	3,561	4,012	4,012	3,876	(136)	(3.39)%
Discretionary Contribution		85,605	85,605	83,448	(2,157)	(2.52)%
Total Personnel Expenditures	1,782,247	2,139,312	2,139,312	2,296,281	156,969	7.34%
Services & Supplies Expenditures						
Travel		5,000		5,000	5,000	
Training & Education		8,750		8,750	8,750	
Repair & Maintenance	51,103	115,000	125,438	115,000	(10,438)	(8.32)%
Communications	686	1,000	1,000	1,000		
Professional Services	36,236	53,650	56,759	49,150	(7,609)	(13.41)%
Laboratory Supplies	85,298	115,000	148,314	115,000	(33,314)	(22.46)%
Computer Hardware & Software	447	2,500	500	2,500	2,000	400.00%
Stationery & Office Supplies				500	500	
Total Services & Supplies Expenditures	173,770	300,900	332,011	296,900	(35,111)	(10.58)%
Capital Expenditures						
Lab & Monitoring Equipment	358,020	70,000	70,935	7,500	(63,435)	(89.43)%
Total Capital Expenditures	358,020	70,000	70,935	7,500	(63,435)	(89.43)%
Total Expenditures	2,314,037	2,510,212	2,542,258	2,600,681	58,423	2.30%

Managing Division:

Meteorology & Measurement

Contact Person:

Charles Knoderer

Program Purpose:

The Meteorology section is charged with providing air quality and open burning forecasts, support for wildfire impacts, and validation of data from the Air District's regulatory air monitoring network.

Essential Functions

- Provide reliable and timely Air Quality forecasts to the Air District and the public on weekdays, weekends and holidays.
- Provide support for tracking and forecasting smoke plume impacts during wildfire events.
- Review prescribed and marsh burn plans. Issue the daily open burn decision to Regional, State, and National Fire Agencies and the public. Allocate and distribute burn acreage for prescribed, marsh, and Sonoma County stubble burning. Improve coordination with burners to encourage more prescribed burning.
- Quality assure EPA mandated air quality data and provide to EPA within 90 days of the end of a quarter.
- Update forecasting techniques as needed for winter particulate and summer ozone seasons, including statistical regression equations and develop and maintain the databases these methods are based upon.
- Review air quality and meteorological data from the five oil refinery Ground Level Monitoring (GLM) Networks and evaluate Excess Reports for the Compliance & Enforcement Division regarding compliance with Air District Regulations 1 & 9.
- Respond to record requests for information on air quality and meteorological data from the public. Provide presentations for Air District functions including Board and Committee meetings, and community outreach and public information meetings.

Strategic Plan Commitment	Strategic Plan Strategy
4.04.02 Strengthen quality control systems	4.04 - Improve Air Monitoring

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)	3.92	3.87	3.87	3.87		
Personnel Expenditures						
Permanent Salaries	669,504	655,823	655,823	682,874	27,051	4.12%
Overtime Salaries	2,456	10,000	10,000	10,000		
Temporary Salaries	2,088					
Payroll Taxes	10,432	9,431	9,431	9,759	328	3.48%
Pension Benefits	164,042	122,857	122,857	138,006	15,149	12.33%
FICA Replacement Benefits	14,791	13,639	13,639	14,084	445	3.26%
Group Insurance Benefits	90,398	101,285	101,285	107,285	6,000	5.92%
Transportation Subsidy	1,957	4,964	4,964	3,713	(1,251)	(25.20)%
Workers' Compensation	1,960	1,629	1,629	1,550	(79)	(4.85)%
Discretionary Contribution		37,870	37,870	36,204	(1,666)	(4.40)%
Total Personnel Expenditures	957,628	957,498	957,498	1,003,475	45,977	4.80%
Services & Supplies Expenditures						
Travel	5,909	15,000	15,000	15,000		
Training & Education	3,109	2,000	2,000	3,000	1,000	50.00%
Communications	3,197	3,800	3,800	3,800		
Rents & Leases	950					
Professional Services	12,000	33,000	112,000	33,000	(79,000)	(70.54)%
Shop & Field Supplies	134	4,000	4,000	3,000	(1,000)	(25.00)%
Computer Hardware & Software	440	18,000	18,479	15,000	(3,479)	(18.83)%
Stationery & Office Supplies	49			900	900	
Total Services & Supplies Expenditures	25,788	75,800	155,279	73,700	(81,579)	(52.54)%
Capital Expenditures						
Total Expenditures	983,416	1,033,298	1,112,777	1,077,175	(35,602)	(3.20)%

Air Monitoring Quality Assurance 807

Managing Division:

Meteorology & Measurement

Contact Person:

Charles Knoderer

Program Purpose:

Provide independent oversight of regulatory air monitoring activities, including quality assurance of air monitoring data and uploads of data to EPA. Provide independent performance evaluation services for the Air Monitoring Operations Section and evaluate equipment and siting for air quality monitoring performed by industry and/or their consultants within the Air District's boundaries.

Essential Functions

- Leads Quality Assurance Activities for the Air District's regulatory Air Monitoring network
- Conduct performance evaluation audits on ambient air monitoring equipment as required by EPA and California Air Resources Board (CARB) regulations, and create QA records for reporting to EPA.
- Conduct performance evaluation audits on non-criteria pollutant monitors and prepare summary reports of the audits.
- Conduct performance evaluation audits on industry SO2 and H2S GLMs and prepare summary reports of the audits.
- Participate in interdivisional teams working on improving Air District regulations and the Manual of Procedures, and customer service.

Strategic Plan Commitment	Strategic Plan Strategy
4.04.01 Update air monitoring data systems.	4.04 - Improve Air Monitoring
4.04.02 Strengthen quality control systems	4.04 - Improve Air Monitoring
4.04.03 Evaluate the monitoring network for possible changes and improvements.	4.04 - Improve Air Monitoring
4.04.04 Consider changes to the air monitoring network.	4.04 - Improve Air Monitoring

Air Monitoring Quality Assurance 807

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	4.75	5.49	5.49	5.62	0.13	2.37%
Number of Positions (LTCE)	0.04	1.00	1.00	1.00		
Personnel Expenditures						
Permanent Salaries	834,080	1,050,900	1,050,900	1,126,563	75,663	7.20%
Overtime Salaries	9,123	12,000	12,000	12,000		
Payroll Taxes	12,867	15,046	15,046	16,082	1,036	6.89%
Pension Benefits	140,616	198,763	198,763	227,460	28,697	14.44%
FICA Replacement Benefits	17,967	22,885	22,885	24,115	1,230	5.37%
Group Insurance Benefits	109,276	141,668	141,668	143,861	2,193	1.55%
Transportation Subsidy	2,449	8,329	8,329	6,358	(1,971)	(23.66)%
Workers' Compensation	2,442	2,732	2,732	2,654	(78)	(2.86)%
Discretionary Contribution		60,630	60,630	59,671	(959)	(1.58)%
Total Personnel Expenditures	1,128,820	1,512,953	1,512,953	1,618,764	105,811	6.99%
Services & Supplies Expenditures						
Travel	3,626	7,600	7,600	7,600		
Training & Education		3,000	3,000	33,000	30,000	1,000.00%
Repair & Maintenance	3,496	6,659	10,338	10,000	(338)	(3.27)%
Communications	3,060	4,500	4,500	4,500		
Building Maintenance	373	11,250	11,250	11,250		
Utilities	595			1,000	1,000	
Professional Services		42,250	42,250	46,400	4,150	9.82%
Shop & Field Supplies	5,598	23,000	27,923	23,000	(4,923)	(17.63)%
Stationery & Office Supplies				1,000	1,000	
Books & Journals		160	160	160		
Total Services & Supplies Expenditures	16,748	98,419	107,021	137,910	30,889	28.86%
Capital Expenditures						
Lab & Monitoring Equipment		118,500	130,637	151,235	20,598	15.77%
Total Capital Expenditures		118,500	130,637	151,235	20,598	15.77%
Total Expenditures	1,145,568	1,729,872	1,750,611	1,907,909	157,298	8.99%

BioWatch Monitoring 809

Managing Division:

Meteorology & Measurement

Contact Person:

Daniel Meer

Program Purpose:

Program 809 will be closed in FYE 2027. The Air District determined that the program does not align with the goals of the Strategic Plan. The Air District is not receiving federal funding under the cooperative agreement with the Department of Homeland Security to administer the program.

Essential Functions

Strategic Plan Commitment	Strategic Plan Strategy

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)	0.07					
Personnel Expenditures						
Permanent Salaries	15,716					
Payroll Taxes	247					
Pension Benefits	2,620					
FICA Replacement Benefits	360					
Group Insurance Benefits	2,242					
Transportation Subsidy	55					
Workers' Compensation	46					
Total Personnel Expenditures	21,286					
Services & Supplies Expenditures						
Rents & Leases	28,960	40,000	40,000		(40,000)	(100.00)%
Professional Services	1,305,912	1,512,439	1,687,102		(1,687,102)	(100.00)%
Shop & Field Supplies		10,000	10,000		(10,000)	(100.00)%
Computer Hardware & Software		2,000	2,000		(2,000)	(100.00)%
Total Services & Supplies Expenditures	1,334,872	1,564,439	1,739,102		(1,739,102)	(100.00)%
Capital Expenditures						
Total Expenditures	1,356,158	1,564,439	1,739,102		(1,739,102)	(100.00)%

Air Monitoring - Projects & Technology 810

Managing Division:

Meteorology & Measurement

Contact Person:

Jonathan P. Bower

Program Purpose:

Perform community and near source ambient air monitoring using mobile, portable, and short-term platforms.

Essential Functions

- Make high quality, supportable, and fit-for-purpose ambient air quality measurements in communities and near pollution sources using mobile or portable air monitoring platforms
- Perform quality control, including performance checks, documentation, and data review, for section's air monitoring platforms
- Develop and implement data quality and data management systems for novel, fit-for-purpose air monitoring approaches
- Research, develop, and maintain systems for efficient, robust, and fit-for-purpose data collection, including monitoring approaches and methods, platforms, instrumentation, computer hardware and software for acquisition, transmission, and storage of monitoring data, and networked communications
- Provide technical input, support, or project management for external air monitoring projects as needed
- Monitoring platform upgrades and repairs

Strategic Plan Commitment	Strategic Plan Strategy
2.02.03 Work with communities to collect air pollution data.	2.02 - Collect Community Data
2.03.03 Customize approach to sharing data to meet specific needs of individual communities.	2.03 - Make Data Accessible
2.07.02 Use community experience and knowledge to inform additional air monitoring.	2.07 - Understand Local Air Pollution
2.07.04 Partner with community to identify their additional monitoring needs.	2.07 - Understand Local Air Pollution
2.07.05 Report on air pollution data we collect.	2.07 - Understand Local Air Pollution

Air Monitoring - Projects & Technology 810

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	2.96	3.25	3.25	1.27	(1.98)	(60.92)%
Personnel Expenditures						
Permanent Salaries	462,758	525,938	525,938	252,027	(273,911)	(52.08)%
Overtime Salaries	2,586	3,000	3,000	3,000		
Temporary Salaries	6,514					
Payroll Taxes	7,285	7,562	7,562	3,687	(3,875)	(51.24)%
Pension Benefits	134,812	95,226	95,226	51,070	(44,156)	(46.37)%
FICA Replacement Benefits	10,304	11,465	11,465	4,636	(6,829)	(59.56)%
Group Insurance Benefits	63,148	72,925	72,925	40,011	(32,914)	(45.13)%
Transportation Subsidy	1,177	4,173	4,173	1,222	(2,951)	(70.72)%
Workers' Compensation	1,355	1,369	1,369	510	(859)	(62.75)%
Discretionary Contribution		30,342	30,342	13,398	(16,944)	(55.84)%
Total Personnel Expenditures	689,939	752,000	752,000	369,561	(382,439)	(50.86)%
Services & Supplies Expenditures						
Travel	3,754	13,500	13,500	13,500		
Training & Education		9,500	9,500	9,500		
Communications	43,983	45,000	53,640	45,000	(8,640)	(16.11)%
Rents & Leases	145,755	150,000	150,000	165,000	15,000	10.00%
Professional Services	19,523	225,000	304,477	236,000	(68,477)	(22.49)%
Shop & Field Supplies	26,935	105,000	119,108	85,000	(34,108)	(28.64)%
Computer Hardware & Software		30,000	30,000	30,000		
Stationery & Office Supplies		500	500	2,000	1,500	300.00%
Total Services & Supplies Expenditures	239,950	578,500	680,725	586,000	(94,725)	(13.92)%
Capital Expenditures						
Office Equipment				40,000	40,000	
Lab & Monitoring Equipment	126,095	135,920	191,904		(191,904)	(100.00)%
Total Capital Expenditures	126,095	135,920	191,904	40,000	(151,904)	(79.16)%
Total Expenditures	1,055,984	1,466,420	1,624,629	995,561	(629,068)	(38.72)%

Ambient Air Quality Analysis 811

Managing Division:

Meteorology & Measurement

Contact Person:

Katherine Hoag

Program Purpose:

Summarize, analyze, interpret, and communicate air monitoring data, design air monitoring studies, and track and inform air monitoring policies, requirements, and strategies. Partner with communities on air monitoring and data analysis projects, and provide technical support to Air District programs, other agencies, and the public.

Essential Functions

- Analyze air monitoring and meteorological data to assess long-term air quality trends and the air quality and exposure impacts of various sources.
- Determine compliance with state and federal ambient air quality standards, coordinate NAAQS and CAAQS designations and exceptional events work, and advise on federal and state rules and policies.
- Prepare Annual Network Plan, Five-Year Network Assessment, and network modification requests for EPA.
- Support State Implementation Plan and air quality plan development with air monitoring data analyses.
- Support communications, rule development, permitting, and enforcement with air quality messaging and information.
- Advise communities, other agencies, or researchers conducting air monitoring or air quality data analysis projects.
- Oversee Bay Air Center contract that supports community members conducting air monitoring or data analysis.

Strategic Plan Commitment	Strategic Plan Strategy
2.02.02 Provide training on use of tools and in standard data collection procedures.	2.02 - Collect Community Data
2.02.03 Work with communities to collect air pollution data.	2.02 - Collect Community Data
2.03.02 Work with community members to better describe available data and understand how they want to access data.	2.03 - Make Data Accessible
2.07.02 Use community experience and knowledge to inform additional air monitoring.	2.07 - Understand Local Air Pollution
2.07.04 Partner with community to identify their additional monitoring needs.	2.07 - Understand Local Air Pollution
2.07.05 Report on air pollution data we collect.	2.07 - Understand Local Air Pollution
4.08.03 Partner with communities near facilities with recurring incidents to provide enhanced community-led monitoring.	4.08 - Air Quality Incidents

Ambient Air Quality Analysis 811

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)	2.97	4.47	4.47	4.29	(0.18)	(4.03)%
Personnel Expenditures						
Permanent Salaries	517,236	765,096	765,096	735,404	(29,692)	(3.88)%
Overtime Salaries	1,228	1,000	1,000	1,500	500	50.00%
Payroll Taxes	8,104	10,976	10,976	10,504	(472)	(4.30)%
Pension Benefits	135,971	138,679	138,679	148,510	9,831	7.09%
FICA Replacement Benefits	11,541	15,770	15,770	15,630	(140)	(0.89)%
Group Insurance Benefits	70,467	107,465	107,465	94,128	(13,337)	(12.41)%
Transportation Subsidy	1,582	5,739	5,739	4,121	(1,618)	(28.19)%
Workers' Compensation	1,514	1,883	1,883	1,720	(163)	(8.66)%
Discretionary Contribution		44,188	44,188	38,959	(5,229)	(11.83)%
Total Personnel Expenditures	747,643	1,090,796	1,090,796	1,050,476	(40,320)	(3.70)%
Services & Supplies Expenditures						
Travel	6,848	36,000	36,000	40,000	4,000	11.11%
Training & Education	1,131	7,500	7,500	6,500	(1,000)	(13.33)%
Communications	4,816	7,000	7,000	8,000	1,000	14.29%
Printing & Reproduction	206	500	500	1,000	500	100.00%
Professional Services	649,923	1,722,000	1,915,729	1,430,000	(485,729)	(25.35)%
Computer Hardware & Software	840	10,000	13,000	10,000	(3,000)	(23.08)%
Stationery & Office Supplies				1,500	1,500	
Books & Journals		2,000	2,000	2,000		
Minor Office Equipment		2,000	2,000	2,000		
Total Services & Supplies Expenditures	663,764	1,787,000	1,983,729	1,501,000	(482,729)	(24.33)%
Capital Expenditures						
Total Expenditures	1,411,407	2,877,796	3,074,525	2,551,476	(523,049)	(17.01)%

Refinery Community Air Monitoring 812

Managing Division:

Meteorology & Measurement

Contact Person:

Jonathan P. Bower

Program Purpose:

Develop and implement refinery community air monitoring programs. These programs include establishing and operating stationary air monitoring stations in communities near refineries, oversight of required fenceline air monitoring at refineries and related facilities, and evaluating novel air monitoring approaches.

Essential Functions

- Operate, maintain, and review data from refinery community air monitoring station(s)
- Perform quality control, including performance checks, documentation, and data review, for refinery community air monitoring stations
- Develop and implement data quality and data management systems for novel air monitoring approaches
- Research, develop, and maintain systems for collecting fit-for-purpose data in communities near refineries, including instrumentation, methods, computer hardware and software for acquisition, transmission, and storage, and networked communications
- Review and approve or disapprove new and revised fenceline air monitoring plans and quality assurance project plans from refineries and related facilities
- Track and review fenceline air monitoring data, concentration-triggered notifications, and root cause analysis reports submitted by refineries and related facilities
- Routinely review and update as necessary the regulations, guidelines, and District oversight of the refinery community fenceline air monitoring program
- Track state and federal fenceline air monitoring regulations and policies, participate in state and federal policymaking discussions

Strategic Plan Commitment	Strategic Plan Strategy
1.02.01 Review and update regulations to ensure health protection and stringency.	1.02 - Stronger Regulations
2.03.03 Customize approach to sharing data to meet specific needs of individual communities.	2.03 - Make Data Accessible
2.07.02 Use community experience and knowledge to inform additional air monitoring.	2.07 - Understand Local Air Pollution
2.07.05 Report on air pollution data we collect.	2.07 - Understand Local Air Pollution

Refinery Community Air Monitoring 812

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)		3.02	3.02	4.86	1.84	60.93%
Personnel Expenditures						
Permanent Salaries		488,059	488,059	815,974	327,915	67.19%
Overtime Salaries		1,000	1,000	1,000		
Payroll Taxes		7,013	7,013	11,643	4,630	66.02%
Pension Benefits		88,363	88,363	164,698	76,335	86.39%
FICA Replacement Benefits		10,667	10,667	17,684	7,017	65.78%
Group Insurance Benefits		82,345	82,345	129,366	47,021	57.10%
Transportation Subsidy		3,882	3,882	4,662	780	20.09%
Workers' Compensation		1,274	1,274	1,946	672	52.75%
Discretionary Contribution		28,156	28,156	43,206	15,050	53.45%
Total Personnel Expenditures		710,759	710,759	1,190,179	479,420	67.45%
Services & Supplies Expenditures						
Travel		4,500	4,500	4,500		
Training & Education		5,500	5,500	5,500		
Communications		20,000	20,000	20,000		
Rents & Leases		100,000	100,000	100,000		
Professional Services		230,000	230,000	774,000	544,000	236.52%
Shop & Field Supplies		130,000	130,000	130,000		
Computer Hardware & Software		40,000	40,000	40,000		
Stationery & Office Supplies		500	500	2,000	1,500	300.00%
Total Services & Supplies Expenditures		530,500	530,500	1,076,000	545,500	102.83%
Capital Expenditures						
Lab & Monitoring Equipment		875,000	875,000	877,500	2,500	0.29%
Total Capital Expenditures		875,000	875,000	877,500	2,500	0.29%
Total Expenditures		2,116,259	2,116,259	3,143,679	1,027,420	48.55%

- Page Intentionally Left Blank -

Program Distributions

Program 10

Program 10: General Fund Program Distributions

The monitoring and tracking of expenditures related to General Fund Program Distributions is managed through a dedicated account called Program 10. This separation allows Divisions and Finance staff to effectively oversee spending on special projects apart from the normal operating program budgets. Furthermore, it enables the Finance Office to reconcile actual expenses with the allocated budget amounts. These allocations cater to various programs and initiatives, with some requiring multiple years for expenditure.

The Fiscal Year 2026-2027 Program 10 General Fund Program Distribution encompasses two programs within the Air District's Wildfire Air Quality Response Program:

The Home and School Air Filtration Program (HSAFP) was approved by the Board of Directors in July 2022 using $1,000,000 in General Fund Reserves to support impacted communities that are vulnerable to wildfire smoke by distributing home air filtration units and filter replacements and providing air filtration upgrades to elementary schools in Richmond and San Pablo. Program partners include the Public Health Institute's – Regional Asthma Management and Prevention (RAMP), Bay Area organizations in the California Asthma Mitigation Project (AMP), federally qualified health centers, James Cary Smith (JCS) Community Grantees, and other community-based organizations partners in AB 617 communities, impacted communities and those serving outdoor workers, IQAir Foundation and West Contra Costa Unified School District.

The Board of Directors in June 2021 approved $250,000 for staff to work with air filter manufacturers to purchase home air filters for the Home Air Filtration Program and a pilot program with RAMP and AMP partners to distribute air filters with the AMP partners to clients with asthma or other lung condition.

The Board of Directors in September 2021 approved an additional $100,000 to expand the program to reach all Bay Area Counties under the Executive Officer's expenditure authority and to seek additional partners in Solano, Marin, and Napa.

The Board of Directors in November 2023 approved staff to reallocate remaining Wildfire Mitigation Designation funds flexibly towards any of the partners and project categories and to expand eligibility to any clients of partners, eliminating the need for a lung condition, and any JCS Community Grantee.

The Wildfire Management Office Emergency Supplies (WMOES) was approved by the Board of Directors in July 2021 $1,000,000 General Fund Reserves for Air District to provide heavy-duty portable air filtration units for regional emergency management authorities throughout the San Francisco Bay Area to help communities prepare for wildfire smoke that have the potential to impact air quality in entire regions for consecutive days. This program will be completed in Fiscal Year 2026, and no funding is being proposed for Fiscal Year 2027.

The following is the projected spending plan for the programs:

Programs	Authorized Amount	YTD Spending as of 06/30/2025	FY2026 Projected Spending	FY2027 Projected Spending	Division	Program
HSAFP	1,350,000	1,165,016	48,266	136,718	Environmental Justice	302
WMOES	1,000,000	721,627	278,373	0	Compliance & Enforcement	401

Program 11

Program 11: Clean HEET Grant Program/Woodsmoke Reduction

The monitoring and tracking of expenditures related to the Clean Heating Efficiently with Electric Technology (HEET) Grant Program are managed through a dedicated account called Program 11. This separation allows Divisions and Finance staff to effectively oversee spending on this program, distinct from the normal operating program budgets. It allows the Finance Office to reconcile actual expenses with the allocated budget amount for this program, which spans multiple fiscal years.

The Clean HEET program was developed and is supported with funding from an EPA Targeted Airshed Grant and revenue from the Air District's General Fund. In 2021, the Board of Directors authorized the Air District to accept, obligate, and expend up to $2,120,345 in funding from the EPA and commit $500,000 in General Fund monies from Designated Reserves as matching funding.

This program offers incentive funding to Bay Area homeowners to help reduce emissions and community exposure to wood smoke pollution. This is achieved by providing a grant to eligible applicants to lower the cost of replacing wood-burning devices, including freestanding wood-burning stoves, pellet stoves, and fireplace inserts, with electric heat pumps. The program originally launched in March 2024 and in early 2025, the EPA approved the Air District's request to expand the eligibility criteria and project options to include open hearth fireplaces. Additionally, a decommission-only option has been introduced, allowing older polluting devices to be permanently removed without having to be replaced with an electric heat pump. In late 2025, the EPA approved a two-year program extension until February 2028.

The Air District is reviewing all completed applications until program funds have been exhausted and has conducted several solicitations that were either first-come, first-served or competitive. Additionally, the program offers "plus-up" funding for low-income residents. All work for this program must be completed by February 2028.

The following is the projected spending plan for the program:

Programs	Authorized Amount	YTD Spending as of 06/30/2025	FY2026 Projected Spending	FY2027 Projected Spending	Division	Program
Clean HEET	$2,120,345	$288,284	$587,945	$1,244,116	Strategic Incentives	311

Special Revenue Fund
Program Narratives and Expenditure Details

SPECIAL REVENUE FUND

The Air District's Special Revenue works to support the Air District's mission of improving air quality, protecting public health, and protecting the global climate. The Special Fund revenue is principally derived from state and federal agency grants (e.g., from the California Air Resources Board and US Environmental Protection Agency), Department of Motor Vehicle Registration fees, settlement agreements, environmental mitigation fees, bond-sales, and the Bay Area Clean Air Foundation.

The Air District uses monies from these revenue sources to fund a variety of programs and projects that complement its regulatory and enforcement actives: grant and incentive programs for public agencies businesses, community groups, and residents, community outreach and engagement efforts, air quality monitoring and analysis, commuter benefits and Spare the Air programs, mobile source and anti-idling enforcement activities, and others. Air District staff administrative costs related to the implementation of Air District sponsored projects and programs are mainly provided for by the revenue source. A list of the main sources of revenue is listed below and a description of the programs funded by these sources is found in the section that follows:

- California Air Resources Board
- Transportation Fund for Clean Air (TFCA)
- Mobile Source Incentive Fund (MSIF)
- Carl Moyer Program (CMP)
- Community Air Protection Program (CAP)
- Volkswagen Environmental Mitigation Trust (VW Trust)
- Funding Agricultural Replacement Measures for Emission Reductions (FARMER)
- US Environmental Protection Agency
- California Goods Movement I-Bond (CGMB)
- Ocean-Going Vessel At-berth Remediation Fund (OGV Remediation Fund)
- Bay Area Clean Air Foundation
- Settlement funds

SERVICE AREA - ENGINEERING & COMPLIANCE

Special Revenue Fund

- Compliance and Enforcement

The Compliance & Enforcement Division ensures the Air District realizes the emission reductions achieved by the air quality regulations adopted by the Board of Directors, and permit conditions issued by the Executive Officer/APCO. Compliance with Air District, state, and federal regulations is achieved through a robust Compliance Assurance and Enforcement Program that includes comprehensive inspections and investigations and a complementary Compliance Assistance Program that supports compliance objectives of the Division by maintaining operations and assisting industry with air quality regulations and requirements. The Division works closely with local and state regulatory agencies, regulated industry and members of the community to provide the highest level of service to protect air quality and public health. The Division implements Air District strategies and enforces regulations that pertain to stationary sources and has some mobile source enforcement authority in collaboration with the California Air Resources Board. Division priorities include conducting Title V and Synthetic Minor facility inspections, locating unpermitted sources of operations, resolving violations at facilities with ongoing non-compliance and responding to and investigating air quality complaints. Staff work collaboratively across Divisions to achieve the Air District's mission and apply the appropriate level of enforcement proportional to the level of non-compliance. The Division vigorously pursues violators who show a disregard for the law and well-being of the public and ensures corrective actions and measures to resolve violations are taken.

The Compliance and Enforcement Division continues to focus on activities that support the Air District's commitment to achieve clean air to protect public health and the environment as follows:

The Compliance Assurance and Enforcement Programs focus on announced and unannounced inspections of air pollution sources to ensure compliance. Targeted strategies are used to guide inspections to identify non-compliance and reduce excess emissions. Sources include Title V and Synthetic Minor facilities, petroleum refineries, chemical plants, dry cleaners, gasoline dispensing facilities, autobody shops, asbestos renovations and demolitions, agricultural and prescribed burning, and other permitted sources. Other facets of the program requiring Division resources include investigations of Title V deviation reporting, Reportable Compliance Activities, and other inspections pertaining to the Portable Equipment Registration Program (PERP), Asbestos projects (renovations, demolitions and naturally occurring asbestos – NOA), compliance determinations for State Air Toxics Control Measures (ATCMs) and Federal Maximum Available Control Technology (MACTs) for air toxics. Air pollution complaints and incident response investigations are a high priority in the Division that aim to address and resolve air quality concerns of local communities.

The Compliance Assistance Program develops outreach materials, advisories, policies and procedures and guidance information and implements compliance strategies that complement a wide range of enforcement efforts. The program aims to enhance industry and public understanding of compliance and enforcement programs and regulatory requirements, address compliance concerns and assist in resolving air quality violations. Key programs and projects in Compliance Assistance and Operations include the Air District's Wood Smoke Reduction Program, Air Quality Complaint Program, AB617 Community Health Protection Program in West Oakland, Richmond/San Pablo, East Oakland and Bay View Hunters Point, Wildfire Air Quality Response Program, Commuter Benefits, Title V, Open Burning, Flare Monitoring, Naturally Occurring Asbestos, Inspector Training, Green Business Certifications, Variance and Hearing Board Activities, and many others involving state, federal and Air District regulations and requirements. The program also maintains online web information, the dispatch operating system and the compliance assistance and complaint phone lines which are all integral interfaces with the public.

Enhanced Mobile Source Inspections (TFCA) 318

Managing Division:

Compliance & Enforcement

Contact Person:

Tracy Lee

Program Purpose:

The enhanced mobile source inspection program aims to reduce particulate matter (PM) emissions throughout the Bay Area, specifically at and adjacent to the Port of Oakland. As part of the program, Air District inspectors patrol for smoking vehicles on the road, between performing inspections and answering complaints. Smoking vehicles are reported to Air District dispatchers and owner information is extracted from Department of Motor Vehicles (DMV) records. Letters and other compliance assistance materials are sent to owners to encourage that they repair or retire the respective vehicles.

Essential Functions

- Identify smoking vehicles and send notification letters to vehicle owners to inform them of the vehicle's excess emissions and to request that they repair the vehicle or contact assistance programs to retire the vehicle.
- Conduct enhanced mobile source inspections at and adjacent to the Port of Oakland for compliance with the State drayage truck regulation and other related truck/mobile source regulations.
- Issue Notice of Violations for trucks and other mobile sources found in non-compliance.
- Develop compliance assistance materials for related mobile source regulatory requirements, including fact sheets, posters and other outreach and grants information.

Strategic Plan Commitment	Strategic Plan Strategy
4.05.01 Target inspections and other compliance activities where they are most needed.	4.05 - Improve Compliance Investigations

Enhanced Mobile Source Inspections (TFCA) 318

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Personnel Expenditures						
Services & Supplies Expenditures						
Communications	673	3,000	3,000	3,000		
Postage		4,000	4,000	4,000		
Printing & Reproduction	8,340	8,500	9,195	8,500	(695)	(7.56)
Total Services & Supplies Expenditures	9,013	15,500	16,195	15,500	(695)	(4.29)
Capital Expenditures						
Total Expenditures	9,013	15,500	16,195	15,500	(695)	(4.29)

SERVICE AREA - EQUITY & COMMUNITY PROGRAMS

Special Revenue Fund

- Strategic Incentive Division

The Strategic Incentives Division works to achieve early emissions reductions and accelerate adoption of cleanest-available technology through the administration of voluntary incentive programs to help fleet owners to replace older highly polluting vehicles and equipment with cleaner and zero-emissions technology. This work involves the oversight and administration of Special Revenue funds from federal, state, and local sources to offer incentives that target the clean-up of mobile sources in the marine, goods movement, industrial, transportation, and agricultural sectors, implementation of trip reduction strategies such as the installation of new bikeways and secure bike parking, and the change-out residential wood-burning stoves. The programs are designed to fund projects that reduce emissions and exposure in areas where communities have been most affected by air pollution. In FYE 2025, the team will be working to award over $100 million in new Special Revenue-funded programs and active projects that were previously awarded over the past 10 years.

Special Revenue Fund sources are used to pay for direct project costs (grant awards) and associated Air District administrative costs. These revenue sources include the Carl Moyer Program, Community Air Protection – Incentive Program, Transportation Fund for Clean Air Fund, Mobile Source Incentive Fund, Funding Agricultural Replacement Measures for Emission Reductions (FARMER) Program, Environmental Protection Agency Targeted Airshed Program (EPA TAG), settlement funds, monies that are received from the Bay Area Clean Air Foundation, and other miscellaneous sources.

Managing Division:

Strategic Incentives

Contact Person:

Alona Davis

Program Purpose:

Implement grant programs for eligible projects that reduce emissions and exposure to air pollution, through the administration of state grant funds from the Carl Moyer Program (CMP), Community Air Protection (CAP) Incentives Program, Ocean-Going Vessel At-berth Remediation Fund (OGV Fund), and Funding Agricultural Replacement Measures for Emission Reductions (FARMER) Program. Programs focus on replacing heavy-duty diesel and gasoline powered mobile sources, supporting zero-emission fleets and infrastructure, and reducing community exposure to pollution.

Essential Functions

- Develop program policies and procedures, guidance materials, and administrative operating procedures; and develop solicitation packages and conduct outreach.
- Review and evaluate project applications to determine eligibility and prepare recommendations for award of eligible projects for approval by the Board of Directors.
- Prepare contracts, amendments, and correspondence; monitor projects, inspect, and audit programs and projects to assure compliance with State and District guidelines, policies, and statutory and regulatory requirements; process reimbursement requests; and ensure project files are complete and up to date.
- Prepare and submit reports to CARB; liaise with CARB on contract and guideline requirements.
- Prepare technical, financial, and staff reports, attend meetings, and participate in external audits.
- Develop, enhance, and maintain data management systems to collect, track, share and retain grant program data and documents securely.
- Develop new and enhance existing programs in support of community emission reduction plan strategies.
- Train staff to support administration and expansion of programs

Strategic Plan Commitment	Strategic Plan Strategy
1.04.03 Review funding programs to reduce barriers to applying for funds and develop creative solutions for more variety of projects.	1.04 - Reimagine Funding
1.04.04 Work with communities on new project ideas and find funding sources.	1.04 - Reimagine Funding
1.07.01 Maximize climate change benefits of regulations and nonregulatory programs.	1.07 - New Climate Solutions
4.10.01 Put processes in place to ensure the successful launch and implementation of new rules and regulations, policy and program changes, new initiatives, and modifications to the strategic plan.	4.10 - Ensure Success
4.11.03 Be intentional in matching spending to be in alignment with achieving real impact by adopting new approaches to air quality management that focus on understanding and reducing disparities in local air pollution.	4.11 - Align Resources

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	12.61	19.60	19.60	13.65	(5.95)	(30.36)
Number of Positions (LTCE)	0.48	0.30	0.30	0.30		
Personnel Expenditures						
Permanent Salaries	1,902,454	2,730,553	2,730,553	2,090,510	(640,043)	(23.44)
Overtime Salaries	521					
Payroll Taxes	29,525	38,723	38,723	29,592	(9,131)	(23.58)
Pension Benefits	493,406	507,706	507,706	420,622	(87,084)	(17.15)
FICA Replacement Benefits	42,102	70,207	70,207	50,782	(19,425)	(27.67)
Group Insurance Benefits	257,763	464,761	464,761	334,906	(129,855)	(27.94)
Transportation Subsidy	5,843	25,552	25,552	13,388	(12,164)	(47.60)
Workers' Compensation	5,572	8,383	8,383	5,588	(2,795)	(33.34)
Discretionary Contribution		156,966	156,966	110,344	(46,622)	(29.70)
Total Personnel Expenditures	2,737,186	4,002,851	4,002,851	3,055,732	(947,119)	(23.66)
Services & Supplies Expenditures						
Travel	4,848	18,500	18,500	14,000	(4,500)	(24.32)
Training & Education	1,450	10,000	10,000	6,000	(4,000)	(40.00)
Communications	2,058	5,000	5,000	3,000	(2,000)	(40.00)
Postage		1,000	1,000	1,000		
Printing & Reproduction		3,000	3,000	3,000		
Professional Services	104,783	100,500	147,265	163,000	15,735	10.68
Shop & Field Supplies	176	2,800	2,800	2,800		
Computer Hardware & Software		6,000	6,000	6,000		
Stationery & Office Supplies		2,000	2,000	1,000	(1,000)	(50.00)
Books & Journals		500	500	500		
Minor Office Equipment		2,500	2,500	2,500		
Total Services & Supplies Expenditures	113,315	151,800	198,565	202,800	4,235	2.13
Capital Expenditures						
Computer & Network		175,000	175,000	125,000	(50,000)	(28.57)
Total Capital Expenditures		175,000	175,000	125,000	(50,000)	(28.57)
Transfer In/Out	527,400	338,500	338,500	304,552	(33,948)	(10.03)
Total Expenditures	3,377,901	4,668,151	4,714,916	3,688,084	(1,026,832)	(21.78)

Transportation Fund for Clean Air Administration (TFCA) 308

Managing Division:

Strategic Incentives

Contact Person:

Minda Berbeco

Program Purpose:

Implement incentive programs for eligible projects that reduce on-road vehicle emissions, through the administration of local funding from $4 motor vehicle surcharge revenue, authorized by Assembly Bill 434.

Essential Functions

- Administer grant programs to reduce emissions from the transit sector across the Bay area prioritizing the most impacted communities.
- Review and evaluate project applications to determine their eligibility and prepare recommendations for award of eligible projects for approval by the Board of Directors, prioritizing the Bay Area's most impacted communities.
- Prepare recommendations for updates to program policies for consideration by the Board of Directors; update program guidance and administrative operating procedures, as needed; develop and implement solicitations and conduct outreach.
- Prepare contracts, amendments, and correspondence; review progress reports and monitor projects, inspect, and audit programs and projects to assure compliance with District policies and statutory requirements; process reimbursement requests; and ensure project files are complete and up to date.
- Prepare technical, financial, and staff reports, and attend meetings.

Strategic Plan Commitment	Strategic Plan Strategy
1.04.03 Review funding programs to reduce barriers to applying for funds and develop creative solutions for more variety of projects.	1.04 - Reimagine Funding
1.04.04 Work with communities on new project ideas and find funding sources.	1.04 - Reimagine Funding
4.11.03 Be intentional in matching spending to be in alignment with achieving real impact by adopting new approaches to air quality management that focus on understanding and reducing disparities in local air pollution.	4.11 - Align Resources

Transportation Fund for Clean Air Administration (TFCA) 308

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	4.96	3.25	3.25	2.70	(0.55)	(16.92)
Number of Positions (LTCE)	0.17	0.20	0.20	0.20		
Personnel Expenditures						
Permanent Salaries	747,976	498,227	498,227	434,362	(63,865)	(12.82)
Payroll Taxes	11,702	7,111	7,111	6,119	(992)	(13.95)
Pension Benefits	142,774	95,549	95,549	87,394	(8,155)	(8.53)
FICA Replacement Benefits	16,477	12,171	12,171	10,560	(1,611)	(13.24)
Group Insurance Benefits	100,225	66,258	66,258	53,126	(13,132)	(19.82)
Transportation Subsidy	2,257	4,430	4,430	2,784	(1,646)	(37.16)
Workers' Compensation	2,190	1,453	1,453	1,162	(291)	(20.03)
Discretionary Contribution		28,674	28,674	22,926	(5,748)	(20.05)
Total Personnel Expenditures	1,023,601	713,873	713,873	618,433	(95,440)	(13.37)
Services & Supplies Expenditures						
Travel	1,787	14,000	14,000	14,000		
Training & Education	3,700	11,500	11,500	5,500	(6,000)	(52.17)
Communications	1,642	2,000	2,000	2,000		
Postage		500	500	250	(250)	(50.00)
Printing & Reproduction		7,000	7,000	1,000	(6,000)	(85.71)
Professional Services	180,708	274,000	295,076	461,000	165,924	56.23
Shop & Field Supplies	644	3,000	3,000	1,500	(1,500)	(50.00)
Computer Hardware & Software	644	7,000	7,000	7,000		
Stationery & Office Supplies	55	1,000	1,000	5,000	4,000	400.00
Books & Journals		200	200		(200)	(100.00)
Minor Office Equipment		5,000	5,000	5,000		
Total Services & Supplies Expenditures	189,180	325,200	346,276	502,250	155,974	45.04
Capital Expenditures						
Computer & Network		175,000	175,000	125,000	(50,000)	(28.57)
Total Capital Expenditures		175,000	175,000	125,000	(50,000)	(28.57)
Transfer In/Out	184,421	544,223	544,223	485,567	(58,656)	(10.78)
Total Expenditures	1,397,202	1,758,296	1,779,372	1,731,250	(48,122)	(2.70)

Mobile Source Incentive Fund (MSIF) 310

Managing Division:

Strategic Incentives

Contact Person:

Alona Davis

Program Purpose:

Implement incentive programs for eligible projects that reduce emissions and community exposure to diesel exhaust and other pollutants, primarily from mobile sources, through the administration of local funding from $2 motor vehicle surcharge revenues, authorized by Assembly Bill 923, for emission reduction projects.

Essential Functions

- Recommend funding allocations to the Board of Directors.
- Update program policies and procedures, guidance materials, and administrative operating procedures; develop solicitation packages; conduct outreach.
- Review and evaluate project applications to determine eligibility and prepare recommendations for award of eligible projects for approval by the Board of Directors.
- Prepare contracts, amendments, and correspondence; monitor projects, inspect, and audit programs and projects to assure compliance with State and District guidelines, policies, and statutory and regulatory requirements; process reimbursement requests; and ensure project files are complete and up to date.
- Prepare and submit reports to the California Air Resources Board (CARB) on the expenditure of MSIF funds.
- Prepare technical, financial, and staff reports, attend meetings, and participate in external audits.
- Develop, enhance, and maintain data management systems in order to collect, track, share, and retain grant program data and documents securely.

Strategic Plan Commitment	Strategic Plan Strategy
1.04.03 Review funding programs to reduce barriers to applying for funds and develop creative solutions for more variety of projects.	1.04 - Reimagine Funding
1.07.01 Maximize climate change benefits of regulations and nonregulatory programs.	1.07 - New Climate Solutions
4.10.01 Put processes in place to ensure the successful launch and implementation of new rules and regulations, policy and program changes, new initiatives, and modifications to the strategic plan.	4.10 - Ensure Success

Mobile Source Incentive Fund (MSIF) 310

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	3.26	4.26	4.26	2.93	(1.33)	(31.22)
Number of Positions (LTCE)	0.09	0.20	0.20	0.10	(0.10)	(50.00)
Personnel Expenditures						
Permanent Salaries	457,460	619,926	619,926	435,497	(184,429)	(29.75)
Overtime Salaries	325					
Payroll Taxes	7,106	8,832	8,832	6,127	(2,705)	(30.63)
Pension Benefits	108,474	116,887	116,887	87,516	(29,371)	(25.13)
FICA Replacement Benefits	10,128	15,735	15,735	11,033	(4,702)	(29.88)
Group Insurance Benefits	61,950	91,167	91,167	65,618	(25,549)	(28.02)
Transportation Subsidy	1,531	5,727	5,727	2,909	(2,818)	(49.21)
Workers' Compensation	1,340	1,879	1,879	1,214	(665)	(35.39)
Discretionary Contribution		35,647	35,647	22,958	(12,689)	(35.60)
Total Personnel Expenditures	648,314	895,800	895,800	632,872	(262,928)	(29.35)
Services & Supplies Expenditures						
Travel	135	15,000	15,000	11,000	(4,000)	(26.67)
Training & Education		15,000	15,000	10,500	(4,500)	(30.00)
Communications	3,059	2,000	2,000	2,000		
Postage		500	500	500		
Printing & Reproduction	372	3,000	3,000	300	(2,700)	(90.00)
Professional Services	14,453	57,000	57,660	78,000	20,340	35.28
Shop & Field Supplies	1,055	2,000	2,000	2,000		
Computer Hardware & Software		7,000	7,000	6,000	(1,000)	(14.29)
Stationery & Office Supplies		1,000	1,000	1,000		
Books & Journals		200	200	200		
Minor Office Equipment		2,500	2,500	2,500		
Total Services & Supplies Expenditures	19,074	105,200	105,860	114,000	8,140	7.69
Capital Expenditures						
Computer & Network		50,000	50,000	50,000		
Total Capital Expenditures		50,000	50,000	50,000		
Transfer In/Out	121,939	135,152	135,152		(135,152)	(100.00)
Total Expenditures	789,327	1,186,152	1,186,812	796,872	(389,940)	(32.86)

Vehicle Buy Back (MSIF) 312

Managing Division:

Strategic Incentives

Contact Person:

Minda Berbeco

Program Purpose:

Accelerate the removal of high-emitting vehicles from the on-road motor vehicle fleet within the District's jurisdiction.

Essential Functions

- Oversee contractor's purchase and scrappage of vehicles.
- Respond to inquiries regarding Vehicle Buy-Back Program.
- Oversee contractor's direct mailings.
- Acquire and update Department of Motor Vehicles (DMV) database used for direct mail annually.
- Develop and update Vehicle Buy-Back outreach materials.
- Conduct site visits of dismantling yards and dismantler offices.
- Manage suppression list and update DMV database.
- Review and approve scrapping contractor invoices.
- Review and approve direct mail contractor invoices.
- Develop and update program incentives in response to feedback from car owners and dismantlers, as well as research related to market conditions.

Strategic Plan Commitment	Strategic Plan Strategy
1.04.03 Review funding programs to reduce barriers to applying for funds and develop creative solutions for more variety of projects.	1.04 - Reimagine Funding
4.11.03 Be intentional in matching spending to be in alignment with achieving real impact by adopting new approaches to air quality management that focus on understanding and reducing disparities in local air pollution.	4.11 - Align Resources

Vehicle Buy Back (MSIF) 312

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	0.64	0.81	0.81	0.62	(0.19)	(23.46)
Personnel Expenditures						
Permanent Salaries	95,347	120,921	120,921	108,156	(12,765)	(10.56)
Payroll Taxes	1,501	1,724	1,724	1,530	(194)	(11.25)
Pension Benefits	16,819	22,811	22,811	21,851	(960)	(4.21)
FICA Replacement Benefits	2,129	2,858	2,858	2,257	(601)	(21.03)
Group Insurance Benefits	13,008	16,764	16,764	14,937	(1,827)	(10.90)
Transportation Subsidy	295	1,040	1,040	595	(445)	(42.79)
Workers' Compensation	279	341	341	248	(93)	(27.27)
Discretionary Contribution		6,964	6,964	5,732	(1,232)	(17.69)
Total Personnel Expenditures	129,378	173,423	173,423	155,306	(18,117)	(10.45)
Services & Supplies Expenditures						
Travel		1,500	1,500		(1,500)	(100.00)
Training & Education		1,000	1,000		(1,000)	(100.00)
Postage		1,000	1,000	500	(500)	(50.00)
Printing & Reproduction		1,000	1,000	1,000		
Professional Services	1,833,375	11,300,000	12,991,688	11,300,000	(1,691,688)	(13.02)
Total Services & Supplies Expenditures	1,833,375	11,304,500	12,996,188	11,301,500	(1,694,688)	(13.04)
Capital Expenditures						
Transfer In/Out	61,152	26,166	26,166		(26,166)	(100.00)
Total Expenditures	2,023,905	11,504,089	13,195,777	11,456,806	(1,738,971)	(13.18)

Miscellaneous Incentive Program (Other Grant) 316

Managing Division:

Strategic Incentives

Contact Person:

Adam Shapiro

Program Purpose:

Implement incentive programs for projects that reduce emissions through the administration of miscellaneous sources of grant funding.

Essential Functions

- Review and evaluate project applications to determine eligibility and prepare recommendations for award of eligible projects for approval by the Board of Directors.
- Prepare contracts, amendments, and correspondence; monitor projects, inspect, and audit programs and projects to assure compliance with grant agreements, Program guidelines, policies, and statutory and regulatory requirements; process reimbursement requests; and ensure project files are complete and up to date.
- Prepare and submit reports and funding disbursement requests to funding agencies; liaise with funding agencies on contract and guideline requirements.
- Prepare technical, financial, and staff reports, attend meetings, and participate in external audits.
- Develop, update program policies and procedures, guidance materials, and administrative operating procedures; and develop solicitation packages and conduct outreach.

Strategic Plan Commitment	Strategic Plan Strategy
4.10.01 Put processes in place to ensure the successful launch and implementation of new rules and regulations, policy and program changes, new initiatives, and modifications to the strategic plan.	4.10 - Ensure Success

Miscellaneous Incentive Program (Other Grant) 316

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)		0.20	0.20	0.35	0.15	75.00
Number of Positions (LTCE)				0.05	0.05	
Personnel Expenditures						
Permanent Salaries		38,298	38,298	72,032	33,734	88.08
Payroll Taxes		549	549	1,020	471	85.79
Pension Benefits		7,402	7,402	14,565	7,163	96.77
FICA Replacement Benefits		705	705	1,457	752	106.67
Group Insurance Benefits		5,082	5,082	10,049	4,967	97.74
Transportation Subsidy		257	257	384	127	49.42
Workers' Compensation		84	84	160	76	90.48
Discretionary Contribution		2,216	2,216	3,821	1,605	72.43
Total Personnel Expenditures		54,593	54,593	103,488	48,895	89.56
Services & Supplies Expenditures						
Capital Expenditures						
Total Expenditures		54,593	54,593	103,488	48,895	89.56

Managing Division:

Strategic Incentives

Contact Person:

Minda Berbeco

Program Purpose:

Implement incentive programs for eligible projects that reduce emissions and community exposure to diesel exhaust and other pollutants associated with goods movement activities, primarily from mobile sources, through the administration of state grant funds from the Proposition 1B: Goods Movement Emission Reduction Program.

Essential Functions

- Develop/update policies and procedures in accordance with state requirements.
- Conduct outreach to interested parties and provide application assistance.
- Evaluate grant applications for eligibility with guidelines.
- Conduct inspections of the baseline and funded project equipment.
- Prepare grant award recommendations and coordinate the execution of funding agreements for the selected projects.
- Administer and monitor projects that have been awarded Goods Movement Program grants.
- Prepare and submit reports to the California Air Resources Board.
- Monitor, inspect, and audit current and previously funded programs and projects to assure compliance with State and Air District guidelines, policies, and statutory and regulatory requirements.
- Prepare technical, financial, and staff reports.

Strategic Plan Commitment	Strategic Plan Strategy
1.04.03 Review funding programs to reduce barriers to applying for funds and develop creative solutions for more variety of projects.	1.04 - Reimagine Funding
4.11.03 Be intentional in matching spending to be in alignment with achieving real impact by adopting new approaches to air quality management that focus on understanding and reducing disparities in local air pollution.	4.11 - Align Resources

CA GMB - Grants Administration (CGMB) 323

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	0.47	0.55	0.55	4.20	3.65	663.64
Number of Positions (LTCE)				0.10	0.10	
Personnel Expenditures						
Permanent Salaries	81,483	94,465	94,465	615,344	520,879	551.40
Payroll Taxes	1,222	1,362	1,362	8,656	7,294	535.54
Pension Benefits	21,061	18,090	18,090	123,638	105,548	583.46
FICA Replacement Benefits	1,786	1,941	1,941	15,658	13,717	706.70
Group Insurance Benefits	10,958	16,169	16,169	108,452	92,283	570.74
Transportation Subsidy	279	706	706	4,128	3,422	484.70
Workers' Compensation	239	232	232	1,723	1,491	642.67
Discretionary Contribution		5,456	5,456	32,435	26,979	494.48
Total Personnel Expenditures	117,028	138,421	138,421	910,034	771,613	557.44
Services & Supplies Expenditures						
Travel	21	1,000	1,000	1,000		
Postage				500	500	
Professional Services	5,116	5,000	9,321	40,000	30,679	329.14
Total Services & Supplies Expenditures	5,137	6,000	10,321	41,500	31,179	302.09
Capital Expenditures						
Transfer In/Out	55,315					
Total Expenditures	177,480	144,421	148,742	951,534	802,792	539.72

Volkswagen Environmental Mitigation Trust (VW Trust) 324

Managing Division:

Strategic Incentives

Contact Person:

Chengfeng Wang

Program Purpose:

The purpose of this program is to administer the Volkswagen Environmental Mitigation Trust funds to mitigate the lifetime excess oxides of nitrogen (NOx) emissions caused by VW's use of an illegal defeat device in the State of California.

Essential Functions

- Review and evaluate project applications to determine eligibility and prepare recommendations for award of eligible projects for approval.
- Prepare contracts, amendments, and correspondence; monitor projects, inspect, and audit programs and projects to assure compliance with grant agreements, Program guidelines, policies, and statutory and regulatory requirements; process reimbursement requests; and ensure project files are complete and up to date.
- Prepare and submit reports and funding disbursement requests to funding agencies; liaise with funding agencies on contract and guideline requirements.
- Maintain program website and program hotline.
- Prepare technical, financial, and staff reports, attend meetings, and participate in external audits.
- Coordinate with IT contractors to develop, enhance, and maintain data management systems.
- Develop, update program Implementation Manual, guidance materials, and administrative operating procedures; and develop solicitation packages and conduct outreach.

Strategic Plan Commitment	Strategic Plan Strategy
1.04.03 Review funding programs to reduce barriers to applying for funds and develop creative solutions for more variety of projects.	1.04 - Reimagine Funding
4.10.01 Put processes in place to ensure the successful launch and implementation of new rules and regulations, policy and program changes, new initiatives, and modifications to the strategic plan.	4.10 - Ensure Success

Volkswagen Environmental Mitigation Trust (VW Trust) 324

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	3.32	4.26	4.26	5.38	1.12	26.29
Number of Positions (LTCE)	0.02	0.10	0.10	0.10		
Personnel Expenditures						
Permanent Salaries	502,270	679,277	679,277	873,686	194,409	28.62
Payroll Taxes	7,757	9,744	9,744	12,329	2,585	26.53
Pension Benefits	110,850	131,529	131,529	176,101	44,572	33.89
FICA Replacement Benefits	11,092	15,382	15,382	19,946	4,564	29.67
Group Insurance Benefits	67,935	126,859	126,859	174,364	47,505	37.45
Transportation Subsidy	1,616	5,598	5,598	5,259	(339)	(6.06)
Workers' Compensation	1,471	1,837	1,837	2,195	358	19.49
Discretionary Contribution		39,158	39,158	46,197	7,039	17.98
Total Personnel Expenditures	702,991	1,009,384	1,009,384	1,310,077	300,693	29.79
Services & Supplies Expenditures						
Travel	109	13,700	13,700	13,700		
Training & Education		3,500	3,500	3,500		
Postage		500	500	500		
Printing & Reproduction		3,000	3,000	3,000		
Professional Services	48,535	60,800	63,262	104,000	40,738	64.40
Shop & Field Supplies		400	400	400		
Computer Hardware & Software		5,000	5,000	5,000		
Stationery & Office Supplies		1,000	1,000	1,000		
Books & Journals		500	500	500		
Minor Office Equipment		1,000	1,000	1,000		
Total Services & Supplies Expenditures	48,644	89,400	91,862	132,600	40,738	44.35
Capital Expenditures						
Computer & Network				50,000	50,000	
Total Capital Expenditures				50,000	50,000	
Transfer In/Out	319,444	456,811	456,811	589,535	132,724	29.05
Total Expenditures	1,071,079	1,555,595	1,558,057	2,082,212	524,155	33.64

- Page Intentionally Left Blank -

Special Revenue Fund

- Technology Implementation Office (TIO)

The Technology Implementation Office (TIO) mission is to advance emerging, cost-effective solutions to achieve greenhouse gas emissions reductions for the transportation and industrial source sectors. TIO will connect climate technologies and customers by providing financial incentives (through grants and loans) as well as technical and matchmaking support. Climate technology areas include zero emissions vehicles and infrastructure, zero emissions energy storage and backup systems, composting, and waste-to-energy projects (co-digestion, waste treatment, anaerobic digestion, combined heat and power). By supporting the scale-up of climate technologies, TIO can help achieve state and regional greenhouse gas emissions targets, reduce emissions in impacted communities, while also making technologies cost-effective even in regions without strong climate policies.

Light Duty Electric Vehicle Program (Other Grant) 317

Managing Division:

Technology Implementation

Contact Person:

Anthony Fournier

Program Purpose:

Administer funding, outreach, and planning to accelerate the adoption of light-duty (passenger) electric vehicles (EVs) and EV infrastructure in the Bay Area. Prior to FYE26 the Clean Cars for All program was included in account 317, but moved to account 330 for FYE26 and later years.

Essential Functions

- Administer grant programs, including updating policies and guidelines, conducting outreach, preparing program documents and communications, processing reimbursement requests, tracking project status, and conducting audits, for the Charge! program, CEC REACH grant, FHWA grant, and CMAQ grant.
- Organize and participate in workgroups and events to increase awareness about EVs, support deployment, sharing best practices, and regional coordination.
- Conduct analyses and planning to inform Air District strategy and programs.
- Prepare technical, financial, and staff reports.

Strategic Plan Commitment	Strategic Plan Strategy
1.04.02 Ask community members what changes they want to see in funding programs.	1.04 - Reimagine Funding
1.04.03 Review funding programs to reduce barriers to applying for funds and develop creative solutions for more variety of projects.	1.04 - Reimagine Funding
1.07.01 Maximize climate change benefits of regulations and nonregulatory programs.	1.07 - New Climate Solutions

Light Duty Electric Vehicle Program (Other Grant) 317

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	3.54	2.99	2.99	2.94	(0.05)	(1.67)
Number of Positions (LTCE)		0.30	0.30		(0.30)	(100.00)
Personnel Expenditures						
Permanent Salaries	557,969	522,711	522,711	496,859	(25,852)	(4.95)
Overtime Salaries	194	20,000	20,000	20,000		
Payroll Taxes	9,418	7,590	7,590	7,022	(568)	(7.48)
Pension Benefits	209,445	97,180	97,180	100,302	3,122	3.21
FICA Replacement Benefits	12,986	11,604	11,604	10,705	(899)	(7.75)
Group Insurance Benefits	78,646	71,212	71,212	78,470	7,258	10.19
Transportation Subsidy	1,342	4,223	4,223	2,822	(1,401)	(33.18)
Workers' Compensation	1,700	1,385	1,385	1,178	(207)	(14.95)
Discretionary Contribution		30,145	30,145	26,313	(3,832)	(12.71)
Total Personnel Expenditures	871,700	766,050	766,050	743,671	(22,379)	(2.92)
Services & Supplies Expenditures						
Travel	1,518	12,000	12,000	12,000		
Training & Education	749	3,000	3,000	3,000		
Communications	2,215					
Professional Services	782,626	787,000	1,366,141	630,000	(736,141)	(53.88)
Computer Hardware & Software		4,000	4,000	4,000		
Stationery & Office Supplies				5,000	5,000	
Total Services & Supplies Expenditures	787,108	806,000	1,385,141	654,000	(731,141)	(52.78)
Capital Expenditures						
Transfer In/Out	259,329	154,089	154,089	148,734	(5,355)	(3.48)
Total Expenditures	1,918,137	1,726,139	2,305,280	1,546,405	(758,875)	(32.92)

Clean Cars for All (CCFA) 330

Managing Division:

Technology Implementation

Contact Person:

Tin Le

Program Purpose:

Administer funding, outreach, and planning to accelerate the adoption of light-duty (passenger) electric vehicles in the Bay Area through the Clean Cars for All Program. Prior to FYE26 the Clean Cars for All program was included in Program 317.

Essential Functions

- Administer grant programs, including updating policies and guidelines, conducting outreach, preparing program documents and communications, processing reimbursement requests, tracking project status, and conducting audits, for the Clean Cars For All program.
- Organize and participate in workgroups and events to increase awareness about EVs, support deployment, sharing best practices, and regional coordination.
- Conduct analyses and planning to inform Air District strategy and programs.
- Prepare technical, financial, and staff reports.

Strategic Plan Commitment	Strategic Plan Strategy
1.04.02 Ask community members what changes they want to see in funding programs.	1.04 - Reimagine Funding
1.04.03 Review funding programs to reduce barriers to applying for funds and develop creative solutions for more variety of projects.	1.04 - Reimagine Funding
1.07.01 Maximize climate change benefits of regulations and nonregulatory programs.	1.07 - New Climate Solutions

Clean Cars for All (CCFA) 330

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	4.40	4.93	4.93	4.95	0.02	0.41
Number of Positions (LTCE)	0.22	2.70	2.70	2.00	(0.70)	(25.93)
Personnel Expenditures						
Permanent Salaries	653,050	1,035,458	1,035,458	974,928	(60,530)	(5.85)
Overtime Salaries	9,835	40,000	40,000	40,000		
Temporary Salaries		100,000	100,000	50,000	(50,000)	(50.00)
Payroll Taxes	9,551	14,898	14,898	13,708	(1,190)	(7.99)
Pension Benefits	55,441	190,489	190,489	195,764	5,275	2.77
FICA Replacement Benefits	13,927	26,919	26,919	25,315	(1,604)	(5.96)
Group Insurance Benefits	85,950	190,422	190,422	180,795	(9,627)	(5.06)
Transportation Subsidy	2,434	9,797	9,797	6,674	(3,123)	(31.88)
Workers' Compensation	1,847	3,214	3,214	2,786	(428)	(13.32)
Discretionary Contribution		59,508	59,508	51,356	(8,152)	(13.70)
Total Personnel Expenditures	832,035	1,670,705	1,670,705	1,541,326	(129,379)	(7.74)
Services & Supplies Expenditures						
Travel	746	24,000	24,000	25,000	1,000	4.17
Training & Education		6,500	6,500	7,500	1,000	15.38
Communications		7,000	7,000	7,000		
Printing & Reproduction	270					
Professional Services	171,416	790,000	990,012	1,235,000	244,988	24.75
Computer Hardware & Software		7,000	7,000	7,000		
Stationery & Office Supplies				10,000	10,000	
Total Services & Supplies Expenditures	172,432	834,500	1,034,512	1,291,500	256,988	24.84
Capital Expenditures						
Transfer In/Out	201,627			64,575	64,575	
Total Expenditures	1,206,094	2,505,205	2,705,217	2,897,401	192,184	7.10

SERVICE AREA - PUBLIC AFFAIRS

Special Revenue Fund

- Communication Division

The Communications Office manages advertising and outreach for Spare the Air and the Employer Programs. The Office maintains the Spare the Air website, related social media sites and the Spare the Air mobile apps. The Office represents the Air District at community events for Spare the Air throughout the region.

Office functions include production of publications and digital collateral for the general public and target audiences. This includes publishing newsletters, videos and collateral materials. The Office also provides and oversees graphic design services, social media content creation, translation services and videography.

Spare the Air Program (TFCA) 306

Managing Division:

Communications

Contact Person:

Kristina Chu

Program Purpose:

The Spare the Air program encourages the public to reduce their driving, a major source of Bay Area air pollution, and promotes the use of public transit, biking, walking, carpooling, trip reduction and other behavior changes that reduce pollution from transportation sources. The program also provides outreach to employers/employees through the Spare the Air Employer Program. Employers are targeted specifically due to their significant influence on the commute behaviors of their employees.

Essential Functions

- Prepare and issue media releases and respond to media inquiries related to the Spare the Air program.
- Conduct Spare the Air campaign to educate the public about individual choices to reduce air pollution.
- Manage Spare the Air public outreach campaigns for advertising, social media and media relations.
- Provide Spare the Air program public outreach at community events throughout the Bay Area.
- Notify the media and employers of Spare the Air Alerts through AirAlerts, press releases, websites, apps and social media sites.
- Manage STA employer outreach & advertising campaign.
- Manage and update Spare the Air website landing pages and provide regular updates, measurements and responses for social media sites.
- Notify the public of Spare the Air Alerts through AirAlerts, text alerts, the media, sparetheair.org, baaqmd.gov, the STA app and social media sites.
- Coordinate STA sponsorship of community events and fairs throughout the Bay Area.
- Create educational materials for the Spare the Air program.

Strategic Plan Commitment	Strategic Plan Strategy
2.01.01 Expand community partnership models to other communities impacted by air pollution.	2.01 - Community Partnership
4.06.02 Increase social media presence to expand youth outreach and engage young people	4.06 - Inspire Action
4.06.03 Expand our engagement through local media outlets in communities across the region.	4.06 - Inspire Action
4.06.04 Increase advertising to share more information about the ways to reduce pollution and the associated health benefits of cleaner air, especially at the local level.	4.06 - Inspire Action
4.06.05 Work with local government partners and Board of Directors to establish an increased presence in all nine Bay Area counties.	4.06 - Inspire Action

Spare the Air Program (TFCA) 306

	Audited Program Actual	Approved Program Budget	Amended Program Budget	Proposed Program Budget	FTE/Dollar Change	Percent Change
	2025	2026	2026	2027	$	%
Number of Positions (FTE)	2.95	3.35	3.35	2.87	(0.48)	(14.33)
Personnel Expenditures						
Permanent Salaries	420,210	514,364	514,364	445,375	(68,989)	(13.41)
Overtime Salaries	116,773	100,000	100,000	120,000	20,000	20.00
Temporary Salaries	4,115					
Payroll Taxes	6,682	7,413	7,413	6,280	(1,133)	(15.28)
Pension Benefits	99,110	99,226	99,226	89,701	(9,525)	(9.60)
FICA Replacement Benefits	9,532	11,831	11,831	10,454	(1,377)	(11.64)
Group Insurance Benefits	58,298	74,489	74,488	68,968	(5,520)	(7.41)
Transportation Subsidy	1,686	4,306	4,306	2,756	(1,550)	(36.00)
Workers' Compensation	1,226	1,413	1,413	1,150	(263)	(18.61)
Discretionary Contribution		29,642	29,642	23,532	(6,110)	(20.61)
Total Personnel Expenditures	717,632	842,684	842,683	768,216	(74,467)	(8.84)
Services & Supplies Expenditures						
Travel	2,905					
Printing & Reproduction	67					
Professional Services	1,550,336	1,538,000	1,909,526	3,000,000	1,090,474	57.11
Total Services & Supplies Expenditures	1,553,308	1,538,000	1,909,526	3,000,000	1,090,474	57.11
Capital Expenditures						
Transfer In/Out	337,777	381,165	381,165	325,389	(55,776)	(14.63)
Total Expenditures	2,608,717	2,761,849	3,133,374	4,093,605	960,231	30.65

- Page Intentionally Left Blank -

Special Revenue Fund

- External Affairs Office

In partnership with the Metropolitan Transportation Commission, External Affairs manages enforcement for Rule 14-1, Commuter Benefits program. Regular program updates are mailed to all registered employers, follow up is conducted with lapsed and unregistered employers to get them into compliance with the regional rule and maintain commuter benefits for their employees. Enforcement action is taken if employers fail to come into compliance after receiving warning from the Air District. Enforcement efforts are monitored and tracked and the team works with the Compliance and Enforcement Division and Legal Division if violations occur.

Commuter Benefits Program (TFCA) 319

Managing Division:

External Affairs

Contact Person:

Lisa Fasano

Program Purpose:

The Commuter Benefits Program is jointly managed by the Air District and the Metropolitan Transportation Commission. The Air District manages the compliance and enforcement potion of this rule as well as coordination with MTC on shared goals and program requirements. Implementation of the Commuter Benefits Program is designated per the requirements of Air District Regulation 14-1.

Essential Functions

- Perform outreach to affected employers.
- Continue education campaign for affected employers.
- Perform tracking and monitoring of program.
- Facilitate data reporting and storage for affected employers.
- Coordinate activities with Metropolitan Transportation Commission's 511.org.
- Prepare and implement a compliance and enforcement system.
- Maintain ongoing partnership with the Metropolitan Transportation Commission to administer and enforce this rule.
- Work with MTC to create greater awareness of the benefits, resources and GHG reductions of the Commuter Benefits Program to encourage greater employer/employee commuting partnership.

Strategic Plan Commitment	Strategic Plan Strategy
1.01.04 Prioritize actions that reduce inequitable exposures to air pollution.	1.01 - Change Approach to Air Quality
1.07.01 Maximize climate change benefits of regulations and nonregulatory programs.	1.07 - New Climate Solutions
4.05.03 Improve our program of compliance assistance through better information technology tools and access to compliance resources.	4.05 - Improve Compliance Investigations
4.11.01 Ensure we resource the goals identified in the 2024-2029 Strategic Plan.	4.11 - Align Resources
4.12.01 Track progress in implementing the 2024-2029 Strategic Plan.	4.12 - Report Progress

Commuter Benefits Program (TFCA) 319

	Audited Program Actual 2025	Approved Program Budget 2026	Amended Program Budget 2026	Proposed Program Budget 2027	FTE/Dollar Change $	Percent Change %
Number of Positions (FTE)		0.50	0.50	0.35	(0.15)	(30.00)
Personnel Expenditures						
Permanent Salaries		98,860	98,860	76,796	(22,064)	(22.32)
Payroll Taxes		1,532	1,532	1,092	(440)	(28.72)
Pension Benefits		19,894	19,894	15,595	(4,299)	(21.61)
FICA Replacement Benefits		1,764	1,764	1,274	(490)	(27.78)
Group Insurance Benefits		17,777	17,777	11,255	(6,522)	(36.69)
Transportation Subsidy		642	642	336	(306)	(47.66)
Workers' Compensation		211	211	140	(71)	(33.65)
Discretionary Contribution		5,724	5,724	4,091	(1,633)	(28.53)
Total Personnel Expenditures		146,404	146,404	110,579	(35,825)	(24.47)
Services & Supplies Expenditures						
Postage		20,000	20,000	10,000	(10,000)	(50.00)
Total Services & Supplies Expenditures		20,000	20,000	10,000	(10,000)	(50.00)
Capital Expenditures						
Transfer In/Out		66,263	66,263	49,761	(16,502)	(24.90)
Total Expenditures		232,667	232,667	170,340	(62,327)	(26.79)

- Page Intentionally Left Blank -

Appendices

APPENDIX A
SELECTED LEGAL REQUIREMENTS

The following highlights selected major legal requirements regarding the use and collection of funds that are considered when developing and reviewing the Air District's budget:

1. Federal law requires that the Air District collect fees from affected facilities to fund the implementation of Title V of the Federal Clean Air Act (42 U.S.C. Section 7401, *et seq*. and implementing regulations in 40 CFR Parts 60 and 70). Implementation of Title V includes all activities involved in the review, issuance, and enforcement of Title V Permits. "Affected facilities" include all major stationary sources as defined in the Federal Clean Air Act.
2. Revenue received by the Air District pursuant to California Health and Safety Code Section 44220, *et seq.* (Transportation Fund for Clean Air (TFCA)) may only be used to fund approved projects, and certain expenditures incurred for administration of the TFCA program, including audits. The expenditures for the administration of TFCA grants are contained in the Transportation Fund for Clean Air Administration.
3. Permit fee revenue may only be used to fund activities associated with the permitting, monitoring, and enforcement of regulations affecting permitted stationary sources. Past audits of District activities have shown that the Air District's programs meet this test.
4. Funding from several sources, including grants, is restricted, and thus may only be used to fund certain activities. Air District accounts are periodically audited to ensure that such funds are used appropriately.
5. California Health and Safety Code Section 40131(a)(3) requires that two public hearings be held regarding the adoption of the District budget. The first hearing is for the exclusive purpose of reviewing the budget and providing the public with the opportunity to comment upon the proposed budget. This hearing must be separate from the hearing at which the District adopts its budget. The adoption hearing may not be held any sooner than two weeks after the first hearing. Thirty (30) days public notice must be given before the first public hearing.
6. The Maintenance of Effort (MOE) level refers to a Federal EPA Section 105 grant condition. This condition states that, "No agency shall receive any grant under this section during any fiscal year when its expenditures of non-Federal funds for recurrent expenditures for air pollution control programs will be less than its expenditures were for such programs during the preceding fiscal year unless the Administrator, after notice and opportunity for public hearing, determines that a reduction in expenditures is attributable to a non-selective reduction in the expenditures in the programs of all Executive branch agencies of the applicable unit of Government." Depending on the expenditures reported on the Federal Status Report (FSR) at the conclusion of the prior fiscal year, receipt of the Federal grant funds for current fiscal year could be delayed or jeopardized because of this MOE requirement.

APPENDIX B

PROJECTED GENERAL FUND RESERVES AND LIABILITIES

	FY 2025-2026 Projected Balance	Transfer in	Transfer Out	Adjustment	FY 2026-2027 Projected Balance
Committed (Reserve Designations)*					
Economic Contingency Designations					
AB617 Staffing Contingency	9,000,000			(5,000,000)	4,000,000
Federal Grant Contingency	1,650,000			(1,650,000)	
Litigation Support Contigency	3,655,000		(625,000)	(1,030,000)	2,000,000
Reserve Policy (X% of Budget)**	40,243,000			(217,000)	40,026,000
	54,548,000		**(625,000)**	**(7,897,000)**	**46,026,000**
Long Term Commitment Designations					
Community Benefits	3,000,000				3,000,000
Information Technology Projects				1,000,000	1,000,000
Staffing Investment	2,913,639		(1,196,067)	8,825,384	10,542,956
Schedule X - Operating	4,035,634		(1,709,806)		2,325,828
Schedule X - Capital	1,125,000		(877,500)		247,500
Technology Implementation Office	2,850,000			(2,850,000)	
	13,924,273		**(3,783,373)**	**6,975,384**	**17,116,284**
Other Designations					
Air Toxic Study				4,000,000	4,000,000
Appliance Rule Outreach	2,500,000		(2,500,000)		
Real Property and Facility Projects	3,000,000			1,050,000	4,050,000
Incident Monitoring Program	1,000,000		(700,000)	(300,000)	
One-time professional cost	2,075,000		(415,200)		1,659,800
Prefund Pension Trust	10,000,000		(10,000,000)		
Wildfire Mitigation	288,782		(14,969)	(273,813)	
Woodsmoke (Enforcement)	497,912		(312,928)		184,984
Woodsmoke Program (SID)	473,850		(15,528)		458,322
	19,835,544		**(13,958,625)**	**4,476,187**	**10,353,106**
Total Committed (Reserve Designations)	**88,307,817**		**(18,366,998)**	**3,554,571**	**73,495,390**
Unassigned (Available Reserve Balance)	**22,931**	**13,564,593**	**(20,223,976)**	**6,638,487**	**2,035**
Total General Fund Operating Reserve	**88,330,748**	**13,564,593**	**(38,590,974)**	**10,193,058**	**73,497,425**
Community Benefit Reserves - 9% Admin Portion	**6,170,561**	**389,310**	**(3,767,876)**		**2,791,995**
Community Benefit Reserves - 91% Project Portion	**95,779,297**	**3,936,442**	**(95,590,345)**		**4,125,394**

* Reserve Designations are subject to change at Board's discretion.
** Policy range is 25-35%. Fiscal Year Ending 2027 reflects the 25% minimum amount.

ESTIMATED OUTSTANDING LIABILITIES as of June 30, 2025	
CalPERS Pension Retirement Plan with 115 Trust	91,904,084
Other Post Employment Benefit Plan	6,283,387
Certificate of Participation Notes	21,881,520
TOTAL	**120,068,991**

APPENDIX B (continued)

PROJECTED GENERAL FUND RESERVES AND LIABILITIES (cont.)

APPENDIX B depicts the projected unrestricted reserves amount for FY 2025-2026 (FYE 2026) and FY 2026-2027 (FYE 2027). The Beginning Reserve Balance is projected to decrease from $88.3 million in FYE 2026 to $73.5 million in FYE 2027, representing a net reduction of approximately $14.8 million. This change reflects planned financial activities impacting reserve levels during the fiscal period. Despite the projected decrease, the reserve balance is expected to remain at a substantial level, providing continued financial stability while supporting planned operational or capital funding needs.

Transfers into reserves are projected to total $13.6 million, reflecting the FYE 2025 operating surplus. Planned transfers out of reserves total $38.6 million, including $18.4 million in FYE 2026 transfers to date from various designated reserve accounts, such as the prefunded pension trust and appliance rule outreach. The remaining $20.2 million reflects FYE 2027 recommended uses of reserves, including $8.9 million as a short-term investment in staffing to support the permit backlog reduction plan and to address operational needs across multiple divisions. An additional $11.3 million is recommended for capital projects, equipment, and other one-time costs. Adjustments totaling $10.2 million partially offset the reserve drawdown and represent reserves that were initially projected for use in the FYE 2025 budget but ultimately were not needed due to the operating surplus. The Projected FYE 2027 balance of $73.5 million is allocated into the following three major categories: $50 million in Economic Contingency Designation, $16.1 million in Long-Term Commitment Designation and $10.3 million in Other Designations.

Including in the General Fund unrestricted reserves, is the Community Benefit Reserves, which has been allocated into two designations, the Community Benefit Reserves Admin portion and Community Benefit Reserves Project portion. These funds were derived from penalty assessments which are being reinvested back into the communities most impacted by air pollution. The FYE 2027 recommendation includes $3.8 million of administrative portion to support the Community Investment Office and $96 million of the project portion for local community grants.

To remain fiscally prudent, the Air District established an economic contingency reserve policy (percentage of General Fund operating expense) to ensure the stability of services for a period of time and the ability to set aside funds for anticipated projects and future obligations. Over the years, staff recommended reserve designations to be set aside for a specific purpose. The following is a brief description summarizing designated categories as shown in the table on the previous page. Any designated and undesignated funds are subject to change at the Board of Director's discretion.

- **AB617 Staffing Contingency** was established in FYE 2022 to allow staffing continuity for the AB617 program.
- **Air Toxic Study** was established in FYE 2027 to support the implementation of a regional air toxics monitoring, modeling, and health risk assessment study in the Bay Area.
- **Appliance Rule Outreach** was established in FYE 2026 to was established in FYE 2026 to support outreach, education, and communications for Rules 9-4 and 9-6.
- **Real Property and Facility Project** was established in FYE 2023 to continue office space improvements and other real property acquisitions.
- **Community Benefits** was established in FYE 2022 to provide community benefits.
- **Community Benefit Fund Reserves** – **Admin** was established in FYE 2024 to support the Community Investment Office in administering the community benefit program.
- **Community Benefit Fund Reserves** – **Project** was established in FYE 2024 to create an opportunity to direct significant resources back into the communities where air quality violations occurred.

APPENDIX B (continued)

PROJECTED GENERAL FUND RESERVES AND LIABILITIES (cont.)

- **Federal Grant Contingency** was established in FYE 2025 to address continuity of certain federal funded administrative and program cost.
- **Incident Monitoring Program** was established in FYE 2024 to increase capacity to characterize air quality impacts from large incidents at facilities.
- **Information Technology Project** was established in FYE 2027 to support the future replacement of the financial accounting system.
- **Litigation Support Contingency** was established in FYE 2023 to address potential litigations.
- **One-time professional cost** was established in FYE 2026 to support funding various operational services.
- **Prefund Pension Trust** was established in FYE 2026 to increase the additional discretionary contributions to the pension 115 trust account.
- **Reserves Policy Contingency** was established in FYE 2008 at the request of the Board for unplanned expenditure and/or unanticipated loss in revenues. In FYE 2025, the board amended the policy to 25-35%.
- **Schedule X (Operating & Capital)** was implemented in FYE 2017 to establish and operate refinery-related community air monitoring systems.
- **Staffing Investment** was established in FYE 2024 to support temporary staffing for unanticipated project work and to support the permit reduction backlog plan approved in 2025.
- **Technology Implementation Office** was established in FYE 2019 to fund projects using a revolving loan arrangement to leverage funding for technologies that reduce greenhouse gas emissions
- **Unassigned Reserves** are any remaining reserves without designations. These funds can be designated at any time.
- **Wildfire Mitigation** was established in FYE 2022 to fund the wildfire air quality response program.
- **Woodsmoke Program** was established in FYE 2018 to support funding changeout of residential heating woodburning devices.

Appendix B also includes a list of the Air District's Outstanding Liabilities:

- **Pension Retirement** – The Air District provides retirement pension benefits through the California Public Employees' Retirement System (CalPERS). As of June 30, 2025, the Air District's estimated unfunded pension liability is $92 million, based on the $114 million liability reported in the 2024 valuation and partially offset by approximately $22 million in assets held in the Section 115 prefunding trust.
- **Other Post-Employment Benefits** – The Air District provides continuation of medical, dental, vision and life insurance coverage to its retired employees through California Employers Retirement Benefit Trust (CERBT). As of the 2023 valuation of the plan, that Air District's unfunded liability for the plan is $6.3 million.
- **Certificate of Participation Notes (COP)** – The Air District issued COPs to finance its headquarters at 375 Beale. As of June 2025, the estimated principal and interest outstanding were $21.9 million.

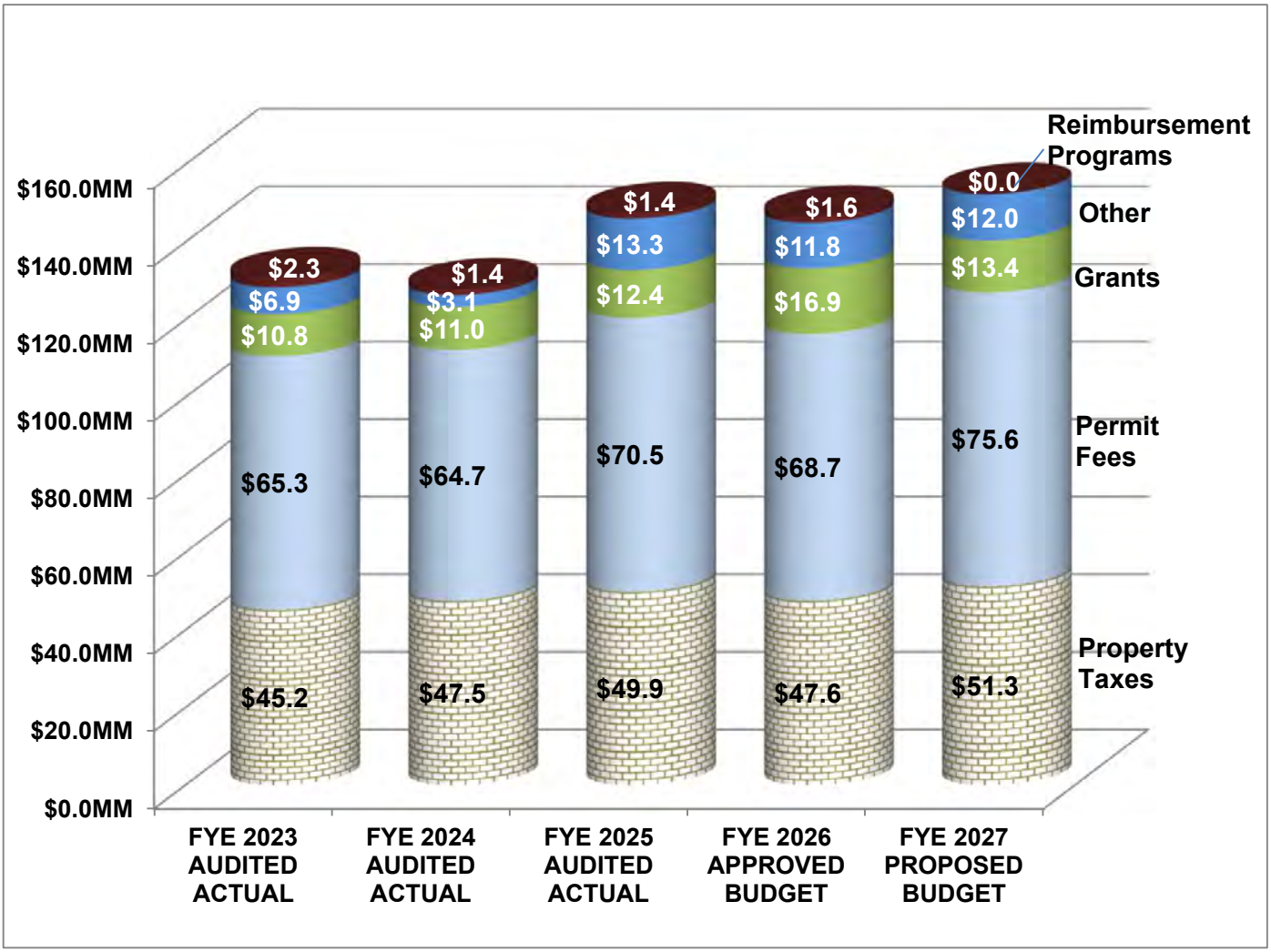
APPENDIX C

Figure 1

General Fund Revenue Trends - FYE 2027

Below Figure 1 graphically displays the trends in the sources of actual revenues used to fund actual expenditures each year from FYE 2023 through FYE 2025 along with the approved budget for FYE 2026 and the proposed budget for FYE 2027.

As seen here, permit fees are the Air District's largest source of revenue. Actual permit revenues fluctuate from FYE 2023 through FYE 2025 because of fee increases to each individual fee schedule based on the cost recovery policy and new fees implemented during the period. In FYE 2027 projected permit revenues are expected to have 10.1% increase. Actual property tax revenues maintained an increasing trend over the past three years attributed to multiple factors such as the annual statutory increases limited to 3%, changes in ownership and new construction in the Bay Area. This revenue source is expected to continue to increase in FYE 2027. Other General Fund sources of revenue have experienced small fluctuations over the years.



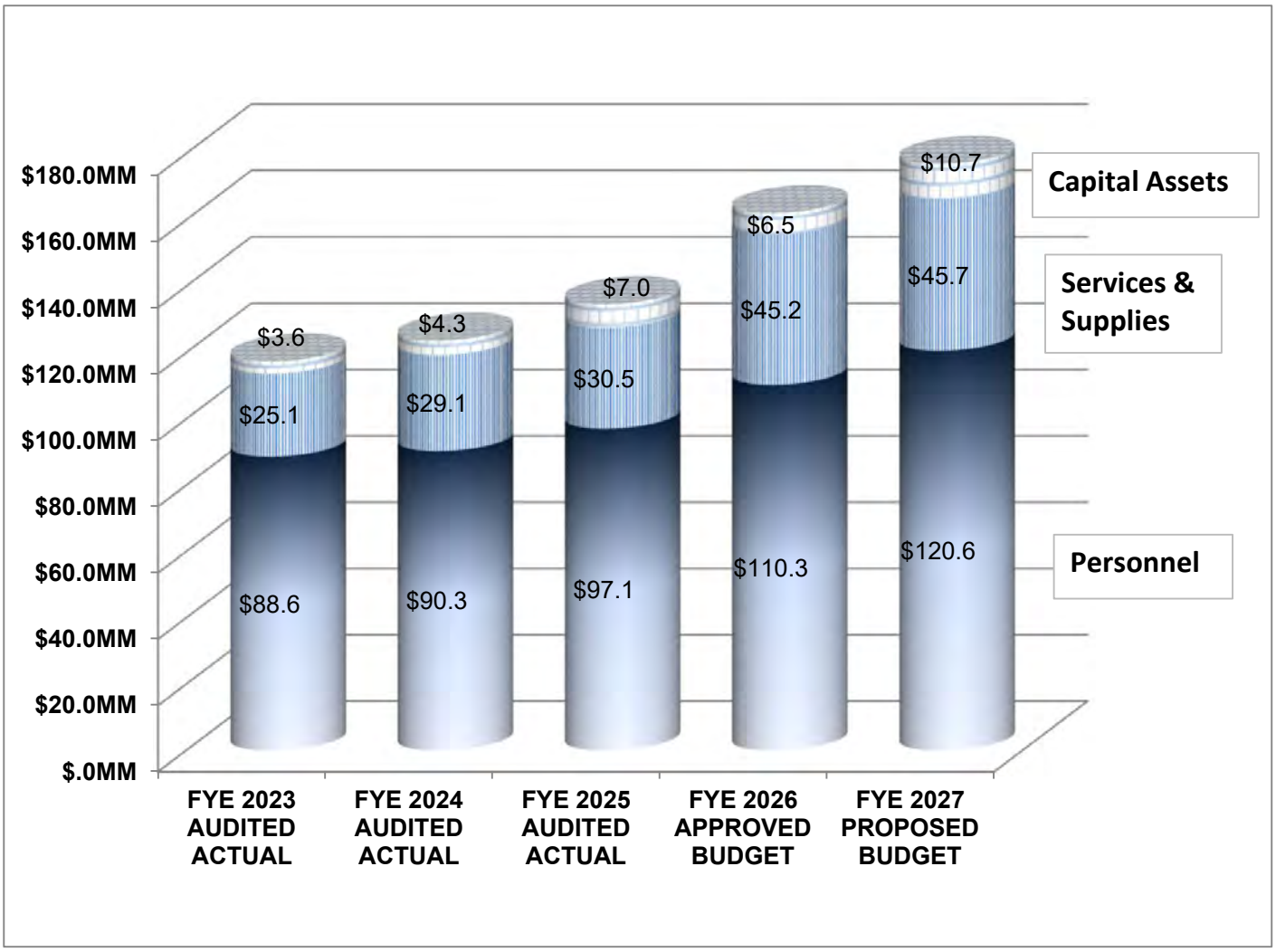
APPENDIX D

Figure 2

General Fund Expenditure Trends - FYE 2027

Below Figure 2 shows the trends in actual expenditures from FYE 2023 through FYE 2025 along with the approved expenditure budget for FYE 2026 and the proposed budget for FYE 2027. These figures do not include Distributions and Transfers.

From FYE 2023 through FYE 2027, the General Fund total has risen at an average rate of 12.7% per year from $117.3 million to $176.9 million due to increased Personnel Costs, Services, and Capital Asset expenditures. The FYE 2027 General Fund Proposed Budget shows a projected $14.9 million increase in expenditures over FYE 2026, due primarily to a 9.3% increase in Personnel costs, a 1.0% increase in Services, and a 64.8% increase in Capital Asset costs.



APPENDIX E

General Fund 5 Year Projection

Figure 3

Five Year Forecast General Fund	FYE 2027 Projected	FYE 2028 Projected	FYE 2029 Projected	FYE 2030 Projected	FYE 2031 Projected
REVENUE					
Property Tax	51,300,000	52,839,000	53,895,780	54,973,696	56,073,170
Permits/Fees	75,620,529	79,568,321	87,371,718	96,612,916	107,202,699
Grant Revenues	3,812,873	3,851,002	3,889,512	3,928,407	3,967,691
AB617 Funding	9,580,120	7,881,973	7,912,480	7,892,150	8,028,605
Other Revenue	12,022,011	12,310,102	12,109,447	11,892,367	11,971,291
Transfer in - Special Funds	1,968,113	2,007,475	2,047,625	2,088,577	2,130,349
TOTAL REVENUE	**154,303,645**	**158,457,873**	**167,226,562**	**177,388,113**	**189,373,805**
(Use of)/Transfer to Reserves	(20,176,438)	(6,693,666)	(4,016,643)	7,283,373	16,204,933
(Use of) Community Benefit Fund	(3,767,876)	(2,791,995)	-	-	-
EXPENDITURE					
Personnel	120,562,918	121,560,453	124,831,512	122,968,814	125,090,227
Services & Supplies	47,009,184	41,884,128	42,721,811	43,576,247	44,447,772
Capital	10,675,857	4,498,953	3,689,882	3,559,680	3,630,873
TOTAL EXPENDITURE	**178,247,960**	**167,943,534**	**171,243,205**	**170,104,741**	**173,168,872**
GENERAL FUND RESERVES					
Beginning Balance	**93,673,862**	**73,497,424**	**66,803,758**	**62,787,114**	**70,070,487**
(Use of)/Transfer to Reserve	(20,176,438)	(6,693,666)	(4,016,643)	7,283,373	16,204,933
Ending Balance	**73,497,424**	**66,803,758**	**62,787,114**	**70,070,487**	**86,275,420**
(Use of) Community Benefit Fund	(3,767,876)	(2,791,995)			
25% Minimum Reserve Policy	40,909,000	41,986,000	42,811,000	42,527,000	43,293,000

APPENDIX E

Figure 3 and Budget Assumptions

Revenue Assumptions

a) Property Tax has historically risen across the Bay Area much higher than the standard 2% annual increase, reflecting the region's robust real estate market. However, This projection anticipates more modest growth, influenced by local economic conditions. The forecast period assumes a 3% increase in property tax revenues for FYE 2028, followed by a 2% annual growth rate through FYE 2031.
b) **Permits/Fees** revenues are projected to increase by approximately 5-11% during the forecast period to help recover a greater share of permit-related costs. These increases are intended to support proposed staffing expansions as the Air District continues to address workforce needs for core permit-related programs, including the permit reduction backlog program. The Air District's Cost Recovery Policy permits adjustments to the fee schedule to ensure cost recovery for permit-related activities. While the current cost recovery level stands at 90%, it is expected to decline during the forecast period due to additional staffing. However, by FYE 2030 and FYE 2031, cost recovery is projected to improve as permit revenues rise to sustain these new positions.
c) **Grant Revenues** which reflect federal grant funding, will remain stable through FYE 2031.
d) **Assembly Bill 617 funding** provides annual funding of approximately $9 million from the State. In addition to the annual allocations, there are accumulated grant funds from previous years that are planned to be utilized through FYE 2031.
e) **Other Revenues** mainly account for Penalties, State Subvention, and interest income. These revenues are expected to remain stable through FYE 2031.
f) **Transfer in – Special Funds** represents indirect funds received from various state grants that help partially offset the General Fund's overhead costs associated with supporting these grant programs. These revenues are projected to remain stable through FYE 2031.

Expenditure Assumptions

a) **Personnel** costs are projected to rise over the next five years, driven by anticipated wage adjustments and benefits costs. In FYE 2027, staffing levels will remain at 574 positions, with no new staffing increases being proposed. Of the 574 positions, 36 represent limited term contract positions. The projections assume a 10% vacancy rate in 2027, decreasing to 9% IN 2028. These projections may change if staffing levels adjust during the forecast period.
b) **Retirement Pension** costs are increasing due to changes in actuarial assumptions and higher staffing levels. The forecast includes the Air District's approved policy to allocate $1.0 million in discretionary payments to the 115 Trust to reduce the unfunded actuarial liability (UAL).
c) **Other Post-Employment Benefits (OPEB)** for retiree medical benefits are projected to remain above the 90% funding level for the forecast period. If this assumption holds, the $4.0 million in discretionary funding will shift towards reducing the retirement pension UAL.
d) **Services and Supplies** include a range of services that support operational needs. Costs are projected to decline in FYE 2028 due to the removal of one-time expenditures. Beyond this adjustment, expenses are expected to grow modestly, reflecting an assumed annual inflationary increase of approximately 2% throughout the 5 year forecast period.
e) **Capital Expenditures assumes** both ongoing and one-time capital in FYE 2027 to pay for equipment purchases and information technology improvements. FYE 2028-2031 assumes normal capital equipment replacement only, with an inflationary increase.

General Fund Reserves are used to fund one-time costs, and to cover temporary revenue shortfalls. The $20.2 million in reserves, which includes $9.8 million in ongoing from previous years' budget approval and $10.4 million in new investments, provide critical staffing resources, capital assets, and one-time services essential to fulfilling our mission. Additional $3.8 million from the Community Benefit Fund is to cover the Community Investment Office administrative budget. This forecast projects use of reserves in FYE 2027 through FYE 2029 to cover the temporary revenue shortfall. Based on current assumptions, reserves are expected to stay above the minimum policy level through FYE 2031 due to a healthy reserve balance. Approximately $73.5 million in reserves have been designated. Please see Appendix B for a detailed list of proposed designations.

APPENDIX F Table 1 - Fiscal Year 2027 Full Time Equivalent (FTE)

The positions listed in Table 1, below, constitute the entirety of authorized permanent full-time positions and Division assignments at the designated classifications presented in the "FYE 26 Mid-Yr APPROVED" column. The "FYE 27 PROPOSED" column represents proposed changes to the designated classifications and/or Division assignments, if any, which is reflected in the "DIFF" column. The total proposed staffing for FYE 2027 is 538 FTEs.

Service Area / Division	Position Classification	Salary Range ID	FYE 26 APPROVED	FYE 26 Mid-Yr APPROVED	FYE 27 PROPOSED	DIFF
Engineering & Compliance Service Area						
	Deputy Executive Officer	169	1	1	1	
Compliance & Enforcement						
	Administrative Assistant I/II	114/118	2	2	2	
	Air Quality Specialist I/II	130/134	49	49	49	
Add/Del	Air Quality Technician I/II	122/126	6	6	5	**-1**
Add/Del	Assistant Air Quality Specialist I/II	122/126	1	1		**-1**
Reclassification	Director/Officer	156	1	1		**-1**
Reclassification	Director	156			1	**1**
Reclassification/Add/Del	Manager II	148	5	5	3	**-2**
	Principal Air Quality Engineer	144	1	1	1	
	Principal Air Quality Specialist	142	2	2	2	
	Radio/Telephone Operator	113	4	4	4	
	Senior Advanced Projects Advisor	148	1	1	1	
	Senior Air Quality Engineer	140	2	2	2	
	Senior Air Quality Specialist	138	13	13	13	
	Senior Air Quality Technician	130	2	2	2	
Add/Del	Senior Manager	152			2	**2**
Add/Del	Supervising Air Quality Specialist	142	10	10	12	**2**
Compliance & Enforcement Total			99	99	99	
Engineering						
	Administrative Assistant I/II	114/118	4	4	4	
Add/Del	Air Quality Engineer I/II	132/136	21	23	24	**1**
Add/Del	Air Quality Permit Technician I/II	122/126	2	2	1	**-1**
Add/Del	Air Quality Specialist I/II	130/134	4	9	7	**-2**
Add/Del	Air Quality Technician I/II	122/126	5	4	5	**1**
Reclassification/Transfer	Assistant Manager	147	1	1		**-1**
Reclassification	Director/Officer	156	1	1		**-1**
Reclassification	Director	156			1	**1**
Reclassification	Manager I	146		1	1	
Reclassification	Manager II	148	5	3	3	
	Principal Air Quality Engineer	144	6	7	7	
	Senior Advanced Projects Advisor	148	1	1	1	
	Senior Air Quality Engineer	140	14	15	15	
	Senior Air Quality Specialist	138		1	1	
Add/Del	Senior Air Quality Technician	130	1		1	**1**
	Supervising Air Quality Engineer	144	12	13	13	
	Supervising Air Quality Specialist	142	1	1	1	
	Senior Manager	152		2	2	
Transfer	Supervising Systems Analyst	139	1	1		**-1**
	Toxicologist	144	1	1	1	
Engineering Total			80	90	88	**-2**
Source Test						
	Air Quality Engineer I/II	132/136	3	3	3	
	Air Quality Specialist I/II	130/134	4	4	4	
	Assistant Staff Specialist I/II	122/126	1	1	1	
Reclassification	Manager II	148	1	1		**-1**
	Principal Air Quality Engineer	144	1	1	1	
	Principal Air Quality Specialist	142	1	1	1	
	Senior Air Quality Engineer	140	2	2	2	
	Senior Air Quality Specialist	138	1	1	1	
	Supervising Air Quality Engineer	144	1	1	1	
	Supervising Air Quality Specialist	142	1	1	1	
Reclassification	Senior Manager	152			1	**1**
Source Test Total			16	16	16	
Engineering & Compliance Service Area Total			**196**	**206**	**204**	**-2**

APPENDIX F Table 1 - Fiscal Year 2027 Full Time Equivalent (FTE)

Service Area / Division	Position Classification	Salary Range ID	FYE 26 APPROVED	FYE 26 Mid-Yr APPROVED	FYE 27 PROPOSED	DIFF
Equity & Community Programs Service Area						
	Deputy Executive Officer	169	1	1	1	
Civil Rights						
Reclassification	Director/Officer	156	1	1		**-1**
Reclassification	Officer	156			1	**1**
Transfer	Senior Staff Specialist	138			1	**1**
	Staff Specialist I/II	130/134	1	1	1	
Civil Rights Total			2	2	3	**1**
Community Investments						
	Assistant Staff Specialist I/II	122/126	1	1	1	
Reclassification	Director/Officer	156	1	1		**-1**
Reclassification	Officer	156			1	**1**
	Manager II	148	1	1	1	
	Staff Specialist I/II	130/134	1	1	1	
	Supervising Staff Specialist	142	1	1	1	
Community Investments Total			5	5	5	
Environmental Justice						
	Administrative Assistant I/II	114/118	1	1	1	
Reclassification	Assistant Manager	147	1	1		**-1**
	Assistant Staff Specialist I/II	122/126	1	1	1	
Reclassification	Director/Officer	156	1	1		**-1**
Reclassification	Director	156			1	**1**
Reclassification	Manager I	146			1	**1**
Reclassification	Manager II	148	3	3	3	
	Public Information Officer II	130/134	1	1	1	
	Senior Advanced Projects Advisor	148	1	1	1	
Add/Del	Senior Air Quality Engineer	140	1	1		**-1**
	Senior Policy Advisor	148	1	1	1	
Add/Del/Transfer	Senior Staff Specialist	138	7	7	8	**1**
Add/Del	Staff Specialist I/II	130/134	6	6	5	**-1**
Environmental Justice Total			24	24	23	**-1**
Diversity, Equity & Inclusion						
Reclassification	Director/Officer	156	1	1		**-1**
Reclassification	Officer	156			1	**1**
	Senior Staff Specialist	138	1	1	1	
	Staff Specialist I/II	130/134	1	1	1	
	Supervising Staff Specialist	142	1	1	1	
Diversity, Equity & Inclusion Total			4	4	4	
Strategic Incentives						
	Administrative Assistant I/II	114/118	1	1	1	
Add/Del	Assistant Staff Specialist I/II	122/126	7	7	6	**-1**
Reclassification	Director/Officer	156	1	1		**-1**
Reclassification	Director	156			1	**1**
Reclassification	Manager II	148	4	4	4	
	Principal Staff Specialist	142	1	1	1	
	Senior Staff Specialist	138	6	6	6	
	Staff Specialist I/II	130/134	10	10	10	
Add/Del	Supervising Staff Specialist	142	5	5	6	**1**
Strategic Incentives Total			35	35	35	
Technology Implementation						
	Assistant Staff Specialist I/II	122/126	2	2	2	
Reclassification	Director/Officer	156	1	1		**-1**
Reclassification	Director	156			1	**1**
Reclassification	Manager II	148	1	1	1	
	Senior Staff Specialist	138	2	2	2	
Add/Del	Staff Specialist I/II	130/134	4	4	3	**-1**
Add/Del	Supervising Staff Specialist	142	1	1	2	**1**
Technology Implementation Total			11	11	11	
Equity & Community Programs Service Area Total			**82**	**82**	**82**	

APPENDIX F Table 1 - Fiscal Year 2027 Full Time Equivalent (FTE)

Service Area / Division		Position Classification	Salary Range ID	FYE 26 APPROVED	FYE 26 Mid-Yr APPROVED	FYE 27 PROPOSED	DIFF
Finance & Administration Service Area							
		Deputy Executive Officer	169	1	1	1	
Administrative Resources							
	Reclassification	Director/Officer	156	1	1		**-1**
	Reclassification	Director	156			1	**1**
		Facilities Maintenance Worker	108	1	1	1	
	Reclassification	Manager II	148	1	1	1	
		Senior Executive Assistant	134	1	1	1	
	Add/Del	Senior Staff Specialist	138	1	1	2	**1**
	Add/Del	Staff Specialist I/II	130/134	9	9	8	**-1**
		Supervising Staff Specialist	142	2	2	2	
	Administrative Resources Total			16	16	16	
Executive							
		Administrative Assistant I/II	114/118	1	1	1	
		Clerk of the Boards	132	1	1	1	
		Deputy Air Pollution Control Officer	160	1			
		Executive Assistant I/II	128/132	3	4	4	
		Executive Officer/Air Pollution Control Officer	Contract	1	1	1	
		Manager II	148	2	2	2	
		Principal Deputy Executive Officer/COO	173		1	1	
	Transfer	Principal Environmental Planner	142			1	**1**
		Senior Executive Assistant	134	3	3	3	
	Executive Total			12	13	14	**1**
Finance							
		Accountant I/II	130/134	4	4	4	
		Accounting Assistant I/II	122/126	4	4	4	
	Reclassification	Analyst II	134			1	**1**
	Reclassification	Director/Officer	156	1	1		**-1**
	Reclassification	Director	156			1	**1**
		Fiscal Services Supervisor	142	1	1	1	
	Reclassification	Human Resources Analyst I/II	130/134	1	1		**-1**
	Reclassification	Manager II	148	3	3	3	
		Senior Accountant	138	1	1	1	
	Transfer	Senior Advanced Projects Advisor	148	1	1		**-1**
	Reclassification	Senior Payroll Analyst	138	1	1		**-1**
	Reclassification	Senior Analyst	138			1	**1**
		Senior Staff Specialist	138	1	1	1	
		Staff Specialist I/II	130/134	1	1	1	
	Finance Total			19	19	18	**-1**
Human Resources							
	Reclassification	Analyst II	134			3	**3**
	Reclassification	Director/Officer	156	1	1		**-1**
	Reclassification	Director	156			1	**1**
	Reclassification	Human Resources Analyst I/II to Analyst I/II	130/134	3	3		**-3**
		Human Resources Technician	122/126	1	1		**-1**
		Manager II	148	2	2	2	
	Reclassification	Principal Human Resources Analyst	142	2	2		**-2**
	Reclassification	Principal Analyst	142			2	**2**
	Reclassification	Technician	122/126			1	**1**
	Reclassification	Senior Human Resources Analyst	138	3	3		**-3**
	Reclassification	Senior Analyst	138			3	**3**
	Human Resources Total			12	12	12	
Finance & Administration Service Area Total				**60**	**61**	**61**	

APPENDIX F Table 1 - Fiscal Year 2027 Full Time Equivalent (FTE)

Service Area / Division	Position Classification	Salary Range ID	FYE 26 APPROVED	FYE 26 Mid-Yr APPROVED	FYE 27 PROPOSED	DIFF
Information Management Service Area						
	Deputy Executive Officer	169	1	1	1	
Transfer/reclassification	Deputy Air Pollution Control Officer	160	1	1		**-1**
Enterprise Technology Solutions						
Reclassification	Assistant Manager	147	4	4		**-4**
Transfer	Assistant Staff Specialist I/II	122/126	1	1		**-1**
Reclassification	Director/Officer	156	1	1		**-1**
Reclassification	Director	156			1	**1**
Reclassification/Add/Del	Manager I	146	1	1	4	**3**
Reclassification/Add/Del	Manager II	148			1	**1**
Pending reclassification	Principal Analyst	142		1	1	
Pending Reclassification/Add/Del	Senior Systems Analyst	139		3	4	**1**
Transfer	Supervising Staff Specialist	142			1	**1**
Pending Reclass/Transfer/Add/Del	Supervising Systems Analyst	143	1	1	2	**1**
Reclassification/Transfer/Add/Del	Systems Analyst	135	4	3	2	**-1**
	Web Master	135	1	1	1	
Enterprise Technology Solutions Total			13	16	17	**1**
Information Services						
	Air Quality Specialist I/II	130/134	1	1	1	
Transfer	Assistant Staff Specialist I/II	122/126			1	**1**
	Assistant Air Quality Specialist I/II	122/126	1	1	1	
Transfer/Add/Del	Director	156			1	**1**
Reclassification/Transfer	Manager I	146			1	**1**
Reclassification	Manager II	148	3	3	3	
	Principal Cybersecurity Analyst	142	1	1	1	
	Programmer Analyst I/II	127/131	1	1	1	
Transfer	Supervising Staff Specialist	142	1	1		**-1**
Pending Reclassification	Supervising Systems Analyst	143	2	2	2	
Pending Reclassification/Add/Del	Senior Systems Analyst	139			2	**2**
Reclassification/Transfer/Add/Del	Systems Analyst	135	4	4	2	**-2**
Information Services Total			14	14	16	**2**
Information Management Service Area Total			**29**	**32**	**34**	**2**
General Counsel Service Area						
Legal						
	Assistant Counsel I/II	149/153	10	10	10	
Reclassification	Executive Assistant I/II	128/132			1	**1**
	General Counsel	Contract	1	1	1	
Reclassification	Legal Office Services Specialist	124	1	1		**-1**
	Senior Assistant Counsel	157	2	2	2	
	Staff Attorney	145	1	1	1	
	Staff Specialist I/II	130/134	4	4	4	
Legal Total			19	19	19	
General Counsel Service Area Total			**19**	**19**	**19**	

APPENDIX F Table 1 - Fiscal Year 2027 Full Time Equivalent (FTE)

Service Area / Division	Position Classification	Salary Range ID	FYE 26 APPROVED	FYE 26 Mid-Yr APPROVED	FYE 27 PROPOSED	DIFF
Public Affairs Service Area						
	Deputy Executive Officer	169	1	1	1	
Communications						
	Assistant Staff Specialist I/II	122/126	2	2	2	
Reclassification	Director/Officer	156	1	1		**-1**
Reclassification	Director	156			1	**1**
Reclassification	Manager II	148	2	2	2	
Add/Del	Public Information Officer I/II	130/134	7	7	6	**-1**
Add/Del	Senior Public Information Officer	138	1	1	2	**1**
Communications Total			13	13	13	
External Affairs						
	Assistant Staff Specialist I/II	122/126	1	1	1	
Reclassification	Director/Officer	156	1	1		**-1**
Reclassification	Officer	156			1	**1**
Reclassification	Manager II	148	1	1		**-1**
Reclassification	Manager I	146			1	**1**
	Staff Specialist I/II	130/134	2	2	2	
External Affairs Total			5	5	5	
Legislative and Government Affairs						
Reclassification	Director/Officer	156	1	1		**-1**
Reclassification	Officer	156			1	**1**
	Staff Specialist I/II	130/134	1	1	1	
Legislative and Government Affairs Total			2	2	2	
Public Affairs Service Area Total			**21**	**21**	**21**	
Policy Service Area						
	Deputy Executive Officer	169	1	1	1	
Planning & Climate Protection						
	Advanced Projects Advisor	144	1	1	1	
Reclassification	Assistant Manager	147	1	1		**-1**
	Assistant Staff Specialist I/II	122/126	1	1	1	
Reclassification	Director/Officer	156	1	1		**-1**
Reclassification	Director	156			1	**1**
	Environmental Planner I/II	130/134	3	3	3	
Reclassification	Manager II	148	3	3	4	**1**
Transfer	Principal Environmental Planner	142	4	4	3	**-1**
	Senior Advanced Projects Advisor	148	1	1	1	
	Senior Air Quality Engineer	140	1	1	1	
	Senior Air Quality Specialist	138	1	1	1	
	Senior Environmental Planner	138	5	5	5	
Planning & Climate Protection Total			22	22	21	**-1**
Regulatory Development						
Reclassification	Assistant Manager	147	1	1		**-1**
Reclassification	Director/Officer	156	1	1		**-1**
Reclassification	Director	156			1	**1**
Reclassification	Manager II	148	2	2	3	**1**
	Principal Air Quality Engineer	144	1	1	1	
	Principal Air Quality Specialist	142	1	1	1	
Transfer	Senior Advanced Projects Advisor	148			1	**1**
	Senior Air Quality Engineer	140	3	3	3	
	Senior Air Quality Specialist	138	5	5	5	
	Staff Specialist I/II	130/134	1	1	1	
Regulatory Development Total			15	15	16	**1**
Policy Service Area Total			**38**	**38**	**38**	

APPENDIX F Table 1 - Fiscal Year 2027 Full Time Equivalent (FTE)

Service Area / Division	Position Classification	Salary Range ID	FYE 26 APPROVED	FYE 26 Mid-Yr APPROVED	FYE 27 PROPOSED	DIFF
Science Service Area						
	Deputy Executive Officer	169		1	1	
Transfer/reclassification	Assistant Deputy Executive Officer	160			1	**1**
Assessment, Inventory & Modeling						
	Advanced Projects Advisor	144	1	1	1	
	Air Quality Engineer I/II	132/136	2	2	2	
	Air Quality Meteorologist I/II	131/135	1	1	1	
	Atmospheric Modeler	140	1	1	1	
Reclassification/Transfer	Director/Officer	156	2	2		**-2**
Reclassification	Director	156			1	**1**
	Manager II	148	2	2	2	
Add/Del	Principal Air Quality Engineer	144	3	3	2	**-1**
	Research Analyst	130	1	1	1	
	Senior Advanced Projects Advisor	148	2	2	2	
	Senior Air Quality Engineer	140	2	2	2	
Add/Del	Senior Atmospheric Modeler	144	1	1	2	**1**
	Statistician	137	1	1	1	
Assessment, Inventory & Modeling Total			19	19	18	**-1**
Meteorology & Measurement						
	Advanced Projects Advisor	144	1	1	1	
	Air Quality Chemist I/II	130/134	1	1	1	
	Air Quality Laboratory Technician I/II	122/126	1	1	1	
	Air Quality Meteorologist I/II	131/135	2	2	2	
Add/Del	Air Quality Specialist I/II	130/134	11	11	12	**1**
Add/Del	Assistant Air Quality Specialist I/II	122/126	4	4	3	**-1**
Reclassification	Assistant Manager	147	1	1		**-1**
Add/Del	Assistant Staff Specialist I/II	122/126	2	2	2	
Reclassification	Director/Officer	156	1	1		**-1**
Reclassification	Director	156			1	**1**
Reclassification	Manager II	148	5	5	6	**1**
	Principal Air and Meteorological Monitoring Spe	143	1	1	1	
	Principal Air Quality Chemist	142	3	3	3	
	Principal Air Quality Meteorologist	143	1	1	1	
	Principal Air Quality Specialist	142	6	6	6	
	Senior Air Quality Chemist	138	1	1	1	
	Senior Air Quality Specialist	138	11	11	11	
	Staff Specialist I/II	130/134	1	1	1	
	Supervising Air Quality Specialist	142	4	4	4	
	Systems Analyst	135	2	2	2	
Meteorology & Measurement Total			59	59	59	
Science Service Area Total			**78**	**79**	**79**	
Grand Total			**523**	**538**	**538**	

APPENDIX F Table 2 - Fiscal Year 2027 Limited Term Contract Employee (LTCE)

The positions listed in Table 2, below, constitute the entirety of limited term contract employee positions and Division assignments at the designated classifications presented in the "FYE 26 Mid-Yr APPROVED" column. The "FYE 27 PROPOSED" column represents proposed changes to the designated classifications and/or Division assignments, if any, which is reflected in the "DIFF" column. The total proposed staffing for FYE 2027 is 36 LTCEs.

Service Area / Division		Position Classification	Salary Range ID	FYE 26 APPROVED	FYE 26 Mid-Yr APPROVED	FYE 27 PROPOSED	DIFF
Engineering & Compliance Service Area							
Engineering							
		Air Quality Technician I/II	122/126		2	2	
		Air Quality Engineer I/II	132/136		8	8	
		Manager II	148	2	3	3	
		Supervising Air Quality Engineer	144		1	1	
Engineering Total				**2**	**14**	**14**	
Engineering & Compliance Service Area Total				**2**	**14**	**14**	
Equity & Community Service Area							
Community Investment Office							
		Senior Staff Specialist	138	1	1	1	
		Senior Staff Specialist	138	1	1	1	
		Assistant Staff Specialist I/II	122/126	1	1	1	
Community Investment Office Total				**3**	**3**	**3**	
Civil Rights							
	Transfer	Staff Specialist I/II	134			1	**1**
Civil Rights Total						**1**	**1**
Environmental Justice							
	Transfer	Staff Specialist I/II	130/134	3	3	2	**-1**
Environmental Justice Total				**3**	**3**	**2**	**-1**
Technology Implementation							
		Assistant Staff Specialist I/II	122/126	2	2	2	
	Del	Staff Specialist I/II	130/134	1	1		**-1**
Technology Implementation Total				**3**	**3**	**2**	**-1**
Strategic Incentives							
	Transfer	Systems Analyst	135		1		**-1**
		Principal Staff Specialist (*)	142	1			
Strategic Incentives Total				**1**	**1**		**-1**
Equity & Community Service Area Total				**10**	**10**	**8**	**-2**
Finance & Administration Service Area							
Human Resources							
	Reclassification	Human Resources Analyst I/II	130/134		**1**		**-1**
	Reclassification	Analyst I/II	130/134			**1**	**1**
	Reclassification	Senior Analyst	138			**1**	**1**
	Reclassification	Senior Human Resources Analyst	138	1	1		**-1**
Human Resources Total				**1**	**2**	**2**	
Administrative Resources							
	Transfer/Add/Del	Manager II	148			1	**1**
Administrative Resources Total						1	**1**
Finance & Administration Service Area Total				**1**	**2**	**3**	**1**

APPENDIX F Table 2 - Fiscal Year 2027 Limited Term Contract Employee (LTCE)

Service Area / Division	Position Classification	Salary Range ID	FYE 26 APPROVED	FYE 26 Mid-Yr APPROVED	FYE 27 PROPOSED	DIFF
Information Management Service Area						
Enterprise Technology Solutions						
	Senior Systems Analyst	139			2	**2**
Enterprise Technology Solutions Total					**2**	**2**
Information Services						
Transfer	Systems Analyst	135	1	1		**-1**
Reclassification	Manager II	148	1	1	1	
Information Services Total			**2**	**2**	**1**	**-1**
Information Management Service Area			**2**	**2**	**3**	**1**
Public Affairs Service Area						
External Affairs						
	Staff Specialist I/II	130/134	1	1	1	
External Affairs Total			**1**	**1**	**1**	
Public Affairs Service Area			**1**	**1**	**1**	
Policy Service Area						
Planning & Climate Protection						
	Environmental Planner	134	1	1	1	
Transfer/Add/Del	Senior Environmental Planner	138	2	2	1	**-1**
Planning & Climate Protection Total			**3**	**3**	**2**	**-1**
Regulatory Development						
	Air Quality Specialist I/II	130/134	2	2	2	
	Senior Air Quality Engineer	140		1	1	
Regulatory Development Total			**2**	**3**	**3**	
Policy Service Area Total			**5**	**6**	**5**	**-1**
Science Service Area						
Meteorology & Measurement						
	Air Quality Specialist I/II	130/134	1	1	1	
	Senior Air Quality Specialist	138	1	1	1	
Meteorology & Measurement Total			**2**	**2**	**2**	
Science Service Area Total			**2**	**2**	**2**	
Grand Total			**23**	**37**	**36**	**-1**

(*) Reclassed by Executive Officer to Systems Analyst

APPENDIX G

Definitions

AB 617 (Assembly Bill 617) – This enacted bill requires the state board to develop a uniform statewide system of annually reporting of emissions of criteria air pollutants and toxic air contaminants for use by certain categories of stationary sources.

AB 923 (Assembly Bill 923) – This enacted bill allows an additional $2 surcharge on Motor Vehicle Registration fees for MSIF (Mobile Source Incentive Fund).

AIRS (Aerometric Information Retrieval System) – Computerized information system as delineated by the EPA (Environmental Protection Agency).

APCO – Air Pollution Control Officer – Appointed by the Board of Directors.

Appropriation – A legal authorization to incur obligations and to make expenditures for specific purposes.

Association of Bay Area Governments (ABAG) – Regional agency covering the nine counties of the Bay Area, responsible for population projections, various services for local agencies, and co-lead agency for federal air quality planning.

A&WMA (Air & Waste Management Association) – The international nonprofit organization of regulatory, business, academic and research communities for air and waste management professionals.

BACT (Best Available Control Technology) – The lowest achievable emission rate to be applied to new and modified stationary sources pursuant to the District's New Source Review permitting program.

Board – Board of Directors and also Hearing Board. The Board of Directors is the governing body of the District. The Hearing Board is appointed by the Board of Directors. (See Programs 121 and 122).

California Clean Air Act 1988 – Statutory scheme to reduce air pollution from stationary and mobile sources as set forth in *California Health and Safety Code* Section 39600 et seq.

Capital Expenditures – An amount spent to acquire land, building, equipment, vehicles etc. in order to increase capacity or efficiency by the District for more than 1 year. Such purchases are capitalized or depreciated over the useful land, except for land.

Carl Moyer Program – Provides grants to public and private entities to reduce emissions of oxides of nitrogen, reactive organic gases and particulate matter from existing heavy-duty engines by either replacing or retrofitting them.

CAPCOA (California Air Pollution Control Officers Association) – Organization comprised of local air pollution control officials; human resource and fiscal staff are also members.

CARB or ARB (California Air Resources Board) – The State agency responsible for setting California Ambient Air Quality Standards (CAAQS) and motor vehicle emission standards, and for overseeing implementation of the California Clean Air Act.

CBSA (Core-based Statistical Area) – Geographic term used by the U.S. Office of Management and Budget (OMB) to define urban areas.

CEC (California Energy Commission) – The state agency responsible for energy policy and planning.

CEMS – (Continuous Emissions Monitoring Systems) – Technology that allows the District to measure certain emissions on a continuous basis.

CEQA (California Environmental Quality Act) – State law that requires public agencies to analyze environmental impacts of proposed projects and plans. (*California Public Resources* Code Section 21000 et seq.)

CFC (Chlorofluorocarbon) – Any of a group of compounds that contain carbon, chlorine, fluorine and sometimes hydrogen and are used as refrigerants, cleaning solvents, and aerosol propellants and in the manufacture of plastic foams.

Clean Air Act Amendments of 1990 – Revisions to the Federal legislation governing air quality planning and control programs to meet National ambient air quality standards.

CMAQ – (Congestion Mitigation and Air Quality) - The District receives funding under this grant to fund the Spare the Air campaign.

Contractual Services – Services rendered to a government by private firms, individuals, or other governmental agencies.

COLA (Cost of Living Adjustment) – An adjustment to salaries based on the increased cost of living as defined by the percent change in the U.S. Department of Labor's Consumer Price Index.

Environmental Justice – The fair treatment of people of all races and incomes with respect to development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment implies that no person or group of people should shoulder a disproportionate share of negative environmental and economic impacts resulting from the execution of environmental programs.

EPA (Environmental Protection Agency) – Federal agency that oversees air, water and waste management. An assistance grant is provided to various agencies in their efforts to reduce air pollution.

EPA 103 Grant – Provides funding for all aspects of operating the $PM_{2.5}$ fine particulate monitoring program as well as BioWatch, the National Air Toxic Trends Study (NATTS) Program and other supplemental study programs awarded by the EPA.

EPA 105 Grant – Grant pursuant to federal Clean Air Act Section 105.

Fiscal Year – A twelve-month period designated as the operating year for accounting and budgeting purposes in an organization; July 1 through June 30 is the fiscal year for the District.

FICA (Federal Insurance Corporation Act) Replacement Benefits – In 1981, District employees elected to terminate participation in Social Security. FICA costs listed in the budget reflect the replacement benefit premiums paid in lieu of Social Security.

Fixed Assets – Assets of long-term character that are intended to continue to be held or used, such as land, buildings, machinery, furniture and other equipment.

FTE (Full-time Equivalent Position) – A position converted to the decimal equivalent of a full-time position based on 2,080 hours of work per year.

Fund – A fiscal entity with revenues and expenditures that are segregated for the purpose of carrying out a specific purpose or activity.

Fund Reserves – Designated – That portion of the fund reserve designated by the governing body to indicate tentative plans for financial resource utilization in a future period**.**

Fund Reserves – Reserved – That portion of the fund reserve obligated by the issuance of purchase orders or contracts (encumbrances), or otherwise obligated and unavailable to meet the District's operating expenditures.

Fund Reserves – Undesignated – That portion of the unreserved fund reserve that represents the accumulated surplus which, as specified in the *California Government Code*, is restricted to the following uses: to meet cash requirements before the proceeds from revenues are available, to meet emergency expenditures, and at the end of each fiscal year to meet current year operating or subsequent year budget deficits.

Fund Reserves – The equity accounts for the governmental fund types.

Group Insurance Benefits – benefits provided to Air District employees, including medical, dental, vision, and life insurance as well as State Disability Insurance, Section 125 cafeteria plan, Long Term Care and Long Term Disability, Section 457 deferred compensation plan, and COBRA program.

LTCE (Limited Term Contract Employee) – full-time employee hired with a term limit of usually two to three years

MACT (Maximum Achievable Control Technology) – EPA standards mandated by the 1990 amendments to the Federal Clean Air Act for control of toxic air contaminants.

Metropolitan Transportation Commission (MTC) – Bay Area regional agency responsible for transportation planning, financing and coordination; co-lead agency for Federal air quality planning.

MSIF (Mobile Source Incentive Fund) – The Air District's grant program for allocating revenues from an additional motor vehicle registration fee surcharge for implementation of eligible projects.

NOV (Notice of Violation) – A written citation informing a facility, or individual, that it has violated a specific air quality regulation or rule.

PERP (Portable Equipment Registration Program) – a program established by CARB allowing the operation of portable equipment in any air district throughout the state without individual local district permits.

PERS (Public Employees Retirement System) – The retirement system contracted by the District to provide retirement benefits to employees

Program Budget – A budget that allocates financial resources to functions or activities of government, rather than to specific types of expenditure, or to specific departments.

PSM (Process Safety Management) – Federal OSHA regulation that requires industrial safety audits.

Request for Proposals (RFP) – A document requesting bids to provide specified services or supplies.

RMPP (Risk Management and Prevention Plan) – State Program that the District monitors to prevent accidental releases of hazardous materials.

SIP (State Implementation Plan) – Bay Area portion of California plan to attain and maintain national ambient air quality standards.

State Subvention Revenue – Pursuant to Part 2, Chapter 5 of the *California Health and Safety Code*, the California Air Resources Board must subvene and distribute funds to Districts engaged in the reduction of air contaminants. The distribution is based on a per-capita basis of population contained in the District.

T-BACT (Toxic Best Available Control Technology) – The lowest achievable emission rate for toxic air contaminants at new or modified stationary sources.

TFCA (Transportation Fund for Clean Air) – The District's grant program for allocating revenues from a motor vehicle registration fee surcharge to public agencies for implementation of eligible projects that reduce motor vehicle emissions.

Vehicle Buy Back – The District's sponsored incentive program for the scrapping of 1998 and older models funded under TFCA. Beginning July 1, 2024, the amount offered per vehicle will increase from $1,200 to $1,500

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Resolution No. 2026 -_____

A Resolution of the Board of Directors of the Bay Area Air Quality Management District to Adopt a Budget for the Fiscal Year Ending June 30, 2027 (FY 2026-2027) and Take Various Other Budget-Related Actions

WHEREAS, the Board of Directors of the Bay Area Air Quality Management District (Air District) has the statutory authority and direction to adopt the Air District's financial budget pursuant to Health & Safety Code Sections 40130 and 40131;

WHEREAS, by Resolution No. 2025-04, the Board of Directors adopted the Air District Budget for Fiscal Year (FY) 2025-2026 on June 4, 2025, pursuant to the above-mentioned statutory authority;

WHEREAS, the Board of Directors, in connection with that action, approved the following budget-related actions:

A. Carry Forward Encumbered Balance of Appropriations to the Next Fiscal Year for Continuation of Projects/Programs Not Completed in the Current Fiscal Year;
B. Use of Operating Surplus from FY 2024-2025;
C. Continue to Fund the General Reserve from Year to Year, With Modifications to the Name and Purpose of Certain Designated Reserve Funds;
D. Authorize Transfer of Budget Between Accounts to Carry Out the Business of the Air District;
E. Authorize Disposal of Surplus Government Property;
F. Approve Salary Ranges and Benefits Package for Air District Employees;
G. Approve Funding for Pension Benefits and Other Post-Employment Benefits for FY 2025-2026; and
H. Adopt Air District Budget for FY 2025-2026.

WHEREAS, Air District staff has determined through its annual budget review and analysis that similar actions are necessary in connection with the adoption of a budget for FY 2026-2027 and that all of these actions should be incorporated into a single resolution;

WHEREAS, the Finance and Administration Committee of the Board of Directors reviewed the proposed FY 2026-2027 Air District Budget at a public meeting held on March 18, 2026, and recommended that the Board of Directors adopt it as submitted;

WHEREAS, pursuant to Health & Safety Code Section 40131, on April 29, 2026, the Board of Directors duly noticed and held an initial public hearing for the exclusive purpose of reviewing the Air District's proposed FY 2026-2027 Budget and providing the public with an opportunity to comment on it;

WHEREAS, a further hearing was duly noticed and held on June 3, 2026, at a Regular Meeting of the Board of Directors, to consider adoption of the Proposed FY 2026-2027 Air District Budget;

WHEREAS, in connection with the public hearing and consideration of the Proposed FY 2026-2027 Air District Budget on June 3, 2026, the Board of Directors takes the following actions and adopts the following resolutions related to the FY 2026-2027 Air District Budget:

A. CARRY FORWARD ENCUMBERED BALANCE OF APPROPRIATIONS TO THE NEXT FISCAL YEAR FOR CONTINUATION OF PROJECTS/PROGRAMS NOT COMPLETED IN THE CURRENT FISCAL YEAR

WHEREAS, the Air District Budget for FY 2025-2026 has appropriated funds committed for projects/programs not completed in the current fiscal year that will carry over to the next fiscal year;

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors hereby directs Air District staff, that in the event there is encumbered balance of appropriations from FY 2025-2026 for continuation of projects/programs, to transfer such appropriations to the FY 2026-2027 budget as needed for completion of such projects/programs;

B. USE OF OPERATING SURPLUS FROM FY 2025-2026

WHEREAS, if an unencumbered balance of appropriations remains at the close of Fiscal Year 2025-2026, such operating surplus will be transferred to the General Reserve;

WHEREAS, the Board of Directors wishes to identify funding priorities for which any such operating surplus funds transferred into General Reserve funds may be used;

NOW, THEREFORE, BE IT FURTHER RESOLVED that any operating surplus from Fiscal Year 2025-2026 that is transferred into General Reserve funds may be used for one or more of the following purposes, subject to approval by the Board of Directors:

1. To fund one-time capital expenditures and professional services that support future budgetary needs;

2. To serve as a short-term investment strategy for funding Full-Time Equivalent and Limited-Term Contract Employee positions, pending the identification of ongoing funding sources;

3. To be identified as designated reserves in support of other short-term or long-term investments and/or financial obligations; and

4. To address needs consistent with the Air District's Economic Contingency Policy.

C. CONTINUE TO FUND THE GENERAL RESERVE FROM YEAR TO YEAR, WITH MODIFICATIONS TO THE NAME AND PURPOSE OF CERTAIN DESIGNATED RESERVE FUNDS

WHEREAS, the Board of Directors finds that maintaining a healthy and properly funded General Reserve in the Air District's budget is a prudent and financially sound decision;

WHEREAS, the Air District's Economic Contingency Reserve Policy, adopted by the Board of Directors on May 1, 2024, establishes a policy to maintain an economic contingency reserve in a range between 25% to 35% of the General Fund Budget;

WHEREAS, in addition to the Economic Contingency Designation, the proposed FY 2026-2027 Budget includes modifications to the name and purpose of certain Designated Reserve Funds;

NOW THEREFORE, BE IT FURTHER RESOLVED that the General Reserve be continued for FY 2026-2027, with the modifications to Designated Reserve Funds as specified in the FY 2026-2027 Budget, and that it be continued thereafter until discontinued by the Board of Directors.

D. AUTHORIZATION TO TRANSFER BUDGET BETWEEN ACCOUNTS TO CARRY OUT THE BUSINESS OF THE AIR DISTRICT

WHEREAS, the Board of Directors desires to give the Executive Officer/APCO authority to make administrative budget transfers as necessary to carry out the business of the Air District, so long as there is no funding source incompatibility and provided these adjustments do not increase the overall budget appropriation of the FY 2026-2027 Air District General Fund Budget;

NOW, THEREFORE, BE IT FURTHER RESOLVED that the Board of Directors hereby authorizes the Executive Officer/APCO, or their designee, to:

1. Make necessary administrative budget adjustments to transfer budget funds between certain accounts, so long as there is no funding source incompatibility and provided these adjustments do not increase the overall budget appropriation of the FY 2026-2027 Air District General Fund Budget;

2. Transfer personnel positions from one program to another and transfer the pertinent budgeted funds from personnel accounts, provided that the Executive Officer/APCO shall report such transfers to the Board of Directors;

3. Transfer Limited-Term Contract Employees (LTCE) Reserve Designations to the General Fund's personnel accounts to fund the Board-approved LTCE staffing recommendations; and

4. Transfer services and supplies accounts between operating accounts and programs within the General Fund, so long as the transfers are not between the operating and capital accounts, which requires the Board of Directors' approval.

E. AUTHORIZE DISPOSAL OF SURPLUS GOVERNMENT PROPERTY

WHEREAS, the Air District Budget for FY 2026-2027 provides for the replacement of certain equipment and other property that either has become obsolete and surplus or will become obsolete and surplus;

WHEREAS, Air District staff has determined that certain equipment or other property will no longer be economically feasible to maintain or repair, and that some equipment will become obsolete and not useful for Air District purposes;

WHEREAS, from time to time during the course of the coming fiscal year it may be advantageous to the Air District to sell or dispose of such equipment or other property;

WHEREAS, in the judgment of the Board of Directors, such surplus or obsolete equipment or other property is no longer required for the purposes of the Air District;

WHEREAS, the Board of Directors desires to authorize the Executive Officer/APCO, or their designee, to sell or dispose of such surplus or obsolete

equipment or other property pursuant the authority provided in Health & Safety Code section 40701(e);

NOW, THEREFORE, BE IT FURTHER RESOLVED that the Board of Directors hereby authorizes the Executive Officer/APCO, or their designee, to sell or dispose of surplus or obsolete equipment or other property during FY 2026-2027 in a public manner and in accordance with governmental best practices, with all proceeds or compensation therefore to be paid into the General Fund of the Air District.

F. ADOPT SALARY RANGES FOR AIR DISTRICT EMPLOYEES AND MANAGEMENT & CONFIDENTIAL EMPLOYEE BENEFITS PROGRAM

WHEREAS, the Board of Directors establishes salary ranges and classifications for Air District employees, as well as employment-related benefits for those employees;

WHEREAS, the Board of Directors desires to establish salary ranges for unrepresented confidential and management employees, and desires to apply a 2.5% general wage increase for such employees;

WHEREAS, the Board of Directors desires to establish salary ranges for employees in the newly-represented Attorney Management Unit (AMU) and desires to apply the same 2.5% general wage increase for such employees during the pendency of negotiating their inaugural Memorandum of Understanding (MOU) for the AMU, which is currently in negotiations; and

WHEREAS, the Board of Directors does not desire to change established salary ranges at this time for represented employees in the Technical/General unit or the Professional Employees' unit because a successor MOU for those units is currently in negotiations; and

WHEREAS, the Board of Directors expects that MOUs that will cover salary ranges for represented employees, as well as other items with a budgetary impact such as fringe benefits, will be agreed to and become effective in the FY 2026-2027 period;

WHEREAS, in accordance with the reasons outlined in the foregoing recitals, the FY 2026-2027 salary schedule attached hereto reflects a 2.5% general wage increase to the salary ranges for unrepresented confidential and management employees and newly-represented employees in the AMU (except where otherwise required by separate, independent employment agreements with individual employees), but does not reflect any change to the salary ranges for represented employees in the Technical/General unit or the

Professional Employees' unit, in anticipation that negotiated salary adjustments will be adopted by the Board of Directors in conjunction with the successor MOU that is currently being negotiated;

WHEREAS, the Board of Directors desires to establish a written benefits program for management and confidential employees as set forth in the attached Management and Confidential Employee Benefits Program;

WHEREAS, the attached Management and Confidential Employee Benefits Program does not reflect benefits for other employees, in anticipation that negotiated benefit changes will be adopted by the Board of Directors in conjunction with the MOUs that are currently being negotiated;

NOW, THEREFORE, BE IT FURTHER RESOLVED that the Board of Directors hereby adopts (i) the attached FY 2026-2027 salary schedule for represented, confidential, and management employees, and (ii) FY 2026-2027 benefits for management and confidential employees as outlined in the attached Management and Confidential Employment Benefits Program; and

BE IT FURTHER RESOLVED that, as an additional benefit, effective July 1, 2026, to effectuate the 460-hour vacation cap that was implemented in Fiscal Year 2025–2026, all vacation hours in excess of 460 will be paid to unrepresented staff as a one-time lump sum payment and/or contribution to an employee eligible deferred compensation plan, subject to the applicable annual maximum limits under the Internal Revenue Code.

G. APPROVE FUNDING FOR PENSION BENEFITS AND OTHER POST-EMPLOYMENT BENEFITS (OPEB) FOR FY 2026-2027

WHEREAS, in December 2022, the Board of Directors adopted a policy of prefunding the Air District's OPEB and Pension benefit plans by contributing up to $5 million ($4M to OPEB and $1M to Pension) in discretionary funding annually towards achieving a minimum 90% funded target level;

WHEREAS, based on the most recent actuarial valuations, the OPEB plan has reached its target funded level at 92% and the pension plan is below the target funded level at 77%;

WHEREAS, the funding policy also states that the Board of Directors can redirect the $4 million discretionary funds from OPEB upon reaching its funded target to the 115 Pension Trust with California Employers' Pension Prefunding Trust (CEPPT);

WHEREAS, the Board of Directors desires to redirect the $4 million in OPEB discretionary funding to the CEPPT pension trust for a total of $5 million for the continuation of prefunding the Air District's Pension plan in accordance with the December 2022 policy;

NOW, THEREFORE, BE IT FURTHER RESOLVED that as a part of the FY 2026-2027 Budget, the Board of Directors hereby authorizes and directs staff to transfer $5 million in discretionary funding to the CEPPT pension trust for the continuation of prefunding the Air District's Pension plan.

H. ADOPT AIR DISTRICT BUDGET FOR FY 2026-2027

WHEREAS, on April 29, 2026, and June 3, 2026, public proceedings have been held in the manner and form required by Health & Safety Code Section 40131 for the adoption of the FY 2026-2027 Budget of the Bay Area Air Quality Management District;

WHEREAS, the Board of Directors has considered the Proposed FY 2026-2027 Air District Budget, as well as the recommendation to adopt this Proposed Budget from the Finance and Administration Committee, which considered the Proposed Budget at its meeting of March 18, 2026;

NOW, THEREFORE, BE IT FURTHER RESOLVED that the Proposed Air District Budget for Fiscal Year 2026-2027, in the total consolidated amount of Four Hundred Eighty Million, Fifty Nine Thousand, One Hundred and Ninety Two Dollars ($480,059,192), specifying by appropriation classification funding levels for personnel, services and supplies, capital outlay, program distributions and transfers, is hereby adopted by the Board of Directors of the Bay Area Air Quality Management District to become effective as of July 1, 2026.

The foregoing resolution was duly and regularly introduced, passed and adopted at a regular meeting of the Board of Directors of the Bay Area Air Quality Management District on the Motion of _____, seconded by _____, on the _____ day of _____ 2026, by the following vote of the Board:

AYES:

NOES:

ABSTAIN:

ABSENT:

_____

Lynda Hopkins
Chair of the Board of Directors

ATTEST:

_____

Marcy Hiratzka
Clerk of the Board of Directors

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
SALARY SCHEDULE FOR MANAGEMENT AND CONFIDENTIAL CLASSES
Annually/Monthly/Bi-weekly/Hourly effective July 12, 2026

ID-JDE	MANAGEMENT		Per Employment Agreement
1B101	Executive Officer/Air Pollution Control Officer*		465306.05
			38775.50
			17896.39
		"(1) (3)	223.70
1B102	Counsel**		426305.54
			35525.46
			16396.37
		"(2) (3)	204.95

(1) Per Employment Agreement effective February 21, 2026
(2) Per Employment Agreement Effective May 23, 2026
(3) Per Employment Agreement, Cola Effective July 1, 2026
(4) 1B103 Per BOD Special Meeting 9/10/25 (Detail see below)

ID-JDE	MANAGEMENT	Range	Step A	Step B	Step C	Step D	Step E
1M103	Assistant Deputy Executive Officer	160M	231487.50	243061.87	255214.96	267975.71	281374.50
New			19290.62	20255.16	21267.91	22331.31	23447.87
			8903.37	9348.53	9815.96	10306.76	10822.10
			111.29	116.86	122.70	128.83	135.28
1M102	Deputy Executive Officer	169M	288323.06	302739.22	317876.18	333769.99	350458.49
			24026.92	25228.27	26489.68	27814.17	29204.87
			11089.35	11643.82	12226.01	12837.31	13479.17
			138.62	145.55	152.83	160.47	168.49
2M112	Director	156M	208579.80	219008.79	229959.23	241457.19	253530.05
New			17381.65	18250.73	19163.27	20121.43	21127.50
			8022.30	8423.42	8844.59	9286.82	9751.16
			100.28	105.29	110.56	116.09	121.89
3M122	Manager I	146M	164513.84	172739.53	181376.51	190445.34	199967.60
New			13709.49	14394.96	15114.71	15870.44	16663.97
			6327.46	6643.83	6976.02	7324.82	7691.06
			79.09	83.05	87.20	91.56	96.14
3M123	Manager II	148M	172739.53	181376.51	190445.34	199967.60	209965.98
New			14394.96	15114.71	15870.44	16663.97	17497.17
			6643.83	6976.02	7324.82	7691.06	8075.61
			83.05	87.20	91.56	96.14	100.95
2M113	Officer	156M	208579.80	219008.79	229959.23	241457.19	253530.05
New			17381.65	18250.73	19163.27	20121.43	21127.50
			8022.30	8423.42	8844.59	9286.82	9751.16
			100.28	105.29	110.56	116.09	121.89
1B103	Principal Deputy Executive Officer	173M	317876.18	333769.99	350458.49	367981.41	386380.48
New	(4) BOD Special Meeting 9/10/25		26489.68	27814.17	29204.87	30665.12	32198.37
			12226.01	12837.31	13479.17	14153.13	14860.79
			152.83	160.47	168.49	176.91	185.76

ID-JDE	MANAGEMENT(CONTINUED)	Range	Step A	Step B	Step C	Step D	Step E
6M101	Senior Assistant Counsel	157M	215151.11	225908.66	237204.10	249064.30	261517.52
			17929.26	18825.72	19767.01	20755.36	21793.13
			8275.04	8688.79	9123.23	9579.40	10058.37
			103.44	108.61	114.04	119.74	125.73
3M124	Senior Manager	152M	190445.34	199967.60	209965.98	220464.28	231487.50
New			15870.44	16663.97	17497.17	18372.02	19290.62
			7324.82	7691.06	8075.61	8479.40	8903.37
			91.56	96.14	100.95	105.99	111.29
8M102	Staff Attorney	145M	160549.07	168576.52	177005.35	185855.62	195148.40
			13379.09	14048.04	14750.45	15487.97	16262.37
			6174.96	6483.71	6807.90	7148.29	7505.71
			77.19	81.05	85.10	89.35	93.82
8M103	Staff Attorney Trainee	129M	107394.18	112763.89	118402.08	124322.19	130538.29
			8949.51	9396.99	9866.84	10360.18	10878.19
			4130.55	4337.07	4553.93	4781.62	5020.70
			51.63	54.21	56.92	59.77	62.76

ID-JDE	CONFIDENTIAL	Range	Step A	Step B	Step C	Step D	Step E
8C006	Administrative Assistant I (Confidential)	114	73170.57	76829.10	80670.55	84704.08	88939.28
			6097.55	6402.42	6722.55	7058.67	7411.61
			2814.25	2954.97	3102.71	3257.85	3420.74
			35.18	36.94	38.78	40.72	42.76
7C009	Administrative Assistant II (Confidential)	118	80670.55	84704.08	88939.28	93386.25	98055.56
			6722.55	7058.67	7411.61	7782.19	8171.30
			3102.71	3257.85	3420.74	3591.78	3771.37
			38.78	40.72	42.76	44.90	47.14
8C102	Analyst I	130	108106.26	113511.57	119187.15	125146.50	131403.83
New			9008.85	9459.30	9932.26	10428.88	10950.32
			4157.93	4365.83	4584.12	4813.33	5053.99
			51.97	54.57	57.30	60.17	63.17
7C105	Analyst II	134	119187.15	125146.50	131403.83	137974.02	144872.72
New			9932.26	10428.88	10950.32	11497.84	12072.73
			4584.12	4813.33	5053.99	5306.69	5572.03
			57.30	60.17	63.17	66.33	69.65
5C101	Clerk of the Boards	132	113511.57	119187.15	125146.50	131403.83	137974.02
			9459.30	9932.26	10428.88	10950.32	11497.84
			4365.83	4584.12	4813.33	5053.99	5306.69
			54.57	57.30	60.17	63.17	66.33
6C105	Economist	148	167708.29	176093.70	184898.38	194143.30	203850.47
New			13975.69	14674.47	15408.20	16178.61	16987.54
			6450.32	6772.83	7111.48	7467.05	7840.40
			80.63	84.66	88.89	93.34	98.01
8C005	Executive Assistant I	128	102958.34	108106.26	113511.57	119187.15	125146.50
			8579.86	9008.85	9459.30	9932.26	10428.88
			3959.94	4157.93	4365.83	4584.12	4813.33
			49.50	51.97	54.57	57.30	60.17
7C008	Executive Assistant II	132	113511.57	119187.15	125146.50	131403.83	137974.02
			9459.30	9932.26	10428.88	10950.32	11497.84
			4365.83	4584.12	4813.33	5053.99	5306.69
			54.57	57.30	60.17	63.17	66.33
7C010	Legal Intern	124	93386.25	98055.56	102958.34	108106.26	113511.57
			7782.19	8171.30	8579.86	9008.85	9459.30
			3591.78	3771.37	3959.94	4157.93	4365.83
			44.90	47.14	49.50	51.97	54.57
8C103	Paralegal I	120	84704.08	88939.28	93386.25	98055.56	102958.34
New			7058.67	7411.61	7782.19	8171.30	8579.86
			3257.85	3420.74	3591.78	3771.37	3959.94
			40.72	42.76	44.90	47.14	49.50
7C102	Paralegal II	124	93386.25	98055.56	102958.34	108106.26	113511.57
New			7782.19	8171.30	8579.86	9008.85	9459.30
			3591.78	3771.37	3959.94	4157.93	4365.83
			44.90	47.14	49.50	51.97	54.57
4C103	Principal Analyst	142	144872.72	152116.36	159722.18	167708.29	176093.70
New			12072.73	12676.36	13310.18	13975.69	14674.47
			5572.03	5850.63	6143.16	6450.32	6772.83
			69.65	73.13	76.79	80.63	84.66

ID-JDE	CONFIDENTIAL(CONTINUED)	Range	Step A	Step B	Step C	Step D	Step E
4C102	Principal Cybersecurity Analyst	139	134648.86	141381.30	148450.37	155872.88	163666.53
			11220.74	11781.78	12370.86	12989.41	13638.88
			5178.80	5437.74	5709.63	5995.11	6294.87
			64.74	67.97	71.37	74.94	78.69
6C106	Senior Analyst	138	131403.83	137974.02	144872.72	152116.36	159722.18
New			10950.32	11497.84	12072.73	12676.36	13310.18
			5053.99	5306.69	5572.03	5850.63	6143.16
			63.17	66.33	69.65	73.13	76.79
6C002	Senior Executive Assistant	134	119187.15	125146.50	131403.83	137974.02	144872.72
			9932.26	10428.88	10950.32	11497.84	12072.73
			4584.12	4813.33	5053.99	5306.69	5572.03
			57.30	60.17	63.17	66.33	69.65
5C103	Supervising Analyst	142	144872.72	152116.36	159722.18	167708.29	176093.70
New			12072.73	12676.36	13310.18	13975.69	14674.47
			5572.03	5850.63	6143.16	6450.32	6772.83
			69.65	73.13	76.79	80.63	84.66
7C104	Technician	126	98055.56	102958.34	108106.26	113511.57	119187.15
New			8171.30	8579.86	9008.85	9459.30	9932.26
			3771.37	3959.94	4157.93	4365.83	4584.12
			47.14	49.50	51.97	54.57	57.30

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
SALARY SCHEDULE FOR ATTORNEY MANAGEMENT EMPLOYEES
Annually/Monthly/Bi-weekly/Hourly effective July 12, 2026

8M101	Assistant Counsel I	149M	173980.79	182679.83	191813.82	201404.52	211474.74
			14498.40	15223.32	15984.49	16783.71	17622.90
			6691.57	7026.15	7377.45	7746.33	8133.64
			83.64	87.83	92.22	96.83	101.67
7M101	Assistant Counsel II	153M	195148.40	204905.82	215151.11	225908.66	237204.10
			16262.37	17075.48	17929.26	18825.72	19767.01
			7505.71	7880.99	8275.04	8688.79	9123.23
			93.82	98.51	103.44	108.61	114.04

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
SALARY SCHEDULE FOR TECHNICAL/GENERAL AND PROFESSIONAL EMPLOYEES
Effective July 14, 2024 per Memorandum of Understanding effective July 1, 2023

ID-JDE	PROFESSIONAL	Range	Step A	Step B	Step C	Step D	Step E
7P001	Accountant I	130	103401.49	108571.56	114000.14	119700.15	125685.16
			8616.79	9047.63	9500.01	9975.01	10473.76
			3976.98	4175.83	4384.62	4603.85	4834.04
			49.71	52.20	54.81	57.55	60.43
7P014	Accountant II	134	114000.14	119700.15	125685.16	131969.41	138567.88
			9500.01	9975.01	10473.76	10997.45	11547.32
			4384.62	4603.85	4834.04	5075.75	5329.53
			54.81	57.55	60.43	63.45	66.62
5P004 New	Accounting Supervisor	142	138567.88	145496.28	152771.09	160409.65	168430.13
			11547.32	12124.69	12730.92	13367.47	14035.84
			5329.53	5596.01	5875.81	6169.60	6478.08
			66.62	69.95	73.45	77.12	80.98
7P002	Advanced Projects Advisor	144	145496.28	152771.09	160409.65	168430.13	176851.64
			12124.69	12730.92	13367.47	14035.84	14737.64
			5596.01	5875.81	6169.60	6478.08	6801.99
			69.95	73.45	77.12	80.98	85.02
8P001	Air Quality Chemist I	130	103401.49	108571.56	114000.14	119700.15	125685.16
			8616.79	9047.63	9500.01	9975.01	10473.76
			3976.98	4175.83	4384.62	4603.85	4834.04
			49.71	52.20	54.81	57.55	60.43
7P003	Air Quality Chemist II	134	114000.14	119700.15	125685.16	131969.41	138567.88
			9500.01	9975.01	10473.76	10997.45	11547.32
			4384.62	4603.85	4834.04	5075.75	5329.53
			54.81	57.55	60.43	63.45	66.62
8P002	Air Quality Engineer I	132	108571.56	114000.14	119700.15	125685.16	131969.41
			9047.63	9500.01	9975.01	10473.76	10997.45
			4175.83	4384.62	4603.85	4834.04	5075.75
			52.20	54.81	57.55	60.43	63.45
7P004	Air Quality Engineer II	136	119700.15	125685.16	131969.41	138567.88	145496.28
			9975.01	10473.76	10997.45	11547.32	12124.69
			4603.85	4834.04	5075.75	5329.53	5596.01
			57.55	60.43	63.45	66.62	69.95
8P003	Air Quality Meteorologist I	131	105955.00	111252.75	116815.38	122656.15	128788.96
			8829.58	9271.06	9734.62	10221.35	10732.41
			4075.19	4278.95	4492.90	4717.54	4953.42
			50.94	53.49	56.16	58.97	61.92
7P005	Air Quality Meteorologist II	135	116815.38	122656.15	128788.96	135228.41	141989.83
			9734.62	10221.35	10732.41	11269.03	11832.49
			4492.90	4717.54	4953.42	5201.09	5461.15
			56.16	58.97	61.92	65.01	68.26

ID-JDE	PROFESSIONAL(continued)	Range	Step A	Step B	Step C	Step D	Step E
7P015	Assistant Atmospheric and Air Quality Modeler	132	108571.56	114000.14	119700.15	125685.16	131969.41
New			9047.63	9500.01	9975.01	10473.76	10997.45
			4175.83	4384.62	4603.85	4834.04	5075.75
			52.20	54.81	57.55	60.43	63.45
8P005	Atmospheric and Air Quality Modeler I	136	119700.15	125685.16	131969.41	138567.88	145496.28
New			9975.01	10473.76	10997.45	11547.32	12124.69
			4603.85	4834.04	5075.75	5329.53	5596.01
			57.55	60.43	63.45	66.62	69.95
7P016	Atmospheric and Air Quality Modeler II	140	131969.41	138567.88	145496.28	152771.09	160409.65
New			10997.45	11547.32	12124.69	12730.92	13367.47
			5075.75	5329.53	5596.01	5875.81	6169.60
			63.45	66.62	69.95	73.45	77.12
7P006	Atmospheric Modeler	140	131969.41	138567.88	145496.28	152771.09	160409.65
			10997.45	11547.32	12124.69	12730.92	13367.47
			5075.75	5329.53	5596.01	5875.81	6169.60
			63.45	66.62	69.95	73.45	77.12
8P004	Environmental Planner I	130	103401.49	108571.56	114000.14	119700.15	125685.16
			8616.79	9047.63	9500.01	9975.01	10473.76
			3976.98	4175.83	4384.62	4603.85	4834.04
			49.71	52.20	54.81	57.55	60.43
7P007	Environmental Planner II	134	114000.14	119700.15	125685.16	131969.41	138567.88
			9500.01	9975.01	10473.76	10997.45	11547.32
			4384.62	4603.85	4834.04	5075.75	5329.53
			54.81	57.55	60.43	63.45	66.62
7P008	Legislative Analyst	138	125685.16	131969.41	138567.88	145496.28	152771.09
			10473.76	10997.45	11547.32	12124.69	12730.92
			4834.04	5075.75	5329.53	5596.01	5875.81
			60.43	63.45	66.62	69.95	73.45
7P013	Librarian	128	98477.61	103401.49	108571.56	114000.14	119700.15
			8206.47	8616.79	9047.63	9500.01	9975.01
			3787.60	3976.98	4175.83	4384.62	4603.85
			47.35	49.71	52.20	54.81	57.55
4P001	Principal Accountant	142	138567.88	145496.28	152771.09	160409.65	168430.13
			11547.32	12124.69	12730.92	13367.47	14035.84
			5329.53	5596.01	5875.81	6169.60	6478.08
			66.62	69.95	73.45	77.12	80.98
4P002	Principal Air and Meteorological Monitoring Specialist	143	141989.83	149089.32	156543.79	164370.98	172589.52
			11832.49	12424.11	13045.32	13697.58	14382.46
			5461.15	5734.20	6020.91	6321.96	6638.06
			68.26	71.68	75.26	79.02	82.98
4P005	Principal Air Quality Chemist	142	138567.88	145496.28	152771.09	160409.65	168430.13
			11547.32	12124.69	12730.92	13367.47	14035.84
			5329.53	5596.01	5875.81	6169.60	6478.08
			66.62	69.95	73.45	77.12	80.98

ID-JDE	PROFESSIONAL(continued)	Range	Step A	Step B	Step C	Step D	Step E
4P003	Principal Air Quality Engineer	144	145496.28	152771.09	160409.65	168430.13	176851.64
			12124.69	12730.92	13367.47	14035.84	14737.64
			5596.01	5875.81	6169.60	6478.08	6801.99
			69.95	73.45	77.12	80.98	85.02
4P006	Principal Air Quality Meteorologist	143	141989.83	149089.32	156543.79	164370.98	172589.52
			11832.49	12424.11	13045.32	13697.58	14382.46
			5461.15	5734.20	6020.91	6321.96	6638.06
			68.26	71.68	75.26	79.02	82.98
4P004	Principal Environmental Planner	142	138567.88	145496.28	152771.09	160409.65	168430.13
			11547.32	12124.69	12730.92	13367.47	14035.84
			5329.53	5596.01	5875.81	6169.60	6478.08
			66.62	69.95	73.45	77.12	80.98
7P010	Research Analyst	130	103401.49	108571.56	114000.14	119700.15	125685.16
			8616.79	9047.63	9500.01	9975.01	10473.76
			3976.98	4175.83	4384.62	4603.85	4834.04
			49.71	52.20	54.81	57.55	60.43
6P007	Senior Accountant	138	125685.16	131969.41	138567.88	145496.28	152771.09
			10473.76	10997.45	11547.32	12124.69	12730.92
			4834.04	5075.75	5329.53	5596.01	5875.81
			60.43	63.45	66.62	69.95	73.45
6P001	Senior Advanced Projects Advisor	148	160409.65	168430.13	176851.64	185694.22	194978.93
			13367.47	14035.84	14737.64	15474.52	16248.24
			6169.60	6478.08	6801.99	7142.09	7499.19
			77.12	80.98	85.02	89.28	93.74
6P002	Senior Air Quality Chemist	138	125685.16	131969.41	138567.88	145496.28	152771.09
			10473.76	10997.45	11547.32	12124.69	12730.92
			4834.04	5075.75	5329.53	5596.01	5875.81
			60.43	63.45	66.62	69.95	73.45
6P003	Senior Air Quality Engineer	140	131969.41	138567.88	145496.28	152771.09	160409.65
			10997.45	11547.32	12124.69	12730.92	13367.47
			5075.75	5329.53	5596.01	5875.81	6169.60
			63.45	66.62	69.95	73.45	77.12
6P004	Senior Air Quality Meteorologist	139	128788.96	135228.41	141989.83	149089.32	156543.79
			10732.41	11269.03	11832.49	12424.11	13045.32
			4953.42	5201.09	5461.15	5734.20	6020.91
			61.92	65.01	68.26	71.68	75.26
6P008 New	Senior Atmospheric and Air Quality Modeler	144	145496.28	152771.09	160409.65	168430.13	176851.64
			12124.69	12730.92	13367.47	14035.84	14737.64
			5596.01	5875.81	6169.60	6478.08	6801.99
			69.95	73.45	77.12	80.98	85.02
6P005	Senior Atmospheric Modeler	144	145496.28	152771.09	160409.65	168430.13	176851.64
			12124.69	12730.92	13367.47	14035.84	14737.64
			5596.01	5875.81	6169.60	6478.08	6801.99
			69.95	73.45	77.12	80.98	85.02

ID-JDE	PROFESSIONAL(continued)	Range	Step A	Step B	Step C	Step D	Step E
6P006	Senior Environmental Planner	138	125685.16	131969.41	138567.88	145496.28	152771.09
			10473.76	10997.45	11547.32	12124.69	12730.92
			4834.04	5075.75	5329.53	5596.01	5875.81
			60.43	63.45	66.62	69.95	73.45
7P011	Statistician	137	122656.15	128788.96	135228.41	141989.83	149089.32
			10221.35	10732.41	11269.03	11832.49	12424.11
			4717.54	4953.42	5201.09	5461.15	5734.20
			58.97	61.92	65.01	68.26	71.68
5P001	Supervising Air Quality Engineer	144	145496.28	152771.09	160409.65	168430.13	176851.64
			12124.69	12730.92	13367.47	14035.84	14737.64
			5596.01	5875.81	6169.60	6478.08	6801.99
			69.95	73.45	77.12	80.98	85.02
5P002	Supervising Air Quality Meteorologist	143	141989.83	149089.32	156543.79	164370.98	172589.52
			11832.49	12424.11	13045.32	13697.58	14382.46
			5461.15	5734.20	6020.91	6321.96	6638.06
			68.26	71.68	75.26	79.02	82.98
5P003	Supervising Environmental Planner	142	138567.88	145496.28	152771.09	160409.65	168430.13
			11547.32	12124.69	12730.92	13367.47	14035.84
			5329.53	5596.01	5875.81	6169.60	6478.08
			66.62	69.95	73.45	77.12	80.98
7P012	Toxicologist	144	145496.28	152771.09	160409.65	168430.13	176851.64
			12124.69	12730.92	13367.47	14035.84	14737.64
			5596.01	5875.81	6169.60	6478.08	6801.99
			69.95	73.45	77.12	80.98	85.02

ID-JDE	TECHNICAL/GENERAL	Range	Step A	Step B	Step C	Step D	Step E
8T001	Accounting Assistant I	122	85068.66	89322.09	93788.20	98477.61	103401.49
			7089.06	7443.51	7815.68	8206.47	8616.79
			3271.87	3435.47	3607.24	3787.60	3976.98
			40.90	42.94	45.09	47.35	49.71
7T001	Accounting Assistant II	126	93788.20	98477.61	103401.49	108571.56	114000.14
			7815.68	8206.47	8616.79	9047.63	9500.01
			3607.24	3787.60	3976.98	4175.83	4384.62
			45.09	47.35	49.71	52.20	54.81
7T002	Administrative Analyst	131	105955.00	111252.75	116815.38	122656.15	128788.96
			8829.58	9271.06	9734.62	10221.35	10732.41
			4075.19	4278.95	4492.90	4717.54	4953.42
			50.94	53.49	56.16	58.97	61.92
8T015	Administrative Assistant I	114	69986.20	73485.51	77159.78	81017.77	85068.66
			5832.18	6123.79	6429.98	6751.48	7089.06
			2691.78	2826.37	2967.68	3116.07	3271.87
			33.65	35.33	37.10	38.95	40.90
7T034	Administrative Assistant II	118	77159.78	81017.77	85068.66	89322.09	93788.20
			6429.98	6751.48	7089.06	7443.51	7815.68
			2967.68	3116.07	3271.87	3435.47	3607.24
			37.10	38.95	40.90	42.94	45.09
7T037 New	Accounting Technician	126	93788.20	98477.61	103401.49	108571.56	114000.14
			7815.68	8206.47	8616.79	9047.63	9500.01
			3607.24	3787.60	3976.98	4175.83	4384.62
			45.09	47.35	49.71	52.20	54.81
7T003	Administrative Secretary	118	77159.78	81017.77	85068.66	89322.09	93788.20
			6429.98	6751.48	7089.06	7443.51	7815.68
			2967.68	3116.07	3271.87	3435.47	3607.24
			37.10	38.95	40.90	42.94	45.09
8T002	AQ Case Settlement Spec. I	126	93788.20	98477.61	103401.49	108571.56	114000.14
			7815.68	8206.47	8616.79	9047.63	9500.01
			3607.24	3787.60	3976.98	4175.83	4384.62
			45.09	47.35	49.71	52.20	54.81
7T004	AQ Case Settlement Spec. II	130	103401.49	108571.56	114000.14	119700.15	125685.16
			8616.79	9047.63	9500.01	9975.01	10473.76
			3976.98	4175.83	4384.62	4603.85	4834.04
			49.71	52.20	54.81	57.55	60.43
8T003	Air Quality Inspector I	124	89322.09	93788.20	98477.61	103401.49	108571.56
			7443.51	7815.68	8206.47	8616.79	9047.63
			3435.47	3607.24	3787.60	3976.98	4175.83
			42.94	45.09	47.35	49.71	52.20
7T005	Air Quality Inspector II	128	98477.61	103401.49	108571.56	114000.14	119700.15
			8206.47	8616.79	9047.63	9500.01	9975.01
			3787.60	3976.98	4175.83	4384.62	4603.85
			47.35	49.71	52.20	54.81	57.55

ID-JDE	TECHNICAL/GENERAL (cont'd)	Range	Step A	Step B	Step C	Step D	Step E
8T004	Air Quality Instrument Specialist I	124	89322.09	93788.20	98477.61	103401.49	108571.56
			7443.51	7815.68	8206.47	8616.79	9047.63
			3435.47	3607.24	3787.60	3976.98	4175.83
			42.94	45.09	47.35	49.71	52.20
7T006	Air Quality Instrument Specialist II	128	98477.61	103401.49	108571.56	114000.14	119700.15
			8206.47	8616.79	9047.63	9500.01	9975.01
			3787.60	3976.98	4175.83	4384.62	4603.85
			47.35	49.71	52.20	54.81	57.55
8T005	Air Quality Laboratory Technician I	122	85068.66	89322.09	93788.20	98477.61	103401.49
			7089.06	7443.51	7815.68	8206.47	8616.79
			3271.87	3435.47	3607.24	3787.60	3976.98
			40.90	42.94	45.09	47.35	49.71
7T007	Air Quality Laboratory Technician II	126	93788.20	98477.61	103401.49	108571.56	114000.14
			7815.68	8206.47	8616.79	9047.63	9500.01
			3607.24	3787.60	3976.98	4175.83	4384.62
			45.09	47.35	49.71	52.20	54.81
8T006	Air Quality Permit Technician I	122	85068.66	89322.09	93788.20	98477.61	103401.49
			7089.06	7443.51	7815.68	8206.47	8616.79
			3271.87	3435.47	3607.24	3787.60	3976.98
			40.90	42.94	45.09	47.35	49.71
7T008	Air Quality Permit Technician II	126	93788.20	98477.61	103401.49	108571.56	114000.14
			7815.68	8206.47	8616.79	9047.63	9500.01
			3607.24	3787.60	3976.98	4175.83	4384.62
			45.09	47.35	49.71	52.20	54.81
8T007	Air Quality Specialist I	130	103401.49	108571.56	114000.14	119700.15	125685.16
			8616.79	9047.63	9500.01	9975.01	10473.76
			3976.98	4175.83	4384.62	4603.85	4834.04
			49.71	52.20	54.81	57.55	60.43
7T009	Air Quality Specialist II	134	114000.14	119700.15	125685.16	131969.41	138567.88
			9500.01	9975.01	10473.76	10997.45	11547.32
			4384.62	4603.85	4834.04	5075.75	5329.53
			54.81	57.55	60.43	63.45	66.62
7T010	Air Quality Technical Assistant	118	77159.78	81017.77	85068.66	89322.09	93788.20
			6429.98	6751.48	7089.06	7443.51	7815.68
			2967.68	3116.07	3271.87	3435.47	3607.24
			37.10	38.95	40.90	42.94	45.09
8T008	Air Quality Technician I	122	85068.66	89322.09	93788.20	98477.61	103401.49
			7089.06	7443.51	7815.68	8206.47	8616.79
			3271.87	3435.47	3607.24	3787.60	3976.98
			40.90	42.94	45.09	47.35	49.71
7T011	Air Quality Technician II	126	93788.20	98477.61	103401.49	108571.56	114000.14
			7815.68	8206.47	8616.79	9047.63	9500.01
			3607.24	3787.60	3976.98	4175.83	4384.62
			45.09	47.35	49.71	52.20	54.81

ID-JDE	TECHNICAL/GENERAL (cont'd)	Range	Step A	Step B	Step C	Step D	Step E
8T016	Assistant Air Quality Specialist I	122	85068.66	89322.09	93788.20	98477.61	103401.49
			7089.06	7443.51	7815.68	8206.47	8616.79
			3271.87	3435.47	3607.24	3787.60	3976.98
			40.90	42.94	45.09	47.35	49.71
7T035	Assistant Air Quality Specialist II	126	93788.20	98477.61	103401.49	108571.56	114000.14
			7815.68	8206.47	8616.79	9047.63	9500.01
			3607.24	3787.60	3976.98	4175.83	4384.62
			45.09	47.35	49.71	52.20	54.81
8T014	Assistant Staff Specialist I	122	85068.66	89322.09	93788.20	98477.61	103401.49
			7089.06	7443.51	7815.68	8206.47	8616.79
			3271.87	3435.47	3607.24	3787.60	3976.98
			40.90	42.94	45.09	47.35	49.71
7T033	Assistant Staff Specialist II	126	93788.20	98477.61	103401.49	108571.56	114000.14
			7815.68	8206.47	8616.79	9047.63	9500.01
			3607.24	3787.60	3976.98	4175.83	4384.62
			45.09	47.35	49.71	52.20	54.81
7T012	Building Maintenance Mechanic	114	69986.20	73485.51	77159.78	81017.77	85068.66
			5832.18	6123.79	6429.98	6751.48	7089.06
			2691.78	2826.37	2967.68	3116.07	3271.87
			33.65	35.33	37.10	38.95	40.90
7T013	Data Entry Operator	111	65047.18	68299.54	71714.51	75300.24	79065.25
			5420.60	5691.63	5976.21	6275.02	6588.77
			2501.81	2626.91	2758.25	2896.16	3040.97
			31.27	32.84	34.48	36.20	38.01
5T010	Data Support Supervisor	142	138567.88	145496.28	152771.09	160409.65	168430.13
			11547.32	12124.69	12730.92	13367.47	14035.84
			5329.53	5596.01	5875.81	6169.60	6478.08
			66.62	69.95	73.45	77.12	80.98
7T014	Database Specialist	135	116815.38	122656.15	128788.96	135228.41	141989.83
			9734.62	10221.35	10732.41	11269.03	11832.49
			4492.90	4717.54	4953.42	5201.09	5461.15
			56.16	58.97	61.92	65.01	68.26
7T015	Deputy Clerk of the Boards	123	87169.44	91527.91	96104.30	100909.52	105955.00
			7264.12	7627.33	8008.69	8409.13	8829.58
			3352.67	3520.30	3696.32	3881.14	4075.19
			41.91	44.00	46.20	48.51	50.94
7T028	Facilities Maintenance Worker	108	60456.71	63479.54	66653.52	69986.20	73485.51
			5038.06	5289.96	5554.46	5832.18	6123.79
			2325.26	2441.52	2563.60	2691.78	2826.37
			29.07	30.52	32.04	33.65	35.33
5T008	Facilities Services Supervisor	130	103401.49	108571.56	114000.14	119700.15	125685.16
			8616.79	9047.63	9500.01	9975.01	10473.76
			3976.98	4175.83	4384.62	4603.85	4834.04
			49.71	52.20	54.81	57.55	60.43

ID-JDE	TECHNICAL/GENERAL (cont'd)	Range	Step A	Step B	Step C	Step D	Step E
7T031	Fiscal Services Supervisor	142	138567.88	145496.28	152771.09	160409.65	168430.13
			11547.32	12124.69	12730.92	13367.47	14035.84
			5329.53	5596.01	5875.81	6169.60	6478.08
			66.62	69.95	73.45	77.12	80.98
8T009	Mechanic I	121	83018.51	87169.44	91527.91	96104.30	100909.52
			6918.21	7264.12	7627.33	8008.69	8409.13
			3193.02	3352.67	3520.30	3696.32	3881.14
			39.91	41.91	44.00	46.20	48.51
7T016	Mechanic II	125	91527.91	96104.30	100909.52	105955.00	111252.75
			7627.33	8008.69	8409.13	8829.58	9271.06
			3520.30	3696.32	3881.14	4075.19	4278.95
			44.00	46.20	48.51	50.94	53.49
8T010	Office Assistant I	104	54836.02	57577.82	60456.71	63479.54	66653.52
			4569.67	4798.15	5038.06	5289.96	5554.46
			2109.08	2214.53	2325.26	2441.52	2563.60
			26.36	27.68	29.07	30.52	32.04
7T017	Office Assistant II	108	60456.71	63479.54	66653.52	69986.20	73485.51
			5038.06	5289.96	5554.46	5832.18	6123.79
			2325.26	2441.52	2563.60	2691.78	2826.37
			29.07	30.52	32.04	33.65	35.33
5T001	Office Services Supervisor	116	73485.51	77159.78	81017.77	85068.66	89322.09
			6123.79	6429.98	6751.48	7089.06	7443.51
			2826.37	2967.68	3116.07	3271.87	3435.47
			35.33	37.10	38.95	40.90	42.94
7T018	Permit Coordinator	134	114000.14	119700.15	125685.16	131969.41	138567.88
			9500.01	9975.01	10473.76	10997.45	11547.32
			4384.62	4603.85	4834.04	5075.75	5329.53
			54.81	57.55	60.43	63.45	66.62
6T009	Principal Air Quality Instrument Specialist	136	119700.15	125685.16	131969.41	138567.88	145496.28
			9975.01	10473.76	10997.45	11547.32	12124.69
			4603.85	4834.04	5075.75	5329.53	5596.01
			57.55	60.43	63.45	66.62	69.95
4T001	Principal Air Quality Specialist	142	138567.88	145496.28	152771.09	160409.65	168430.13
			11547.32	12124.69	12730.92	13367.47	14035.84
			5329.53	5596.01	5875.81	6169.60	6478.08
			66.62	69.95	73.45	77.12	80.98
4T002	Principal Staff Specialist	142	138567.88	145496.28	152771.09	160409.65	168430.13
			11547.32	12124.69	12730.92	13367.47	14035.84
			5329.53	5596.01	5875.81	6169.60	6478.08
			66.62	69.95	73.45	77.12	80.98
4T003 New	Principal Systems Analyst	143	141989.83	149089.32	156543.79	164370.98	172589.52
			11832.49	12424.11	13045.32	13697.58	14382.46
			5461.15	5734.20	6020.91	6321.96	6638.06
			68.26	71.68	75.26	79.02	82.98

ID-JDE	TECHNICAL/GENERAL (cont'd)	Range	Step A	Step B	Step C	Step D	Step E
8T011	Programmer Analyst I	127	96104.30	100909.52	105955.00	111252.75	116815.38
			8008.69	8409.13	8829.58	9271.06	9734.62
			3696.32	3881.14	4075.19	4278.95	4492.90
			46.20	48.51	50.94	53.49	56.16
7T019	Programmer Analyst II	131	105955.00	111252.75	116815.38	122656.15	128788.96
			8829.58	9271.06	9734.62	10221.35	10732.41
			4075.19	4278.95	4492.90	4717.54	4953.42
			50.94	53.49	56.16	58.97	61.92
8T012	Public Information Officer I	130	103401.49	108571.56	114000.14	119700.15	125685.16
			8616.79	9047.63	9500.01	9975.01	10473.76
			3976.98	4175.83	4384.62	4603.85	4834.04
			49.71	52.20	54.81	57.55	60.43
7T020	Public Information Officer II	134	114000.14	119700.15	125685.16	131969.41	138567.88
			9500.01	9975.01	10473.76	10997.45	11547.32
			4384.62	4603.85	4834.04	5075.75	5329.53
			54.81	57.55	60.43	63.45	66.62
7T038	Public Information Technician	126	93788.20	98477.61	103401.49	108571.56	114000.14
New			7815.68	8206.47	8616.79	9047.63	9500.01
			3607.24	3787.60	3976.98	4175.83	4384.62
			45.09	47.35	49.71	52.20	54.81
7T027	Purchasing Agent	122	85068.66	89322.09	93788.20	98477.61	103401.49
			7089.06	7443.51	7815.68	8206.47	8616.79
			3271.87	3435.47	3607.24	3787.60	3976.98
			40.90	42.94	45.09	47.35	49.71
7T021	Radio/Telephone Operator	113	68299.54	71714.51	75300.24	79065.25	83018.51
			5691.63	5976.21	6275.02	6588.77	6918.21
			2626.91	2758.25	2896.16	3040.97	3193.02
			32.84	34.48	36.20	38.01	39.91
5T002	Radio/Telephone Operator Supervisor	119	79065.25	83018.51	87169.44	91527.91	96104.30
			6588.77	6918.21	7264.12	7627.33	8008.69
			3040.97	3193.02	3352.67	3520.30	3696.32
			38.01	39.91	41.91	44.00	46.20
7T022	Receptionist	104	54836.02	57577.82	60456.71	63479.54	66653.52
			4569.67	4798.15	5038.06	5289.96	5554.46
			2109.08	2214.53	2325.26	2441.52	2563.60
			26.36	27.68	29.07	30.52	32.04
7T023	Secretary	112	66653.52	69986.20	73485.51	77159.78	81017.77
			5554.46	5832.18	6123.79	6429.98	6751.48
			2563.60	2691.78	2826.37	2967.68	3116.07
			32.04	33.65	35.33	37.10	38.95
6T001	Senior Accounting Assistant	120	81017.77	85068.66	89322.09	93788.20	98477.61
			6751.48	7089.06	7443.51	7815.68	8206.47
			3116.07	3271.87	3435.47	3607.24	3787.60
			38.95	40.90	42.94	45.09	47.35

ID-JDE	TECHNICAL/GENERAL (cont'd)	Range	Step A	Step B	Step C	Step D	Step E
6T002	Senior Air Quality Inspector	132	108571.56	114000.14	119700.15	125685.16	131969.41
			9047.63	9500.01	9975.01	10473.76	10997.45
			4175.83	4384.62	4603.85	4834.04	5075.75
			52.20	54.81	57.55	60.43	63.45
6T003	Senior Air Quality Instrument Specialist	132	108571.56	114000.14	119700.15	125685.16	131969.41
			9047.63	9500.01	9975.01	10473.76	10997.45
			4175.83	4384.62	4603.85	4834.04	5075.75
			52.20	54.81	57.55	60.43	63.45
6T007	Senior Air Quality Permit Technician	130	103401.49	108571.56	114000.14	119700.15	125685.16
			8616.79	9047.63	9500.01	9975.01	10473.76
			3976.98	4175.83	4384.62	4603.85	4834.04
			49.71	52.20	54.81	57.55	60.43
6T004	Senior Air Quality Specialist	138	125685.16	131969.41	138567.88	145496.28	152771.09
			10473.76	10997.45	11547.32	12124.69	12730.92
			4834.04	5075.75	5329.53	5596.01	5875.81
			60.43	63.45	66.62	69.95	73.45
6T006	Senior Air Quality Technician	130	103401.49	108571.56	114000.14	119700.15	125685.16
			8616.79	9047.63	9500.01	9975.01	10473.76
			3976.98	4175.83	4384.62	4603.85	4834.04
			49.71	52.20	54.81	57.55	60.43
6T005	Senior Public Information Officer	138	125685.16	131969.41	138567.88	145496.28	152771.09
			10473.76	10997.45	11547.32	12124.69	12730.92
			4834.04	5075.75	5329.53	5596.01	5875.81
			60.43	63.45	66.62	69.95	73.45
6T008	Senior Staff Specialist	138	125685.16	131969.41	138567.88	145496.28	152771.09
			10473.76	10997.45	11547.32	12124.69	12730.92
			4834.04	5075.75	5329.53	5596.01	5875.81
			60.43	63.45	66.62	69.95	73.45
6T010 New	Senior Systems Analyst	139	128788.96	135228.41	141989.83	149089.32	156543.79
			10732.41	11269.03	11832.49	12424.11	13045.32
			4953.42	5201.09	5461.15	5734.20	6020.91
			61.92	65.01	68.26	71.68	75.26
8T013	Staff Specialist I	130	103401.49	108571.56	114000.14	119700.15	125685.16
			8616.79	9047.63	9500.01	9975.01	10473.76
			3976.98	4175.83	4384.62	4603.85	4834.04
			49.71	52.20	54.81	57.55	60.43
7T032	Staff Specialist II	134	114000.14	119700.15	125685.16	131969.41	138567.88
			9500.01	9975.01	10473.76	10997.45	11547.32
			4384.62	4603.85	4834.04	5075.75	5329.53
			54.81	57.55	60.43	63.45	66.62
5T003	Supervising Air Quality Inspector	136	119700.15	125685.16	131969.41	138567.88	145496.28
			9975.01	10473.76	10997.45	11547.32	12124.69
			4603.85	4834.04	5075.75	5329.53	5596.01
			57.55	60.43	63.45	66.62	69.95

ID-JDE	TECHNICAL/GENERAL (cont'd)	Range	Step A	Step B	Step C	Step D	Step E
5T004	Supervising Air Quality Instrument Specialist	136	119700.15	125685.16	131969.41	138567.88	145496.28
			9975.01	10473.76	10997.45	11547.32	12124.69
			4603.85	4834.04	5075.75	5329.53	5596.01
			57.55	60.43	63.45	66.62	69.95
5T005	Supervising Air Quality Specialist	142	138567.88	145496.28	152771.09	160409.65	168430.13
			11547.32	12124.69	12730.92	13367.47	14035.84
			5329.53	5596.01	5875.81	6169.60	6478.08
			66.62	69.95	73.45	77.12	80.98
5T006	Supervising Public Information Officer	142	138567.88	145496.28	152771.09	160409.65	168430.13
			11547.32	12124.69	12730.92	13367.47	14035.84
			5329.53	5596.01	5875.81	6169.60	6478.08
			66.62	69.95	73.45	77.12	80.98
5T009	Supervising Staff Specialist	142	138567.88	145496.28	152771.09	160409.65	168430.13
			11547.32	12124.69	12730.92	13367.47	14035.84
			5329.53	5596.01	5875.81	6169.60	6478.08
			66.62	69.95	73.45	77.12	80.98
5T007	Supervising Systems Analyst	143	141989.83	149089.32	156543.79	164370.98	172589.52
			11832.49	12424.11	13045.32	13697.58	14382.46
			5461.15	5734.20	6020.91	6321.96	6638.06
			68.26	71.68	75.26	79.02	82.98
7T024	Systems Analyst	135	116815.38	122656.15	128788.96	135228.41	141989.83
			9734.62	10221.35	10732.41	11269.03	11832.49
			4492.90	4717.54	4953.42	5201.09	5461.15
			56.16	58.97	61.92	65.01	68.26
8T017	Systems Analyst I	131	105955.00	111252.75	116815.38	122656.15	128788.96
New			8829.58	9271.06	9734.62	10221.35	10732.41
			4075.19	4278.95	4492.90	4717.54	4953.42
			50.94	53.49	56.16	58.97	61.92
7T037	Systems Analyst II	135	0.00	0.00	0.00	0.00	0.00
New			0.00	0.00	0.00	0.00	0.00
			0.00	0.00	0.00	0.00	0.00
			0.00	0.00	0.00	0.00	0.00
7T025	Systems Quality Assurance Specialist	135	116815.38	122656.15	128788.96	135228.41	141989.83
			9734.62	10221.35	10732.41	11269.03	11832.49
			4492.90	4717.54	4953.42	5201.09	5461.15
			56.16	58.97	61.92	65.01	68.26
7T039	Systems Technician	127	96104.30	100909.52	105955.00	111252.75	116815.38
New			8008.69	8409.13	8829.58	9271.06	9734.62
			3696.32	3881.14	4075.19	4278.95	4492.90
			46.20	48.51	50.94	53.49	56.16
7T026	Web Master	135	116815.38	122656.15	128788.96	135228.41	141989.83
			9734.62	10221.35	10732.41	11269.03	11832.49
			4492.90	4717.54	4953.42	5201.09	5461.15
			56.16	58.97	61.92	65.01	68.26

Bay Area Air District

Management and Confidential Employee

Benefits Program

INDEX

		Page
1.	Term of Program	1
2.	Participants	1
3.	Transit Allowance	1
4.	Transit/Carpool Subsidy	1
5.	Hours of Work and Overtime	1
6.	Retirement	2
7.	Health, Dental and Vision Insurance Premiums	2
8.	Health, Dental, Vision Care, And Life Insurance Coverage After Retirement	3
9.	Deferred Compensation	4
10.	Employee Assistance Program	5
11.	Life Insurance	5
12.	Long Term Disability (LTD)	5
13.	State Disability Insurance (SDI)	5
14.	Tuition Reimbursement and Professional Development Program	5
15.	Money Purchase Pension Plan	6
16.	Flexible Spending Account (Medical and Dependent Care)	6
17.	Paid Holidays	6
18.	Annual Leave	7
19.	Management Leave	8
20.	Sick Leave	8
21.	Workers' Compensation Leave	8
22.	Other Leave(s)	8

1. Term of Program

This Management and Confidential Employee Benefits Program is effective as of July 1, 2026, until June 30, 2027, or until such time that a successor program is approved.

2. Participants

Participants in the Management and Confidential Benefits Program include the Air District Executive Officer/APCO, Air District General Counsel, Principal Deputy Executive Officers, Deputy Executive Officers, Assistant Deputy Executive Officers, Directors, Officers, Senior Managers, Manager II's, Manager I's, Senior Assistant Counsels, Staff Attorney/Staff Attorney Trainee, Confidential employees, Limited-Term Contract Employees (LTCE) and all other management employees who are not currently covered by a Memorandum of Understanding (MOU).

The Air District Executive Officer/APCO and General Counsel are appointed directly by the Board of Directors and may have additional benefits available as outlined in their respective contracts as approved by the Board of Directors.

To the extent required by the Meyers Milias Brown Act and governing law, Employees in the classification of Assistant Counsel who are now organized under the Attorney Management Unit (AMU) will receive the same compensation as the participants in the Management and Confidential Benefits Program until ratification and Board approval of an inaugural Memorandum of Understanding for the AMU.

3. Transit Allowance

Executive Officer/APCO, Principal Deputy Executive Officer, Deputy Executive Officer, Assistant Deputy Executive Officer, Director and Officer level employees only, excluding General Counsel, receive a $500 per month Transit Allowance in lieu of an Air District assigned vehicle and transit/carpool subsidy.

4. Transit/Carpool Subsidy

Employees who do not receive the Transit Allowance are eligible for a transit or carpool subsidy of up to $340 per month (indexed to the IRS rate). Parking associated with a mass transit agency is an eligible reimbursement. In lieu of other transit subsidy, Air District employees who live more than one mile from their work location and walk or bicycle to work are eligible for up to three dollars ($3.00) per day (one dollar and fifty cents ($1.50) per one (1)-way trip). This is an Air District paid program.

5. Hours of Work and Overtime

All employees are expected to report all work time.

Executive and management participants in the Management and Confidential Benefits Program are exempt employees under the Fair Labor Standards Act (FLSA). Executive and Management employees are expected to fulfill the duties of their positions regardless

of the number of hours worked. While a standard workweek is typically forty (40) hours, exempt employees may be required to work beyond these hours based on business needs without eligibility to accrue compensatory time or to be paid overtime compensation.

Confidential employees are considered non-exempt employees for purposes of overtime or compensatory time and shall be paid one and half times (1.5x) their regular rate of pay for any hours worked over forty (40) hours in a workweek.

Non-exempt employees eligible for compensatory time (CTO) who have a balance in excess of 120 hours at the end of the calendar year will have the excess hours paid out to them. Non-exempt employees eligible for compensatory time have the option at the end of the calendar year to either cash out their entire balance or use their balance to contribute to their 457 deferred compensation plan.

6. Retirement

Employees are covered under the provisions of the California Public Employees Retirement System (CalPERS). The retirement formula for employees hired before January 1, 2013, is two percent (2%) at fifty-five (55), single highest year of compensation with an employee contribution of seven percent (7%) of salary. Employees hired on or after January 1, 2013, will be subject to the Public Employees' Pension Reform Act of 2013 (PEPRA). The retirement formula for PEPRA Members is two percent (2%) at sixty-two (62) and the employee contribution is seven point twenty-five percent (7.25%) from July 1, 2026 to June 30, 2027. The employee contribution rate for PEPRA member is based on fifty percent (50%) of the total normal cost as determined by CalPERS.

CalPERS employee payroll contributions are deducted bi-weekly.

7. Health, Dental and Vision Insurance Premiums

1. The Air District will provide a cafeteria plan for Fringe Benefits with a Fringe Benefit Allowance (FBA) for payment of premiums for health, dental, vision (including the vision buy up plan), and additional life insurance coverage.

    a. For employees hired before July 1, 2017, the FBA will be equal to the appropriate tier provided in Subsection 2 below or $1,763.70 for confidential employees and $1813.70 for management employees, whichever amount is greater.

    b. For employees hired on or after July 1, 2017, the FBA will be equal to the appropriate tier provided in Subsection 2 below.

2. Tiered Benefit Plan - The Air District will offer the following tiered benefit plan for FBA. Determination of tiers A, B, or C is based on enrollment for health care plan only.

    a. Employee (EE) only – 100% of Kaiser Health Maintenance Organization (HMO)premium for single plus 100% of dental and vision premiums for Employee Only Plan.

    b. Employee plus One (EE +1) – 95% of Kaiser HMO premium for employee plus one (1) plus 95% of dental and vision premiums for Employee + One (1)

Dependent Plan.

c. Employee + Family (EE + Family) – 90% of Kaiser HMO premium for employee plus two (2) or more plus 90% of dental and vision premiums for Employee + Two (2) or More Dependents Plan.

3. For those employees who do not enroll in a CalPERS health care plan, the allowance will be based on the percentage for the selected dental and vision plan(s) as described above.

8. Health, Dental, Vision Care, And Life Insurance Coverage After Retirement

The Air District shall comply with the provisions of the California Public Employees' Medical and Hospital Care Act. Vision care, dental insurance and life insurance coverage after retirement will be governed by the vision, dental and life insurance plans in effect for employees covered by this agreement, and in compliance with the provisions of the Medicare program.

1. Employees Hired before July 1, 2010

   Health insurance, dental insurance, vision care and life insurance shall continue for employees hired before July 1, 2010, at the maximum fringe benefit allowance received at the time of retirement. This Section also applies to employees hired before July 1, 2010, who separate from the Air District and are re-hired by the Air District at a later date and subsequently retire from the Air District.

2. Employees Hired on and after July 1, 2010

   a. Health insurance, dental insurance, vision care and life insurance shall continue for retired employees at the maximum fringe benefit allowance received upon retirement times a percentage of Air District contribution, and in compliance with the provisions of the Medicare program.

      The percentage of Air District contribution payable for postretirement health insurance, dental insurance, vision care and life insurance shall, except as provided in subsection b below, be based on the employee's completed years of credited CalPERS service at retirement as shown in the following table:

Credited Years of Service	Percentage of Air District Contribution
10	50
11	60
12	70
13	80
14	90
15	100

This subsection shall apply only to employees who receive a service or disability retirement and are first employed by the Air District after July 1, 2010.

b. The credited service of an employee for the purpose of determining the percentage of Air District contributions applicable under subsection I.2.a shall not include purchased Additional Retirement Service Credit (air time).

c. The credited service of an employee for the purpose of determining the percentage of Air District contributions applicable under subsection I.2.a shall include purchased Military, Peace Corps and AmeriCorps service.

d. Notwithstanding subsection I.2.a, for employees hired by the Air District on and after July 1, 2010, and who retire due to a disability with less than ten (10) years of credited service, the contribution payable by the Air District shall be fifty percent (50%) of the maximum fringe benefit allowance received at the time of retirement.

3. Increases

Retired annuitants' fringe benefit allowances may be equal to and increased concurrently with increases to represented employees' fringe benefits, as determined by the Air District's Board of Directors.

4. For employees first employed before July 1, 2017, and with no break in service to the date of retirement, except as provided in subsection I.2 above, if they are otherwise eligible for an annuitant fringe benefit (see subsections I.1, I.2 and I.3 above), their retired annuitant fringe benefit allowance shall not be less than $1763.70 per month for confidential employees and $1813.70 for management employees or proration as described in I.2 above.

5. The Air District provides Medicare Part B reimbursement for employees that retire after July 1, 2000, up to a maximum total cost of $10,000 per year for all covered retirees. However, employees that retire after July 1,2011 shall only be entitled to be reimbursed for the standard Medicare Part B premium. Once the $10,000 has been distributed by the Air District, an additional $5,000 per calendar year shall be made available to reimburse the standard Medicare Part B premium for employees that retire after July 1, 2011.

9. Deferred Compensation

The Air District provides a 457 deferred compensation plan. Participation is optional. This plan is designed to allow employees to invest a portion of their salary that is tax deferred until such time as the employee withdraws the funds, subject to IRS regulations. The maximum employee contribution is based on IRS regulations and may be subject to change. An additional amount for catch-up for employees who are fifty (50) years old or older is available and is subject to IRS regulations. Employees can make pre-tax and/or Roth after-tax contributions.

Deferred compensation payroll deductions are taken twice per month, for a total of twenty-four (24) deductions per calendar year, regardless of the bi-weekly payroll schedule.

10. Employee Assistance Program

The Air District provides an employee assistance program for the employee and the members of their household. This is an Air District paid program.

11. Life Insurance

Basic Life (Air District paid) - Up to age fifty-five (55), the coverage is equal to five (5) times the employee's annual salary up to a maximum of $500,000. Coverage decreases with age. From age fifty-five (55) through the age of fifty-nine (59), coverage is equal to four (4) times salary up to a maximum of $500,000. From age sixty (60) through the age of sixty-four (64), coverage is equal to three (3) times salary up to a maximum of $500,000. From age sixty-five (65) through sixty-nine (69), coverage is two (2) times salary up to a maximum of $500,000. From age seventy (70) and over, coverage is one and thirty-five hundredths (1.35) times salary up to a maximum of $500,000. This is an Air District paid program.

Additional Life - The coverage is equal to two (2) times the employee's annual salary up to a maximum of $100,000. Employees may use FBA for premium payment.

Dependent Life - The coverage is equal to $5,000 for each eligible dependent covered. Employees may NOT use FBA for premium payment.

Life insurance payroll deductions are taken twice per month, for a total of twenty-four (24) deductions per calendar year, regardless of the bi-weekly payroll schedule.

12. Long Term Disability (LTD)

The Air District provides LTD coverage which equals sixty-six (66)-two-thirds percent (2/3%) of salary for any on or off the job disability, up to a maximum of $6,500 per month. This is an Air District paid program.

13. State Disability Insurance (SDI)

The Air District adheres to SDI coverage including sick leave integration for non-industrial illness or injury. Employees contribute one point three percent (1.3%) of salary. The employee contribution is subject to changes by the State of California. Participation is mandatory.

State Disability Insurance payroll deductions are taken biweekly.

14. Tuition Reimbursement and Professional Development Program

The Air District reimburses up to a maximum of $2,000 per fiscal year for job related educational pursuits and up to a maximum of $1,500 per fiscal year for skills enhancement pursuits.

The Air District offers student loan repayment assistance in amounts up to $1,000 per year, per employee. The program is administered on a first-come, first-served basis.

Each of the above programs is limited to $10,000 in total reimbursement per fiscal year.

15. Money Purchase Pension Plan

Effective July 1, 2026, the Air District contributes $258.25 per month for each eligible employee. Adjustments in subsequent years to match increase in CPI-W.

16. Flexible Spending Account (Medical and Dependent Care)

The Air District provides a medical and dependent care reimbursement program, also known as a Flexible Spending Account (FSA) program, allows the employee to set aside pre-tax salary dollars to pay for eligible expenses for medical and dependent care. The plan year maximum will be based on IRS regulations. Participation is optional. FSA payroll deductions are taken twice per month, for a total of twenty-four (24) deductions per calendar year, regardless of the bi-weekly payroll schedule.

17. Paid Holidays

Management and Confidential employees receive the following fourteen (14) paid holidays:

New Year's Day	1st (First) day of January
Martin Luther King's Birthday	3rd (Third) day of January
Lincoln's Birthday	12th (Twelfth) day of February
Washington's Birthday	3rd (Third) Monday of February
Farmworkers' Day	31st (Thirty-first) day of March
Memorial Day	Last Monday of May
Juneteenth	19th (Nineteenth) day of June
Independence Day	4th (Fourth) of July
Labor Day	1st (First) Monday of September
Indigenous Peoples' Day	2nd (Second) Monday of October
Veterans Day	11th (Eleventh) day of November
Thanksgiving Day	4th (Fourth) Thursday of November
Day After Thanksgiving	4th (Fourth) Friday of November
Christmas Day	25th (Twenty-fifth) of December

Management employees receive seventy-two (72) hours of floating holiday each year on July 1. Confidential employees receive forty (40) hours of floating holiday. The Air District shall grant each Management employee (including Management employees in LTCE positions) 72 hours of floating holiday and each Confidential employee (including Confidential employees in LTCE positions) 40 hours of floating holiday. Except, any Management or Confidential employee who is hired after July 1st of the current fiscal year shall receive a prorated portion of the total floating holiday hours based upon the remaining months for that fiscal year. For purposes of prorating, any Management or Confidential employee whose hire date is between the 1st and the 15th of the month shall receive his/her prorated portion for that month. For purposes of prorating, any Management or Confidential employee whose hire date is between the 16th and the last day of the month shall not receive any prorated portion for that month. For example, a Management employee with a start date of January 1 would receive 36 hours of floating holiday but a Management employee with a start date of January 16 would receive 30 hours of floating holiday. Part-time Management or part-time Confidential employees shall receive a pro-rated amount of floating holiday as determined by the percentage of a full schedule.

Management and Confidential employees who were employed on or before July 1st of the fiscal year shall be credited with the total floating holiday hours on July 1st of the current fiscal year. Management and Confidential employees who were employed after July 1st of the current fiscal year shall receive the total prorated portion of floating holiday hours on their date of hire for that fiscal year.

Floating holidays must be used within the fiscal year they are credited. Floating holidays may not be carried forward into the following fiscal year. Unused floating holiday hours are not eligible for cash-out except upon termination for the Air District.

18. Annual Leave

Management and Confidential employees shall earn annual leave at the following accrual rates:

Years of Service	Accrual Rate per Pay Period
Less than 3 years	3.69
3 to 5 years	4.64
5 to 10 years	5.52
10 to 20 years	6.48
20 to 25 years	7.69
More than 25 years	9.23

Annual leave will accrue beginning on an employee's first day of employment but cannot be taken until the successful completion of six (6) months of service.

The maximum allowable accumulation of annual leave is four hundred-sixty (460) hours. Once an employee reaches the annual leave accumulation maximum, leave accruals will cease until the balance is reduced and remains below 460 hours.

Once per calendar year, employees may cash out unused annual leave in excess of 160 hours up to a maximum of 40 hours per calendar year.

19. Management Leave

Management employees receive eighty (80) hours of management leave (in lieu of overtime) at the beginning of each fiscal year. Any unused portion must be cashed out by June 30th of each fiscal year.

An additional forty (40) hours of management leave at the beginning of each fiscal year will be provided to the Executive Officer/APCO, General Counsel, Principal Deputy Executive Officer, Assistant Deputy Officers, and Deputy Executive Officers. Any unused portion must be cashed out by June 30th of each fiscal year.

Unused management leave cannot be carried forward to the following fiscal year.

20. Sick Leave

Management and Confidential employees earn three point sixty-nine (3.69) hours of sick leave per pay period.

21. Workers' Compensation Leave

The Air District provides Worker's Compensation coverage for industrial injury or illness. The Air District provides full salary continuation for the first ninety (90) days from the date of injury or illness for claims accepted by the Workers' Compensation carrier.

22. Other Leave(s)

Management and Confidential employees are entitled to the following leaves: Benevolent Leave Fund, Bereavement Leave and leave for Jury Duty. Additional information regarding these leaves may be found in the Air District's Personnel Policy Manual.

Bay Area Air District

Proposed Fiscal Year 2026-2027 Budget

Board of Directors Budget Hearing Meeting

April 29, 2026

Hyacinth Hinojosa, Deputy Executive Officer,
Finance and Administration
Stephanie Osaze, Director of Finance

Presentation Outline

- Background
- Budget & Fee Regulation Schedule
- Budget Summary & Highlights
- Overview of the Proposed Budget by Service Areas
- Next Steps

Background

- March 18, 2026 - Finance and Administration Committee discussed the proposed budget and referred the budget to the full Board of Directors (Board) for consideration
- The Board is required to conduct two public hearings for public review and testimony
- Final action is expected at the conclusion of the second public hearing scheduled for June 3, 2026

Budget & Fee Regulation Schedule

Description	Date
Finance and Administration Committee briefing	December 17, 2025
Public workshop for Regulation 3 amendments	February 26, 2026
Budget Workshop	March 10, 2026
Finance and Administration Committee briefing	March 18, 2026
Finance and Administration Committee briefing	April 15, 2026
First public hearings on budget & Regulation 3 to receive testimony	April 29, 2026
Written comments on proposed amendments to Regulation 3 due	May 15, 2026
Second public hearings on budget and Regulation 3 to consider adoption	June 3, 2026
Budget and fee amendments effective, if adopted	July 1, 2026



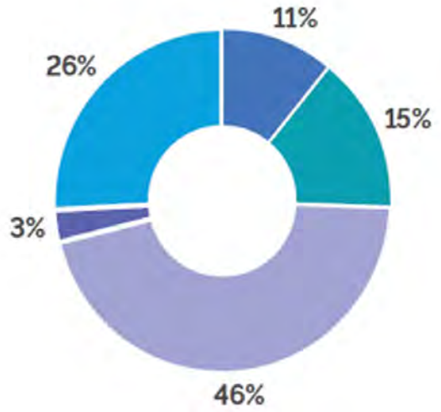
Budget Highlights

The Proposed Budget was developed with the following goals:

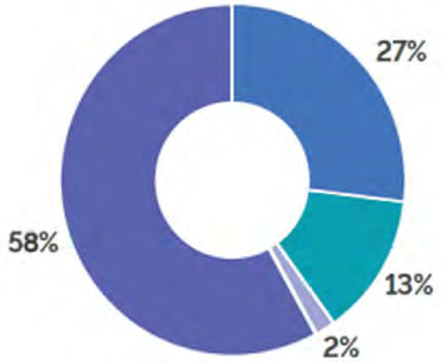
- Strengthen alignment to the Air District's *2024-2029 Strategic Plan* and advance Board priorities for Fiscal Year (FY) 2026-2027
- Cost savings and strategic investments to ensure resources are deployed effectively to improve air quality, enhance public health, and foster stronger community partnerships
- Expansion of community driven funding programs and projects to impacted communities
- Refining the Air District organizational structure, separating the Science & Policy Service Area

FY 2026-2027 All Funds Budget by Revenue and Expense Type

Revenue	($ Millions)	
Property Taxes	$51.3	11%
Permits/Fees	$72.1	15%
Grants	$219.4	46%
Other Revenue	$12.0	3%
Transfer From Reserves *	$121.9	26%
Total Revenue	**$476.6**	



Expenditure		
Salaries and Benefits	$127.1	27%
Services and Supplies	$63.0	13%
Capital	$11.0	2%
Distributions and Transfers	$275.5	58%
Total Expenditure	**$476.6**	



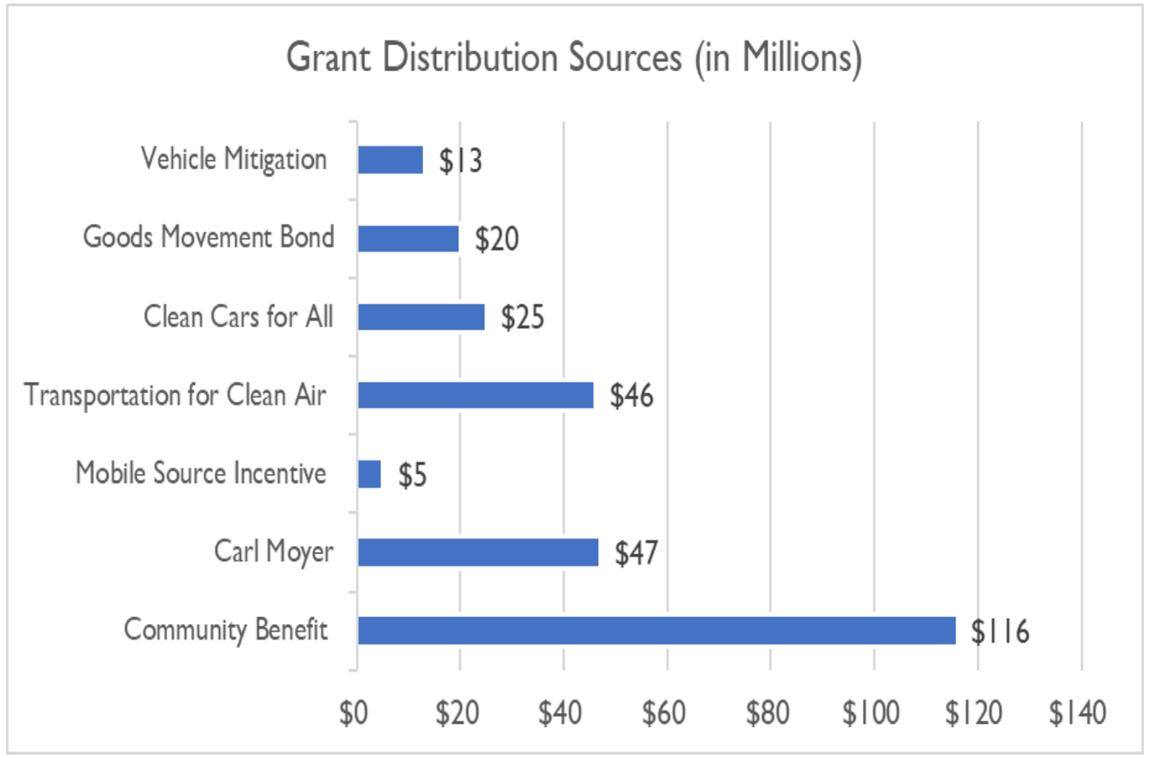
Percentages may not total 100%, and totals may not equal the sum of displayed line items due to rounding.

*Includes Community Benefit Fund resources designated for Round 1 implementation of the Bay Reinvesting Penalties for Air Improvement and Resilience (REPAIR) program

Grant Distributions

The Air District administers a variety of grant incentive programs that fund projects and initiatives aimed at reducing emissions and lowering pollution exposure in communities most affected by air quality impacts.

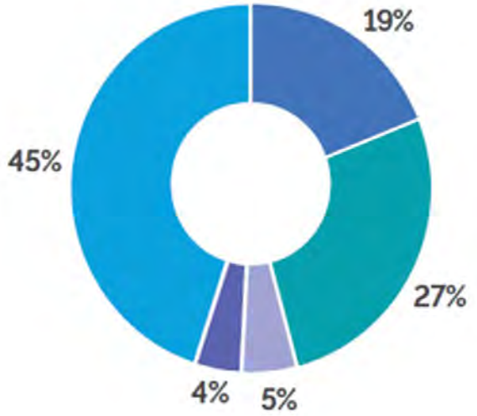
$116 Million (M) in new investments from the community benefit fund to support Bay REPAIR program for community-led investments for Benicia and Richmond and surrounding communities.

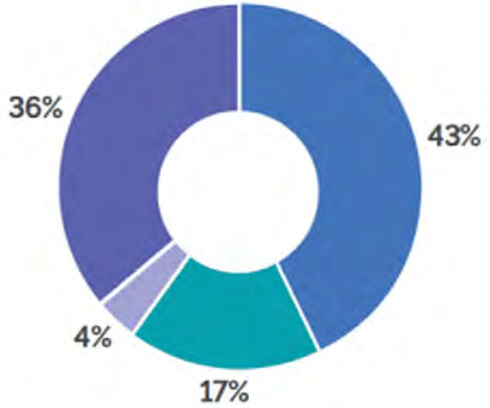


FY 2026-2027 General Fund Budget by Type

Revenue	($ Millions)	
Property Taxes	$51.3	19%
Permits/Fees	$72.1	27%
Grants	$13.5	5%
Other Revenue	$12.0	4%
Transfer From Reserves *	$121.9	45%
Total Revenue	**$270.8**	

Expenditure		
Salaries and Benefits	$117.1	43%
Services and Supplies	$45.7	17%
Capital	$10.7	4%
Distributions and Transfers	$97.3	36%
Total Expenditure	**$270.8**	





* Includes Community Benefit Fund resources designated for Round 1 implementation of the Bay REPAIR program

Percentages may not total 100%, and totals may not equal the sum of displayed line items due to rounding.

Financial Forecast

General Fund Fiscal Year (FY) - Five Year Projection	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31
			(in Millions)		
Revenue	150.9	154.1	162.7	172.5	184.1
Expenditure	174.8	167.7	171.0	169.9	172.9
Deficit/Surplus	-23.9	-13.6	-8.3	2.6	11.2
Use of Community Benefit (9%) Reserves	3.8	2.8			
Use of General Fund Reserves	-20.1	-10.8	-8.3		
Remaining Reserves	**73.6**	**62.8**	**54.5**	**57.1**	**68.3**
25% Minimum Reserve Policy	**40.1**	**42.0**	**42.8**	**42.5**	**43.3**

- The Five-Year Forecast demonstrates the General Fund will draw from reserves in the short-term, the Air District remains financially stable and maintains compliance with its reserve policy
- Total revenues projected to grow, driven primarily by increases in permit and fee revenues and steady property tax growth
- Expenditure show slight fluctuations throughout the forecast period, reflecting adjustments for one-time costs and reductions in limited-term staffing.

Budget Summary - Ongoing Investments

$13.6M - Ongoing investments using reserves (based on prior Board approvals) include:

- $2.6M transfer from designated Schedule X reserves to support the Refinery Community Air Monitoring Program
- $1.2M transfer from Limited Term Contract Employee (LTCE) staffing reserve designation to support existing 6 LTCE positions
- $3.8M transfer from the Community Benefit Administrative Fund to support the Community Investments Office
- $6.0M staffing investment to support 15 Full-Time Equivalent (FTE) and 14 LTCEs for the Permit Backlog Reduction Plan initially approved in September 2025

Budget Summary - New Investments

New investment from reserves includes:

- $10.4M for one-time service and capital costs

In Millions ($)

Capital	Amount
Air Monitoring Equipment	2.5
AI Permiting Enhancement	1.1
Open Air Data Portal	1.0
Website/Language access	0.7
Permit Ticketing System	0.3
Grant System	0.2
Source Test Equipment	0.2
Other	0.2
	6.2

Services	Amount
Regulatory & Plan Development	1.0
Monitoring, Modeling, Data Systems	1.1
Legal Services	0.9
Facility & Maintenance	0.9
Other	0.3
	4.2

Budget Summary - Other Considerations

Separately, the budget also includes new investment from Community Benefit Fund reserves includes:

$116M from the community benefit fund to support Bay REPAIR program for community-led investments for Benicia and Richmond and surrounding communities.

Assumes a 12% Vacancy Rate

2.5% estimated increase to support employee salaries and benefits

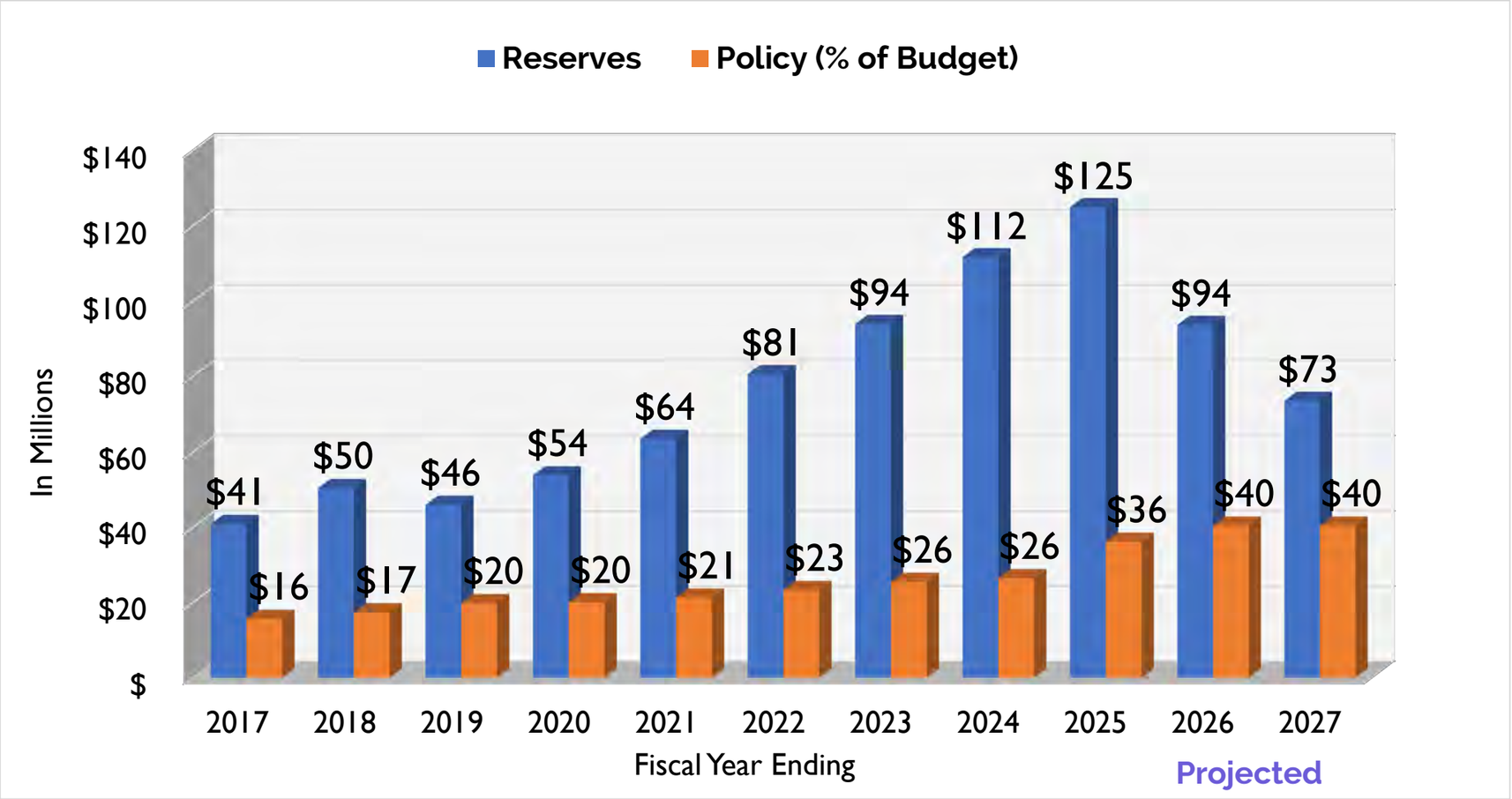
Continuation of $5M discretionary contributions to prefund Pension Trust

Budget Summary - Sources and Uses

General Fund Summary of Sources and Uses	
	FY 2026-27
Sources	
Operating Revenues	150,865,683
Operating Surplus Reserves	13,564,593
Designated Reserves	8,747,316
Undesignated Reserves	1,632,405
Total Sources	**174,809,997**
Uses	
Personnel Cost (net of vacancy rate)	117,124,956
Ongoing service & capital costs	47,321,444
One-Time service & capital costs	10,363,597
Total Uses	**174,809,997**

The proposed budget is balanced with use of FY 2024-2025 operating surplus and reserves to support $13.6M in ongoing investments and $10.4M in new investments to meet strategic priorities.

General Fund Reserves Trend



Reserve Policy updated to a range of 25-35% of the General Fund Operating Budget

- 20%: 2017 to 2025
- 25%: 2026 and 2027

General Fund Reserve Proposed Designations and Uses

	FY 2026-2027 In Millions
Projected Reserves Balance (June 30, 2026)	**93.7**
Contingency Designations*:	
Assembly Bill 617 Staffing Contingency	4
Economic Contingency (25% of Budget)	40
Litigation Support Contingency	2
	46
Long -Term Commitment Designations*:	
Community Benefits	3
Information Technology Projects	1
Staffing Investment	10.5
Schedule X - Capital	0.2
Schedule X - Operating	2.3
	17.0
Other Designations *	
Air Toxic Study	4
Real property & Facility Projects	4
One-Time Professional Services	2
Woodsmoke (Enforcement)	0.2
Woodsmoke Program (Strategic Incentives)	0.5
	10.4
Total Designated Reserves	**73.5**

*Subject to change at Board's discretion

	FY 2026-2027 In Millions
Use of Reserves to Balance the Operating Budget:	**20.2**
Ongoing Investments:	
Permit Backlog Reduction Plan (15FTE & 14 LTCE)	6.0
6 Limited Term Contract Employee (LTCE) Staffing	1.2
Schedule X Capital and Operating costs	2.6
	9.8
New Investments:	
One-time capital & service cost	10.4
	10.4
AVAILABLE GENERAL FUND RESERVES	**0.0**

COMMUNITY BENEFIT FUND - ADMIN PORTION	
	FY 2026-2027
Projected Available funding (9%)	**6.6**
Staffing cost	2.0
Service cost	1.7
	3.7
ENDING BALANCE	**2.9**

Medical Retiree Plan Funding Status/Policy

Medical Retirement Plan- Other Post Employment Benefits (OPEB):

Funding Policy: Target 90% Funded Level

- 90% target was met in 2023
- 2025 actuarial valuation is in progress

Plan Funded Summary:

- Obligation: $79M
- Funded: $73M
- Unfunded: $6M
- **92% funded**



Total contributions to the Trust from 2008 to date = $44M
Total net investment earnings to date = $29M

Pension Plan Funding Status/Policy

Pension Plan: California Pension Employers Retirement System (CalPERS)

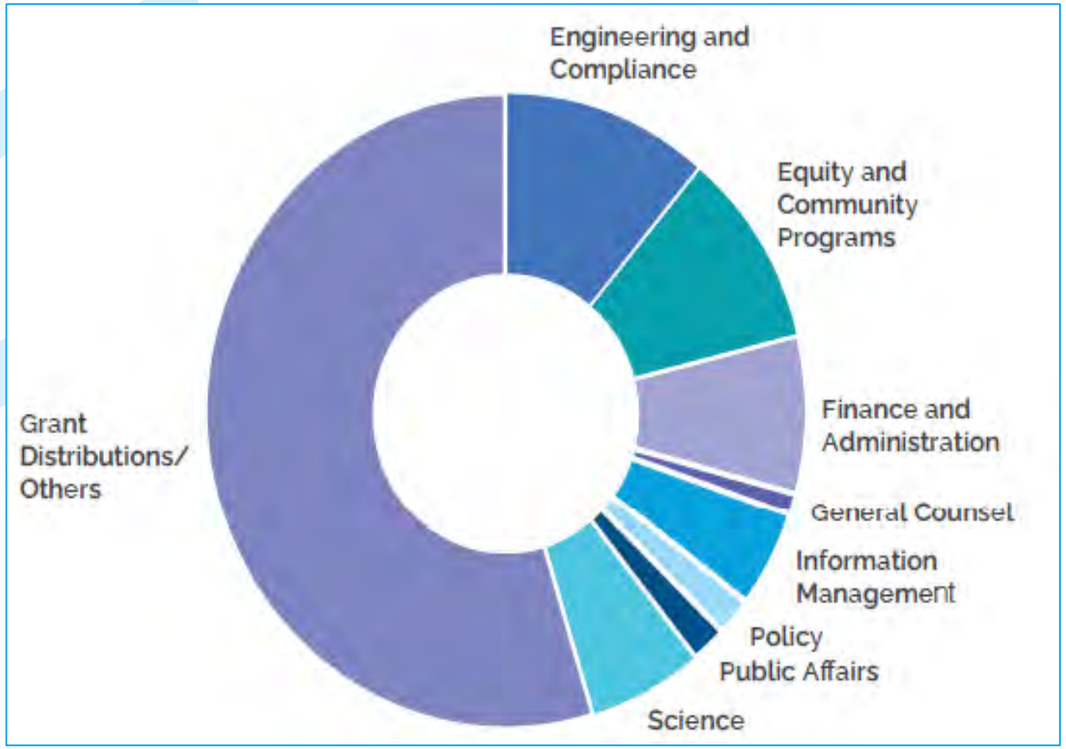
Funding Policy: Target 90% Funded Level
$5M in annual discretionary contribution to accelerate funding target

- FY 2025-26 budget, Board approved an additional $10M using reserves for a total of $15M
- Funded level increase from 78% to 94% projected funding level by 2030

Recommendation: Allocate $5M annual discretionary contribution to the Pension Plan

	Actual	Projection ($ in Millions)					
Fiscal Year	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Accrued Liability	$443	$464	$488	$510	$534	$557	$582
Market Value of Assets	328	363	384	407	429	453	477
115 Trust Assets	16	23	40	47	55	63	72
Unfunded Accrued Liability	99	78	64	56	50	41	33
Funded Status (%)	**78%**	**83%**	**87%**	**89%**	**91%**	**93%**	**94%**
Projections are based on funding policy and actuarial assumptions							
Investment Return							
Assumption	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%
Actual	9.5%	12.1%					

FY 2026-2027 Budget by Service Area

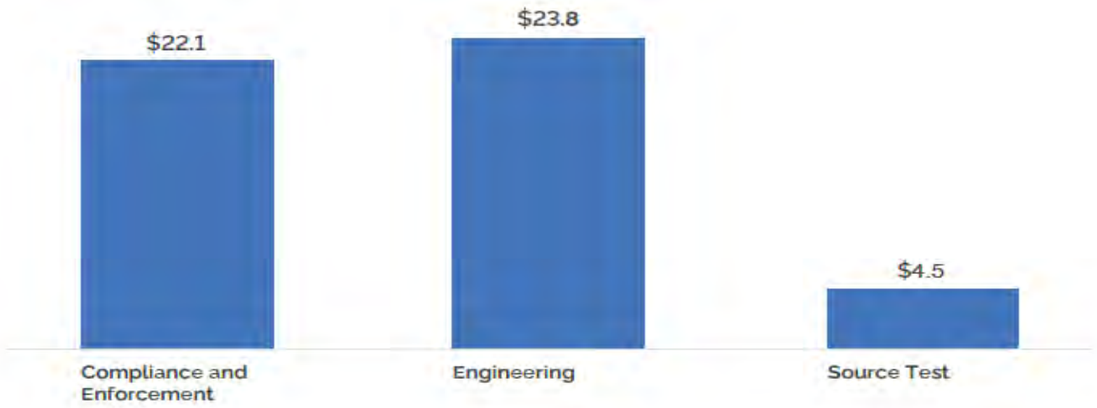


Expenditure	($ Millions)	
Engineering and Compliance	$50.4	11%
Equity and Community Programs	$49.2	10%
Finance and Administration	$38.8	8%
General Counsel	$7.0	1%
Information Management	$24.5	5%
Policy	$10.7	2%
Public Affairs	$11.8	2%
Science	$26.9	6%
Grant Distributions/Others	$257.3	54%
Total Expenditure	**$476.6**	

Percentages may not total 100%, and totals may not equal the sum of displayed line items due to rounding.

Service Area: Engineering & Compliance

FY 2026-27 EXPENDITURE ($ MILLIONS)



Expenditure	FYE 2025 Audited Actual	FYE 2026 Approved Budget	FYE 2026 Amended Budget	FYE 2027 Proposed Budget	FYE 2027 FTE Headcount
Deputy Executive Officer					**1**
Compliance and Enforcement	$17.1	$21.0	$21.1	$22.1	99
Engineering	$14.0	$18.6	$19.4	$23.8	88
Source Test	$3.7	$4.5	$4.5	$4.5	16
Service Area Total	**$34.8**	**$44.1**	**$45.0**	**$50.4**	**204**

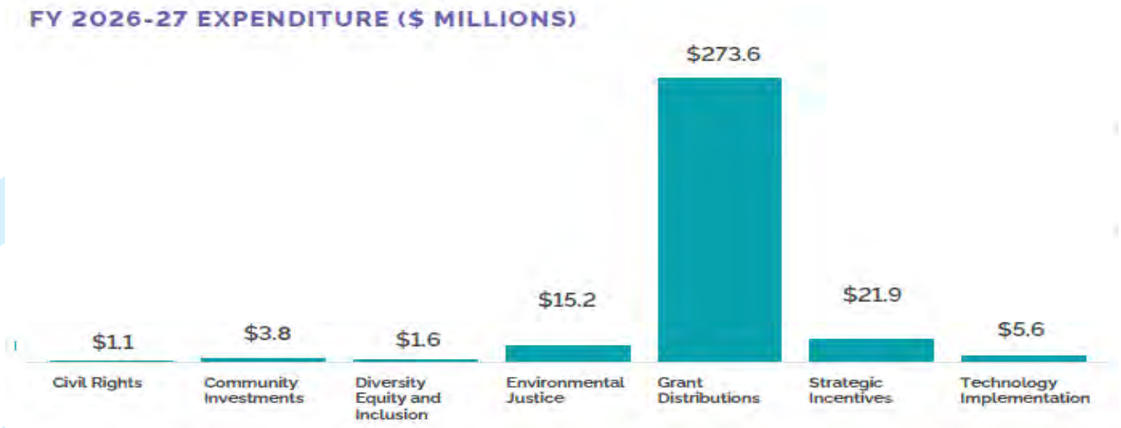
Totals may not equal the sum of displayed line items due to rounding.

Enhance compliance and enforcement policies to prioritize high-impact inspections in communities overburdened by air pollution. (Strategy 1.5, 2.2, 2.4, 3.3, 3.4, 4.5, 4.10, 4.11)

Improve accessibility and transparency of the air quality complaint process to better respond to community concerns. (Strategy 2.1, 2.3, 2.5, 3.3, 3.4, 4.4, 4.7, 4.10, 4.11)

Implement Board-approved strategic staffing adjustments for the Engineering Division to improve timeliness, consistency, and transparency in permitting (Strategies 3.3, 4.1, 4.2, 4.3, 4.10, 4.11)

Service Area: Equity & Community Programs



Expenditure	FYE 2025 Audited Actual	FYE 2026 Approved Budget	FYE 2026 Amended Budget	FYE 2027 Proposed Budget	FYE 2027 FTE Headcount
Deputy Executive Officer					**1**
Civil Rights	-	$0.6	$0.6	$1.1	3
Community Investments	$0.1	$3.3	$3.3	$3.8	5
Diversity Equity and Inclusion	$0.9	$1.5	$1.6	$1.6	4
Environmental Justice	$12.8	$18.3	$21.0	$15.2	23
Grant Distributions	$72.5	$122.1	$136.1	$273.6	-
Strategic Incentives	$9.2	$21.7	$23.5	$21.9	35
Technology Implementation	$3.7	$5.6	$6.4	$5.6	11
Service Area Total	**$99.1**	**$173.2**	**$192.5**	**$322.8**	**82**

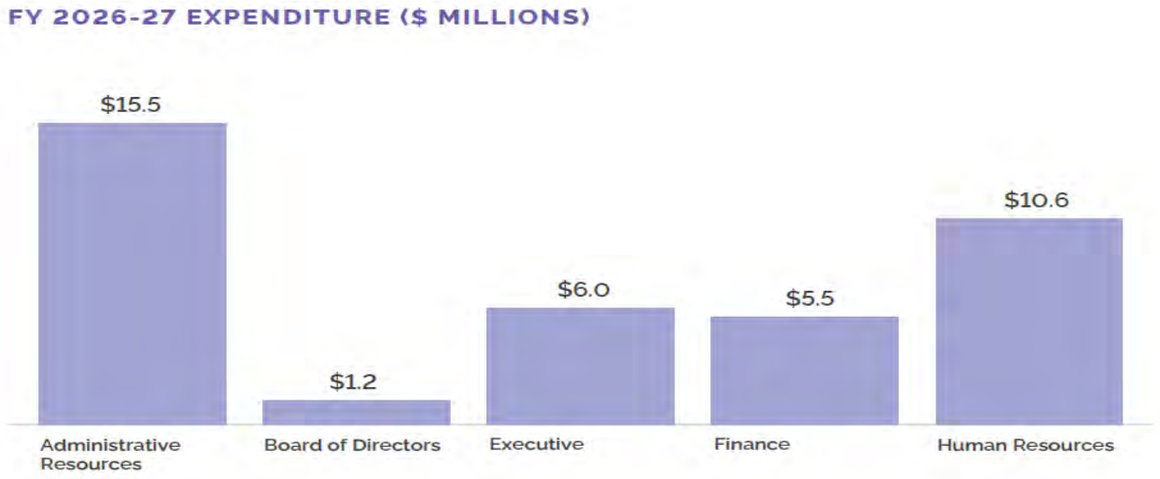
Totals may not equal the sum of displayed line items due to rounding.

Expand clean energy and zero-emission infrastructure investments to support climate resilience in frontline communities. (Strategy 1.7)

Strengthen community engagement through the Environmental Justice Navigator Program to build relationships and trust. (Strategy 2.1)

Launch the Local Community Benefits Fund to reinvest penalty funds back into the communities where air quality violations occurred (Strategy 2.10)

Service Area: Finance & Administration



Expenditure	FYE 2025 Audited Actual	FYE 2026 Approved Budget	FYE 2026 Amended Budget	FYE 2027 Proposed Budget	FYE 2027 FTE Headcount
Deputy Executive Officer					**1**
Administrative Resources	$10.0	$15.3	$16.6	$15.5	16
Board of Directors	$0.6	$0.6	$0.8	$1.2	-
Executive	$7.2	$6.4	$7.2	$6.0	14
Finance	$4.3	$5.4	$5.5	$5.5	18
Human Resources	$7.9	$8.1	$8.6	$10.6	12
Service Area Total	**$30.0**	**$35.8**	**$38.7**	**$38.8**	**61**

Totals may not equal the sum of displayed line items due to rounding.

Implement a comprehensive professional training plan encompassing onboarding, ongoing skills development, and environmental justice, leadership, and regulatory compliance training. (Strategy 3.6)

Advance asset planning to support mission delivery by ensuring facilities and fleet assets are aligned with long-term operational needs, workforce flexibility, and fiscal sustainability. (Strategy 4.11)

Improve procurement and contract management practices to increase efficiency, transparency, and alignment with Air District priorities. (Strategy 4.12)

Service Area: General Counsel

FY 2026-27 EXPENDITURE ($ MILLIONS)



Expenditure	FYE 2025 Audited Actual	FYE 2026 Approved Budget	FYE 2026 Amended Budget	FYE 2027 Proposed Budget	FYE 2027 FTE Headcount
Legal	$5.6	$6.3	$7.6	$7.0	19
Service Area Total	**$5.6**	**$6.3**	**$7.6**	**$7.0**	**19**

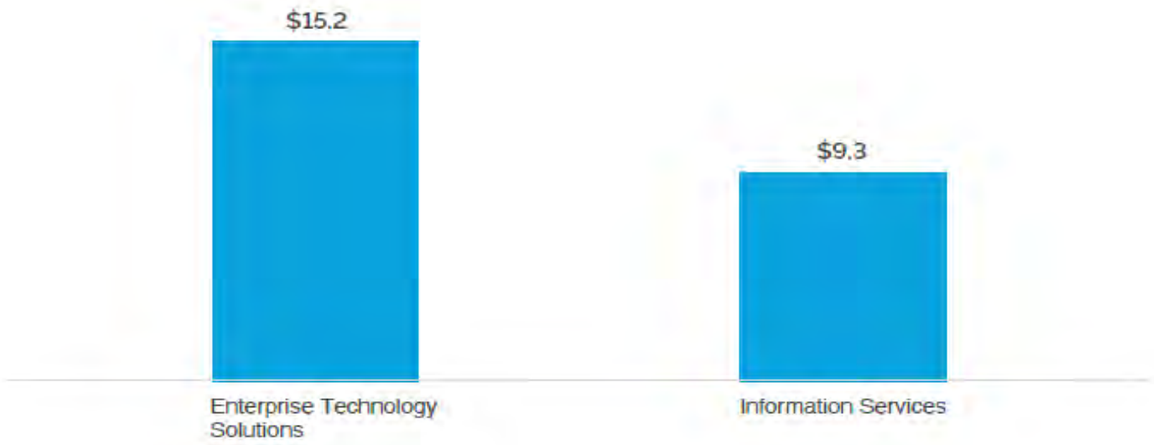
Adopt a new enforcement policy to hold violators accountable and ensure violations result in meaningful consequences. (Strategy 1.6)

Develop protocols to formalize how the Air District ensures compliance with civil rights laws in permitting. (Strategy 2.10)

Expand environmental justice legal training and professional development through implementation of the Environmental Justice Law Fellowship program. (Strategy 3.4)

Service Area: Information Management

FY 2026-27 EXPENDITURE ($ MILLIONS)



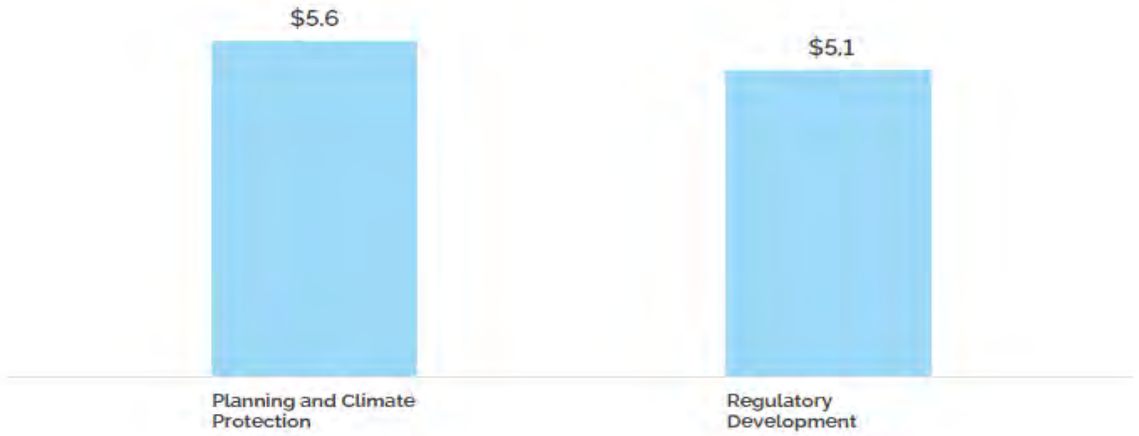
Expenditure	FYE 2025 Audited Actual	FYE 2026 Approved Budget	FYE 2026 Amended Budget	FYE 2027 Proposed Budget	FYE 2027 FTE Headcount
Deputy Executive Officer					**1**
Enterprise Technology Solutions	$11.2	$10.6	$11.8	$15.2	17
Information Services	$6.3	$7.2	$8.7	$9.3	16
Service Area Total	**$17.6**	**$17.8**	**$20.6**	**$24.5**	**34**

Totals may not equal the sum of displayed line items due to rounding.

- Create online data portals to provide public access to comprehensive air quality, permitting and compliance data. (Strategy 2.3)
- Streamline permitting and enforcement systems for greater transparency and operational efficiency. (Strategy 4.1)
- Develop improved grants management systems to increase accessibility for frontline communities. (Strategy 2.8)

Service Area: Policy

FY 2026-27 EXPENDITURE ($ MILLIONS)



Expenditure	FYE 2025 Audited Actual	FYE 2026 Approved Budget	FYE 2026 Amended Budget	FYE 2027 Proposed Budget	FYE 2027 FTE Headcount
Deputy Executive Officer					**1**
Planning and Climate Protection	$4.4	$4.7	$5.7	$5.6	21
Regulatory Development	$2.6	$4.4	$5.0	$5.1	16
Service Area Total	**$7.1**	**$9.1**	**$10.7**	**$10.7**	**38**

Totals may not equal the sum of displayed line items due to rounding.

Strengthen air pollution regulations to reduce emissions from major industrial sources. (Strategy 1.2)

Change approach to air quality (Strategy 1.1)

Advance innovative climate solutions and implement regional climate plans (Strategy 1.7)

Service Area: Public Affairs

FY 2026-27 EXPENDITURE ($ MILLIONS)



Expenditure	FYE 2025 Audited Actual	FYE 2026 Approved Budget	FYE 2026 Amended Budget	FYE 2027 Proposed Budget	FYE 2027 FTE Headcount
Deputy Executive Officer					**1**
Communications	$5.9	$7.3	$8.5	$8.8	13
External Affairs	$0.8	$2.0	$2.1	$2.1	5
Legislative and Government Affairs	$0.6	$0.9	$0.9	$0.9	2
Service Area Total	**$7.3**	**$10.3**	**$11.5**	**$11.8**	**21**

Totals may not equal the sum of displayed line items due to rounding.

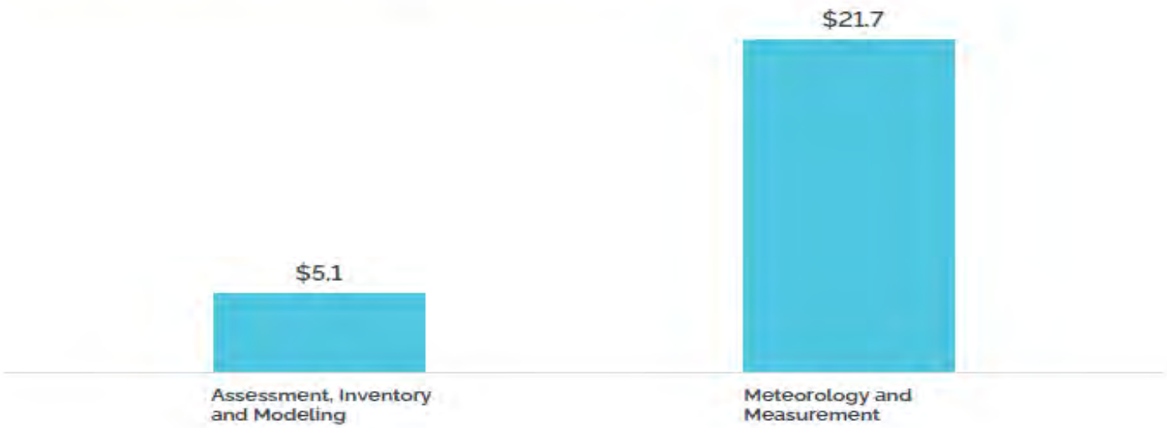
Enhance real-time public communication on air quality incidents to ensure accessibility and responsiveness. (Strategy 4.8)

Expand public notification tools for improved incident response and transparency. (Strategy 4.6)

Increase digital and social media outreach to support education on rulemaking, enforcement, and climate initiatives. (Strategy 4.7)

Service Area: Science

FY 2026-27 EXPENDITURE ($ MILLIONS)



Expenditure	FYE 2025 Audited Actual	FYE 2026 Approved Budget	FYE 2026 Amended Budget	FYE 2027 Proposed Budget	FYE 2027 FTE Headcount
Deputy Executive Officer					**1**
Assessment, Inventory and Modeling	$3.8	$4.2	$4.4	$5.1	19
Meteorology and Measurement	$14.3	$21.0	$21.7	$21.7	59
Service Area Total	**$18.1**	**$25.2**	**$26.1**	**$26.9**	**79**

Totals may not equal the sum of displayed line items due to rounding.

Conduct local assessments and exposure analysis to better understand the population exposure and health impacts of air pollutants in the Bay Area. (Strategy 2.4)

Work with communities overburdened by air pollution to conduct air monitoring and develop air dispersion modeling to improve understanding of local air quality, inter-regional emissions transport, and their impacts on the Bay Area's air quality. (Strategy 2.7)

Upgrade air quality monitoring networks to improve reliability, efficiency, data quality, and accessibility (Strategy 4.4)

Staffing Overview

- No new staffing positions proposed in the FY 2026-2027 Budget
- Twenty-four (24) proposed reclassifications to support operational efficiency and needs. Net impact is approximately $394,524

Organizational Efficiency Add/Delete Positions

Service Area	Add/Delete Position	Division	Cost Impact
Engineering & Compliance	6	Compliance & Enforcement Engineering	$199,475
Equity & Community Programs	5	Environmental Justice Strategic Incentives Technology Implementation Office	($19,141)
Finance & Administration	2	Administrative Resources	$86,201
Information Management	8	Enterprise Technology Solutions Information Services	$77,482
Public Affairs	1	Communication	19,655
Science	2	Assessment, Inventory & Modeling Meteorology & Measurements	$30,852

Additional organization efficiency of position transfers between divisions are noted in staff memo and Appendix F of the budget

Total 394,524

Recommended Action

The Board of Directors will discuss this item, but no action is requested at this time.

The Board will conduct Second Public Hearing for adoption of the FY 2026-2027 Proposed Budget on June 3, 2026.

Questions & Discussion

For more information:

Stephanie Osaze | Director of Finance | sosaze@baaqmd.gov

Bay Area Air District

STAFF REPORT

Proposed Amendments to Bay Area Air District Regulation 3: Fees

May 2026

Prepared by:
Fred Tanaka, Senior Manager, Engineering Division
Mark Gage, Principal Air Quality Engineer

Reviewed by:
Pamela J. Leong, Director, Engineering Division
Brian Case, Assistant Counsel II

Table of Contents

EXECUTIVE SUMMARY 1
BACKGROUND 4
COST RECOVERY 5
PROPOSED FEE AMENDMENTS 9
OVERVIEW OF PROPOSED AMENDMENTS 9
FEE SCEHDULE AMENDMENTS 9
PROPOSED RULE AMENDMENTS IN SECTION 300 10
OTHER FEE SCHEDULE CHANGES 10
FEE REVENUE AND COSTS OF PROGRAM ACTIVITIES 12
STATUTORY AUTHORITY FOR PROPOSED FEE INCREASES 13
ASSOCIATED IMPACTS AND OTHER RULE DEVELOPMENT REQUIREMENTS 14
EMISSIONS IMPACTS 14
ECONOMIC IMPACTS 14
ENVIRONMENTAL IMPACTS 17
STATUTORY FINDINGS 17
RULE DEVELOPMENT PROCESS 18
PUBLIC COMMENTS 19
CONCLUSIONS 19
ACKNOWLEDGEMENTS 20

APPENDIX A: WRITTEN COMMENTS AND RESPONSES A-1

APPENDIX B: PROPOSED REGULATORY LANGUAGE – REGULATION 3: FEES B-1

EXECUTIVE SUMMARY

Bay Area Air District (Air District) staff has proposed amendments to Regulation 3: Fees (Regulation 3) that would increase revenue for effectively implementing and enforcing regulatory programs for stationary sources of air pollution and clarify regulatory language.

The 2026 Cost Recovery Report shows that the recent 3-year average fee revenue (fiscal year[1] (FY) 2023 to FY 2025) stood at 89.9% of program activity costs. Individual fee schedules have a wide range of cost recovery, as low as 13.2% in FY 2025 or 12.0% average from FY 2023 to 2025. Cost recovery fee percentages are impacted by changes to several factors, including but not limited to, new and enhanced programs/rules, staffing levels, Air District priorities, facility emissions and facility permitting. Therefore, cost recovery is evaluated annually and aligned with the proposed budget for the next fiscal year based on revenue and costs that have already occurred in the previous three years.

Typical work that is supported by Regulation 3 includes, but is not limited to:

- Permitting and notification programs
- Compliance and Enforcement of permitted and registered facilities
- Compliance assistance to permitted and registered facilities
- Source Testing at permitted facilities
- Rule development for regulated industries
- Emissions inventory from permitted and registered facilities
- Other (e.g., Implementation of Regulation 11, Rule 18: Reduction of Risk from Toxic Air Emissions at Existing Facilities)

Typical work that is not supported by Regulation 3 includes, but is not limited to:

- Ambient Air Monitoring
- Climate change work for non-permitted sources
- Media relations
- Mobile sources
- Planning
- Rule development for non-permitted sources
- Strategic Incentives – “Grants” (e.g., wood-burning device replacement, Carl Moyer Program, vehicle buy-back)

The overall cost recovery percentage does not consider work backlog, the staff time needed for the Air District to meet its regulatory obligations and any reduced level of service. In other words, the driving factor on the cost side only accounts for time spent on fee-recoverable work with the existing resources regardless of the timeliness and the quality of the work. A fully-recovered fee schedule does not necessarily indicate an effectively operating program. It does not account for revenue and resources needed to operate fee-based programs effectively.

[1] The Air District’s fiscal year is from July 1 through June 30.

Examples of work backlog include, but are not limited to:

- Delays in issuing permits, registrations, and notifications, reviewing source test reports, completing rule studies and rule development, implementing regulatory requirements, and evaluating facility-wide health risk assessments;
- Longer inspection frequencies (delayed compliance verifications);
- Limited time for quality control of data and emissions inventories; and
- Increased response times to air quality complaints, inquiries, requests for information, and general assistance.

To close the existing cost recovery gap, the Air District's strategy as directed by the Board of Directors (Board) implements the following methodology based on a fee schedule's 3-year cost recovery percentage:



Where,

CRR = The 3-year average Cost Recovery Rate
CPIw = The annual Consumer Price Index of the previous year for Bay Area Urban Wage Earners and Clerical Workers

The CPIw for 2025 is 2.3%. The proposal increases administrative fees in Section 300 and Schedule M by CPIw with a few exceptions where no increase is recommended. Schedule I (dry cleaning machines with a Permit to Operate) is also proposed for a maintenance increase of CPIw but there are currently no active permitted dry cleaning machines.

The Air District has approximately 10,000 facilities with more than 25,000 devices and operations with an active Permit to Operate and/or Registration. If the above proposed amendments are approved, examples of the potential impact to a small business' permit renewal fees are shown in Table 1.

Table 1: Estimated Impact of the Fee Changes on Permit Renewal Fees:

Facility type	Percent impact
Registered only	-20
Gas dispensing facility[1]	0.1
Emergency generator (minimum fee)	0.5
Coffee Roaster	11.8
Auto body coating operation	7.6
Petroleum refinery[2]	6.2 to 8.4

[1] Based on a common configuration of 6 islands with 3 triple product nozzles
[2] Based on the same permitting and operating scenario as the previous year and known upcoming changes

The proposed fee amendments have a weighted average increase of 5.7% and are estimated to increase overall Air District fee revenue in FY 2027 by approximately $8.0 million relative to fee revenue that would be expected without the amendments for the same permitted facility inventory.

The proposal also includes administrative cleanup, clarifying language and the following significant changes:

(1) Reduce registration fees in Schedule R by 20%
(2) Create a new Emission Reduction Credit Certificate Reissuance Fee in Section 311.6
(3) Remove late fee provisions in Subsections 3-405.2.1 and 3-405.2.2
(4) Remove the 25% reinstatement fee if a Permit Renewal (Permit to Operate) invoice is not paid 30 days from the invoice due date in Subsection 3-405-4.1.2
(5) Remove the 25% additional late fee if a Permit Renewal invoice (Registration and Other Fees) is not paid 30 days from the invoice due date in Subsection 3-405.5
(6) Reclassify gasification/pyrolysis sources from Schedule F (General miscellaneous) to Schedule G1
(7) Increase base Risk Assessment Fee in Schedule B (Combustion of Fuel) by 2.3%
(8) Increase base Risk Assessment Fee in Schedule C (Stationary Containers for the Storage of Organic Liquids) by 2.3%
(9) Increase base Risk Assessment Fee in Schedule D (Gasoline Transfer at Gasoline Dispensing Facilities, Bulk Plants and Terminals) for existing Gasoline Dispensing Facilities by 15%

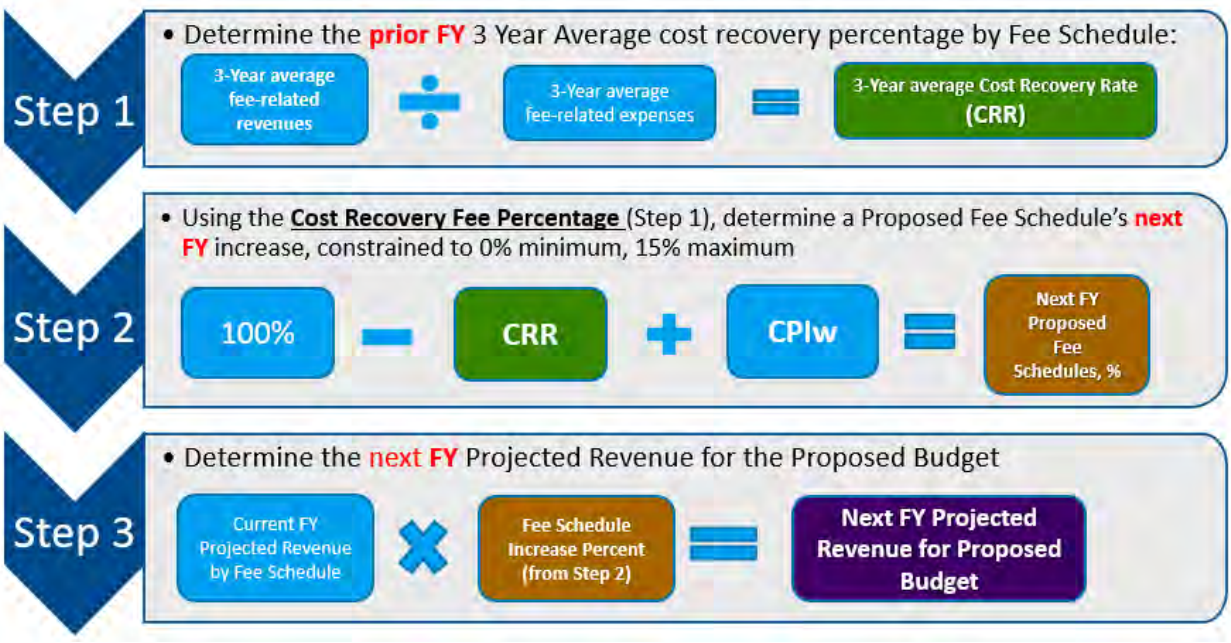
The Finance and Administration Committee recommended approval of these proposed fee amendments on April 15, 2026, and the Board of Directors (Board) received testimony on April 29, 2026 regarding the proposed amendments to Regulation 3: Fees. Air District staff recommend that the Board consider adoption of the proposed amendments to Regulation 3: Fees with an effective date of July 1, 2026.

BACKGROUND

State law authorizes the Air District to assess fees to generate revenue to recover the reasonable costs of regulatory program activities for stationary sources of air pollution. The largest portion of collected fees is under provisions that allow the Air District to impose permit fees sufficient to recover the costs of program activities related to permitted sources. The Air District is also authorized to assess fees for: (1) area-wide or indirect sources of emissions which are regulated, but for which permits are not issued by the Air District, (2) sources subject to the requirements of the State Air Toxics Hot Spots Program (Assembly Bill 2588), and (3) activities related to the Air District's Hearing Board involving variances or appeals from Air District decisions on the issuance of permits. The Air District has established—and regularly updates— Regulation 3 under these authorities.

For existing fees, the amendments are proposed to increase overall recovery of regulatory program activity costs without increasing any individual fee in excess of 15%. The amendments follow the strategy as directed by the Board of analyzing the cost recovery fee percentage of individual fee schedules, averaging the cost recovery over the previous 3 years, and applying a recommended fee action. Figure 1 illustrates the methodology used to determine cost recovery rates and how those rates are applied to existing fees to determine any proposed revision to those rates.

Figure 1: High-Level Illustration of Cost Recovery Analysis Steps



The Air District continues to implement several cost containment and efficiency-based strategies. Some of these strategies include timekeeping improvements to bill codes, periodic review of time accounting, greater web-based capabilities, annual updates to cost recovery, improved public education, submittal of online permit applications, and transitioning to the new cloud-based data system, the Permitting and Compliance System

(PCS) (previously known as “New Production System” or “NPS”).

All permitting activity was moved to PCS in October 2023. The major Compliance and Enforcement programs were moved to PCS in early 2024 and their PCS platform was upgraded in July 2025. In November 2025, Source Test transitioned into PCS. Not having to maintain legacy systems and focusing on one data platform will ultimately improve the development of functionality beyond the minimum viable product.

COST RECOVERY

The Air District analyzed whether fees result in the collection of a sufficient and appropriate amount of revenue in comparison to the costs of related program activities. In 1999, a comprehensive review of the Air District’s fee structure and revenue was completed by the firm KPMG Peat Marwick LLP[2]. The 1999 Study indicated that fee revenue did not offset the full costs of program activities associated with sources subject to fees as authorized by State law. Property tax revenue and, in some years, reserve funds have been used to close this cost recovery gap.

For FY 2000, the Board adopted an across-the-board fee increase of 15%, the maximum allowed by State law for permit fees, as a step toward more complete cost recovery. The Air District also implemented a detailed employee time accounting system to improve the ability to track costs by program activities moving forward. In each of the next five years, the Air District adjusted fees only to account for inflation except for FY 2005, in which the Air District also approved further increases in Title V permit fees and a new permit renewal processing fee.

In 2004, the Air District funded an updated Cost Recovery Study. The accounting firm Stonefield Josephson, Inc. completed this study in March 2005[3]. The 2005 Study indicated that a significant cost recovery gap continued to exist. The 2005 Study also provided cost recovery results at the level of each individual fee schedule based on detailed time accounting data. Finally, the contractor provided a model that could be used by Air District staff to update the analysis of cost recovery on an annual basis using a consistent methodology.

For the five years following the completion of the 2005 Study (i.e., FY 2006 through FY 2010), the Air District adopted fee amendments that increased overall projected fee revenue by an average of 8.9% per year. To address fee equity issues, the various fees were not all increased in a uniform manner. Rather, individual fee schedules were amended based on the magnitude of the cost recovery gap for that schedule, where the schedules with the more significant cost recovery gaps receiving more significant fee increases. In FY 2011, the Air District adopted an across-the-board 5% fee increase, except for the Title V fee schedule (Schedule P) which was increased by 10% (the Air District’s 2010 Cost Recovery Study indicated that Fee Schedule P recovered only 46%

[2] *Bay Area Air Quality Management District Cost Recovery Study, Final Report: Phase One – Evaluation of Fee Revenues and Activity Costs,* KPMG Peat Marwick LLP, February 16, 1999

[3] *Bay Area Air Quality Management District Cost Recovery Study, Final Report*, Stonefield Josephson, Inc., March 30, 2005

of program activity costs).

In September 2010, the Air District contracted with the firm Matrix Consulting Group to complete an updated analysis of cost recovery that could be used in developing fee amendments for FY 2012 and beyond. This study also included a review of the Air District's current cost containment strategies and provided recommendations to improve the management of the Air District's costs and the quality of services provided to stakeholders. The study was completed in March 2011[4]. The 2011 Study concluded that, for FY 2010, overall fee revenue recovered 64% of related program activity costs. The study also provided cost recovery results at the level of each individual fee schedule based on detailed time accounting data and provided a methodology for Air District staff to update the analysis of cost recovery on an annual basis using a consistent methodology.

The results of the 2011 Study were used to establish fee amendments for FY 2012 that were designed to increase overall fee revenue by 10% (relative to fee revenue that would result without the fee amendments). To address fee equity issues, the various fees were not all increased in a uniform manner. Rather, existing fee schedules were amended based on the magnitude of the cost recovery gap for that schedule, with the schedules with the more significant cost recovery gaps receiving more significant fee increases. Based on this approach, the fee rates in several fee schedules were not increased, while the fee rates in other fee schedules were increased by 10%, 12%, or 14%.

One of the recommendations made by Matrix Consulting Group in their 2011 Study was that the Air District should consider the adoption of a Cost Recovery Policy to guide future fee amendments. Air District staff initiated a process to develop such a policy in May 2011, and a Stakeholder Advisory Group was convened to provide input in this regard. A Cost Recovery Policy was adopted by the Board on March 7, 2012. This policy specified that the Air District should amend its fee regulation in a sufficient manner to increase overall recovery of regulatory program activity costs to a minimum of 85%. The policy also indicated that amendments to specific fee schedules should continue to be made in consideration of cost recovery analyses conducted at the fee schedule-level, with larger increases being adopted for the schedules that have the larger cost recovery gaps.

The Matrix Consulting Group was retained by the Air District in September 2017 to provide a cost recovery and containment study for FY 2017 as update to the study done in 2011. This assessment used multiple analytical tools to evaluate the Air District's process for allocation of indirect costs, validate current cost recovery levels, and determine progress from their 2011 recommendations for cost recovery and savings. The primary purpose of this study was to evaluate the indirect overhead and the cost recovery associated with the fees charged. The project team reviewed the Air District's programs and confirmed their classification as direct or indirect, and reviewed time tracking data associated with each of the different fee schedules. The report also provided specific recommendations related to direct and indirect cost recovery, as well as potential cost efficiencies. The

[4] *Cost Recovery and Containment Study, Bay Area Air Quality Management District*, Final Report, Matrix Consulting Group, March 9, 2011

2018 Study recommended the fee rate changes based on the past 3-year average of cost recovery calculated for each individual fee schedule.

The Matrix Consulting Group was retained by the Air District in July 2021 to provide a cost recovery and containment study to update the 2018 Study. This assessment used multiple analytical tools to evaluate the Air District's process for allocation of indirect costs, validate current cost recovery levels, and determine progress from their 2018 recommendations for cost recovery and savings. The primary purpose of this study was to review and verify current cost recovery calculation methodology, determine options for achieving 100% cost recovery, ensure compliance with all legal requirements (Proposition 26, Proposition 218, and the California Health and Safety Code), and continue best management practices by having an outside auditor reassess the fee calculations approximately every five years. This rule proposal follows one of the scenarios in the current Cost Recovery and Containment Study to reach 100% cost recovery.

The project team interviewed internal and external stakeholders, reviewed the Air District's programs and confirmed their cost classification as direct or indirect, and reviewed time tracking data associated with each of the different fee schedules. The final report was released in April 2022 and provided specific recommendations related to direct and indirect cost recovery, as well as potential cost efficiencies.

In December 2022, the Board updated the Cost Recovery and Containment policy. One key change was to increase the overall cost recovery target from 85% to 100% for fee-based work.

Based on recommendations from studies and the direction to staff, the strategies summarized in Table 2 have been implemented since the FY 2018 amendments to the fee regulation:

Table 2: Summary of Cost Recovery Strategies from FY 2019 Through Present, by Fee Schedule Cost Recovery Percentage Rate

Revenue from Fee Schedule	FY 2019 & 2020	FY 2021 (Covid)	FY 2022	FY 2023	FY 2024 & 2025	FY 2026	FY 2027
110% or more of costs	0%	0%	0%	0%	0%	0%	Formula = 0%
100 to <110% of costs	0%	0%	CPIw	+15%	CPIw	CPIw	Formula = 0%
95 to < 100% of costs	CPIw	0%	CPIw	+15%	+15%	CPIw	Formula[1] = 3.6%
85 to < 95% of costs	+7%	0%	+7%	+15%	+15%	+15%	Formula[2] = 8.8%
75 to < 85% of costs	+8%	0%	+8%	+15%	+15%	+15%	Formula = 15%
50 to < 75% of costs	+9%	0%	+9%	+15%	+15%	+15%	Formula = 15%
Less than 50% of costs	+15%	0%	+15%	+15%	+15%	+15%	Formula = 15%

[1] CRR for Schedule G5 is 98.70%
[2] CRR for Schedule E is 93.55%

The 2026 Cost Recovery Report updates the cost recovery analysis for FY 2025. The report indicates that the overall cost recovery rate for FY 2025 was 89.7% and a 3-year average of 89.9%. The schedules with the lowest cost recovery fee percentages during FY 2025 are Schedules H (21.2%) S (16.3%), and K (13.2%).

Cost recovery fee percentages are impacted by several factors which is why it is not a static target. For costs funded by fee revenue, new and enhanced programs, staffing levels, and priorities impact cost recovery. Allocation of Air District full-time equivalent (FTE) positions to fee-based activities impacts cost recovery of individual schedules. New staff hired to work on existing fee-based programs will impact cost recovery as they charge time to applicable work. Time charged to specific fee schedules will increase costs, which decreases cost recovery for the fee schedule and the overall cost recovery. Reallocating existing resources to different fee-based programs tied to a specific fee or fee schedule may noticeably change individual schedule recovery rates but does not impact overall fee-related cost recovery.

Fee revenue is impacted by facility shutdowns, permit applications, notifications, and source emission levels. Facilities that do not renew their permits and facilities that operate new equipment without an Authority to Construct impact not only fee revenue, but their compliance status.

PROPOSED FEE AMENDMENTS

OVERVIEW OF PROPOSED AMENDMENTS

The Air District is proposing increases to fees and fee schedules based on their cost recovery status. In addition, the proposal includes updating definitions, realigning Risk Assessment fees, clarifying language, and administrative clean-up.

FEE SCEHDULE AMENDMENTS

Table 3 shows the general fee schedule amendments. Other changes within a fee schedule are discussed later in this report.

Table 3: General Fee Schedule Amendments

Schedule	Description	Proposed Change
Schedule A	Hearing Board Fees	15% increase
Schedule B	Combustion of Fuel	No increase*
Schedule C	Stationary Containers for the Storage of Organic Liquids	No increase*
Schedule D	Gasoline Transfer at Gasoline Dispensing Facilities, Bulk Plants and Terminals	No increase*
Schedule E	Solvent Evaporating Sources	8.8% increase
Schedule F	Miscellaneous Sources	15% increase
Schedule G1	Miscellaneous Sources	15% increase
Schedule G2	Miscellaneous Sources	15% increase
Schedule G3	Miscellaneous Sources	15% increase
Schedule G4	Miscellaneous Sources	15% increase
Schedule G5	Miscellaneous Sources	3.6% increase
Schedule H	Semiconductor and Related Operations	15% increase
Schedule I	Dry Cleaners (not registered)	2.3% increase
Schedule K	Solid Waste Disposal Sites	15% increase
Schedule L	Asbestos Operations	No increase
Schedule M	Major Stationary Source Fees	2.3% increase
Schedule N	Toxic Inventory Fees	No increase
Schedule P	Major Facility Review Fees	15% increase
Schedule R	Equipment Registration Fees	20% decrease
Schedule S	Naturally Occurring Asbestos Operations	15% increase
Schedule T	Greenhouse Gas Fees	No increase
Schedule V	Open Burning – Open Burning Operation Fee and Stubble Burn Operation Fee Open Burning – All other	15% increase No increase
Schedule W	Refining Emissions Tracking Fees	15% increase
Schedule X	Major Stationary Source Community Air Monitoring Fees	No increase

*The Risk Assessment Fees for these Schedules have been adjusted consistent with other schedules

The complete text of the proposed changes to Air District Regulation 3 has been prepared in strikethrough (deletion of existing text) and underline (new text) format, and is included in Appendices B and C. Proposed fee increases have been rounded to the nearest whole dollar.

PROPOSED RULE AMENDMENTS IN SECTION 300

CPIw Increase

The following sections of Regulation 3 are proposed to be increased by 2.3%:

- Section 302
    - New and Modified Source Filing Fees
    - Abatement Device Filing Fees
- Section 311 Emission Banking Fees
- Section 312 Regulation 2, Rule 9 or Regulation 9, Rule 10 Alternative Compliance Plan Fee
- Section 327
    - Permit to Operate Renewal Processing Fee
    - Assembly Bill 617 Community Health Impact Fee maximum
    - Criteria Pollutant and Toxic Emissions Reporting Fee maximum
    - Overburdened Community Renewal Fee maximum
- Section 337 Exemption Fee
- Section 341 Fee for Risk Reduction Plan
- Section 342 Fee for Facility-Wide Health Risk Assessment
- Section 343 Fees for Air Dispersion Modeling
- Section 345 Evaluation of Plans, Regulation 6
- Section 346 Request for a Petition, Regulation 8
- Section 347 Evaluation of Reports, Organic Waste Recovery Sites

OTHER FEE SCHEDULE CHANGES

The following are specific details and/or changes to fee schedules beyond the percent fee increase as shown in Table 3.

Section 3-304:

Language was added to clarify the initial fee for applications for a G-3, G-4 or G-5 source that meet the definition of “Alter”. This change is meant to improve consistency and transparency.

Subsection 311.6: Emission Reduction Credit Certificate Reissuance Fee

Before the Air District can honor an Emission Reduction Credit (ERC) certificate, the owner must surrender the ERC. Last year, the Air District received several requests where the applicant did not have the certificate and was not the contact of record. Considerable effort is required to verify ownership, especially when the facility is

shutdown and the contact of record is not available. This fee aligns with other administrative fees in the Section 3-311.

Subsection 3-405.1: Fees Not paid

This current language relates to failure to pay invoices for renewal of Authorities to Construct (AC) in the legacy system which was deprecated in October 2023. The updated language reflects the current process.

Subsections 3-405.2.1 and 3-405.2.2: Fees Not paid

Since these provisions were relevant only in legacy system, which was deprecated in October 2023, the language has been stricken.

Subsection 3-405.4.1.2 and 3-405.5: Fees Not paid

The current language imposes a total late fee of 25% if an invoice is not paid in full after 30 days (delinquent fee). By removing these subsections, there is only one 10% late fee if the invoice is not paid in full by the invoice due date. The intent is to streamline the process of getting parties in compliance from a fee standpoint. Many facilities paying the delinquent fee were small businesses.

Schedule B: Combustion of Fuel

To align calculation for the Risk Assessment Fee (RAF) with the filing fee in Section 3-302, the base fee was changed in Schedule B.2.a.

Schedule C: Stationary Containers for the Storage of Organic Liquids

To align calculation for the RAF with the filing fee in Section 3-302, the base fee was changed in Schedule C.2.a.

Schedule D.A: Gasoline Transfer at Gasoline Dispensing Facilities

The RAF for existing GDFs is proposed for a nearly 15% increase in Schedule D.A.4.b. This will improve alignment of the RAF fee already being charged to new GDFs for the same work.

Reclassify gasification/pyrolysis from a General – Unclassified Miscellaneous Sources in Schedule F to Schedule G-1

Source categories being charged Schedule F are periodically reviewed against the level of effort. Schedule F (Miscellaneous – Unclassified) are charged when no other fee schedule applies. Schedule F Initial Fee is proposed to be $1,421, which is approximately 7 hours of evaluation work[5] including review and approval. Whereas the Initial fee for Schedule G-1 is proposed to be $11,541, which represents approximately 58 hours of

[5] Assumes a basis of $200 per hour.

work. Due to the complexity and interest of these facilities, these projects often involve public workshops, legal discussion, increased compliance verification/enforcement, modeling, source testing and emissions verification. The most recent application permit application logged hundreds of hours effort, collaborating with multiple service areas.

FEE REVENUE AND COSTS OF PROGRAM ACTIVITIES

The 2026 Cost Recovery Report concluded that, for FY 2023 to FY 2025 average fee revenue recovered 89.9% of regulatory program activity costs, with revenue of $67.2 million and costs of $75.0 million. This resulted in a shortfall, or cost recovery gap, of $7.7 million.

The proposed fee amendments for FY 2027 are projected to increase overall Air District fee revenue by approximately $8.0 million relative to fee revenue levels that would be expected without the amendments. Revenue in FY 2027 is expected to remain below the Air District's regulatory program costs for both permitted and non-permitted sources.

As needed, the Air District implements cost containment strategies which may include reducing capital expenditures and delaying the hiring of staff. The latter may improve the cost recovery rate but ignores the work backlog. Some of the efficiency-based and cost management strategies that have been implemented include: timekeeping improvements such as auditing, review of and updates to the cost recovery evaluation, improved public education, staff training, improved accessibility of information, and expansion of online services. Implementing these strategies has resulted in improved efficiency as well as the ability to provide a higher service level. In October 2023, all permitting activity was fully transitioned into PCS. In the first quarter of 2024, many Compliance and Enforcement functionalities were transitioned to PCS, allowing the Air District to depreciate legacy infrastructure. In July 2025, functionality for Compliance & Enforcement upgraded to the current PCS platform. In November 2025, Source Test transitioned into PCS.

Through the online portal, tools will increase efficiency and accuracy by allowing customers to submit any permit application and notifications, report data for the emissions inventory, pay invoices and have access to permit documents.

Approximately, 11,000 to 12,000 payments are handled for permit programs that takes about 1.6 FTE to process manual payments, refunds and reconciliation. Increasing online payment acceptance will reduce resources needed to follow-up with expired permits, reconcile over/under payments and issue renewed permit documents in a timely manner. In February 2024, the $1 service fee for eCheck payments was removed for the customer to encourage more online payments.

The Air District is exploring strategies to encourage external adoption of the customer facing of the online systems, including permit application activities and data updates submittals. Potential options include incentivizing customers to submit applications and data updates online as allowed in Section 3-418.

The Air District continues to be fiscally prudent by maintaining its reserves. Reserves address future capital equipment and facility needs, uncertainties in State funding and external factors affecting the economy that could impact the Air District's ability to balance its budgets.

STATUTORY AUTHORITY FOR PROPOSED FEE INCREASES

The Air District is a regional regulatory agency, and its fees are used to recover the costs of issuing permits, performing inspections, and other associated regulatory activities. The Air District's fees fall into the category specified in Section 1(e) of Article XIII C of the California Constitution that specifies that charges of this type assessed to regulated entities to recover regulatory program activity costs are not taxes. The amount of fee revenue collected by the Air District has been clearly shown to be much less than the costs of the Air District's regulatory program activities both for permitted and non-permitted sources.

The Air District's fee regulation, with its various fee schedules, is used to allocate regulatory program costs to fee payers in a manner which bears a fair or reasonable relationship to the payer's burden on—or benefits received from—regulatory activities. Permit fees are based on the type and size of the source being regulated, with minimum and maximum fees being set in recognition of the practical limits to regulatory costs that exist based on source size. Add-on fees are used to allocate costs of specific regulatory requirements that apply to some sources but not others (e.g., health risk screening fees, public notification fees, alternative compliance plan fees). Emissions-based fees are used to allocate costs of regulatory activities that are not reasonably correlated to specific fee payers.

Since 2006, the Air District has used annual analyses of cost recovery performed at the fee-schedule level, which is based on data collected from a labor tracking system, to adjust fees. These adjustments are needed as the Air District's regulatory program activities change over time based on changes in statutes, rules and regulations, enforcement priorities, and other factors.

State law authorizes air districts to adopt fee schedules to cover the costs of various air pollution programs. California Health and Safety Code (H&S Code) section 42311(a) provides authority for an air district to collect permit fees to cover the costs of air district programs related to permitted stationary sources. H&S Code section 42311(f) further authorizes the Air District to assess additional permit fees to cover the costs of programs related to toxic air contaminants. H&S Code section 41512.7(b) provides that the Air District shall not "increase any existing fees for authority-to-construct permits or permits to operate by more than 15% in any calendar year."

H&S Code section 44380(a) authorizes air districts to adopt a fee schedule that recovers the costs to the air district and State agencies of the Air Toxics Hot Spots Program (AB 2588). The section provides the authority for the Air District to collect toxic inventory fees under Schedule N.

H&S Code section 42311(h) authorizes air districts to adopt a schedule of fees to cover the reasonable costs of the Hearing Board incurred as a result of appeals from air district decisions on the issuance of permits. Section 42364(a) provides similar authority to collect fees for the filing of applications for variances or to revoke or modify variances. These sections provide the authority for the Air District to collect Hearing Board fees under Schedule A.

H&S Code section 42311(g) authorizes air districts to adopt a schedule of fees to be assessed on area-wide or indirect sources of emissions, which are regulated but for which permits are not issued by the air district, to recover the costs of air district programs related to these sources. This section provides the authority for the Air District to collect asbestos fees (including fees for Naturally Occurring Asbestos operations), soil excavation reporting fees, registration fees for various types of regulated equipment, for Indirect Source Review, and fees for open burning.

The proposed fee amendments are in accordance with all applicable authorities. The Air District fees subject to this rulemaking are in amounts no more than necessary to cover the reasonable costs of the Air District's regulatory activities, and the manner in which the Air District fees allocate those costs to a payer bear a fair and reasonable relationship to the payer's burdens on the Air District regulatory activities and benefits received from those activities. Permit fee revenue (after adoption of the proposed amendments) would still be well below the Air District's regulatory program activity costs associated with permitted sources. Similarly, fee revenue for non-permitted area wide sources would be below the Air District's costs of regulatory programs related to these sources. Hearing Board fee revenue would be below the Air District's costs associated with Hearing Board activities related to variances and permit appeals. Fee increases would comply with H&S Code section 41512.7(b) strict requirement that the Air District shall not "increase any existing fees for authority-to-construct permits or permits to operate by more than 15% in any calendar year."

ASSOCIATED IMPACTS AND OTHER RULE DEVELOPMENT REQUIREMENTS

EMISSIONS IMPACTS

There will be no direct change in air emissions because of the proposed amendments.

ECONOMIC IMPACTS

The Air District must, in some cases, consider the socioeconomic impacts and incremental costs of proposed rules or amendments. Section 40728.5(a) of the California H&S Code requires that socioeconomic impacts be analyzed whenever an air district proposes the adoption, amendment, or repeal of a rule or regulation that will significantly affect air quality or emissions limitations. The Air District contracted with Eastern Research Group, Inc. (ERG) to complete a socioeconomic analysis to determine whether the proposed amendments would have a significant impact on households in the Air District, businesses in the Air District, and the overall Air District economy.

The ERG report (dated April 29, 2026) showed that the impacts of the proposed amendments are negligible to companies, including those the state considers “small,” and households throughout the Air District.

Section 40920.6 of the H&S Code specifies that an air district is required to perform an incremental cost analysis for a proposed rule, if the purpose of the rule is to meet the requirement for best available retrofit control technology or for a “feasible measure.” The proposed fee amendments are not best available retrofit control technology requirements, nor are they a “feasible measure” required under the California Clean Air Act; therefore, an incremental cost analysis is not required.

Because cost recovery strategies only look at work already completed, work backlog—which has grown over the last several years—is not considered. Underfunding and understaffing FTEs in fee-based programs impacts the regulated community, the public and the economy that relies on the Air District to perform work on a timely basis.

The financial impact of the proposed fee amendments on small businesses depends on the applicable fee schedule of the primary device/operation and whether the facility is located in an Overburdened Community (OBC).

For the limited purpose of analyzing financial impact, a business is considered a “small business” based strictly on the type of equipment that it uses (i.e., the Regulation 3 definition is not utilized here). Table 6 shows a few examples of small businesses with one device/operation type. The Air District has over 10,000 active permitted and registered facilities with varying configurations, so it is difficult to show the impact for all situations. About 83% of facilities with a Permit to Operate have two or less permitted sources. There are 479 active registered-only facilities (4.8%). It is common for a facility to have a mixture of operations and device types that are charged different fee schedules.

Most fee schedules are assessed based on the size or capacity of the source, the size of the facility, and the amount of air emissions for large emitters. Renewal fees in Section 327 are charged based on either the number of permitted sources at a facility or as a percentage of their overall renewal fees.

The proposed amendments reduce registration fees (Schedule R) by 20%, therefore facilities with only registered sources will see fees reduce in FY 2027. Facilities that only have registered devices or operations tend to be small businesses. The primary purpose of the registration program is tracking, whereas the Permit to Operate fees support many activities including a robust compliance verifications and emissions validation program.

Table 4 shows examples of the potential impact these fee proposals. They have been standardized for comparison purposes.

Some application fees are discounted for small and green businesses as defined in the rule. Over the years, considerations for waiving renewal late fees for small businesses during the Covid-19 pandemic and discounts for attending industry compliance school have been implemented.

Table 4. Examples of Estimated Impact at Typical Small Businesses on Permit Renewal Fees

Facility Type	Fee Schedule	Current fee: Not OBC	Current fee: OBC	Proposed fee: Not OBC	Proposed fee: OBC
Back-up Generator[1,2]	B	$563	$644	$566 +0.5%	$647 +0.5%
Gas Station[3]	D.A	$2,860	$3,271	$2,863 +0.1%	$3,274 +0.1%
Coating or Graphic Arts Operation (e.g., Auto Body)[1,2]	E	$1,378	$1,576	$1,491 +7.6%	$1,705 +7.6%
Coffee Roaster[1]	F	$1,076	$1,231	$1,220 +11.8%	$1,395 +11.8%
Dry Cleaner[1]	R	$259	$259	$207 -20%	$207 -20%

1. Assuming facility has only one source.
2. Assuming source qualifies for minimum fee.
3. Assuming a configuration of 6 islands with 3 triple-product nozzles.

For larger facilities, such as refineries and power plants, increases in annual permit renewal fees would cover a considerable range due to differences in the facility's size, mix of emission sources, pollutant emission rates, and applicable fee schedules.

As shown in Table 5, the FY 2027 projected annual permit fee increase for the five Bay Area refineries would range from approximately 6.2% to 8.4%.

Included are current Permit to Operate fees paid and historical annual fee increases. The table also shows that the actual and predicted fee impact is difficult to determine with certainty. For large facilities, annual operational swings and changes to permitted sources may have a significant impact on a facility's permit renewal fees.

Predicting the actual impact of fee changes is challenging for large businesses because many factors have an impact on their Permit to Operate invoice that change year to year. These factors include their new sources, shutdown sources and level of operation.

Table 5 includes the Valero Refinery, even though they plan to change primary operation. As of this report, they plan to renew their Permit to Operate in the next FY, including their refinery operation sources.

Table 5. Comparison of Refinery Annual Permit Fee Increase/Decrease

	2025 % Fee change			2026 % Fee Change			2027 ***Projected*** % Fee Change
Facility	**Predicted**	**Actual**	**Actual Renewal Fees Paid**	**Predicted**	**Actual**	**Actual Renewal Fees Paid**	**Predicted**
Chevron	8.5	9.3	$5.0 million	9.7	9.5	$5.5 million	6.3
Martinez Refining Co.	7.9	-0.2	$5.7 million	4.4	3.2	$5.9 million	7.0
Phillips 66	8.6	-6.2	$2.8 million	3.8	-2.2	$2.8 million	8.4
Tesoro (Marathon)	9.1	16.5	$1.9 million	-1.6	8.0	$2.0 million	6.2
Valero	9.0	4.3	$3.5 million	13.7	4.6	$3.8 million	7.0

ENVIRONMENTAL IMPACTS

Section 40727.2 of the H&S Code imposes requirements on the adoption, amendment, or repeal of air district regulations. It requires an air district to identify existing federal and air district air pollution control requirements for the equipment or source type affected by the proposed change in air district rules. The air district must then note any differences between these existing requirements and the requirements imposed by the proposed change. This fee proposal does not impose a new standard, make an existing standard more stringent, or impose new or more stringent administrative requirements. Therefore, section 40727.2 of the H&S Code does not apply.

STATUTORY FINDINGS

Pursuant to H&S Code section 40727, in order to enact regulatory amendments the Board of Directors must make findings of necessity, authority, clarity, consistency, non-duplication, and reference. The proposed amendments to Regulation 3:

- Are necessary to fund the Air District's efforts to attain and maintain federal and state air quality standards, and to reduce public exposure to toxic air contaminants;
- Are authorized by H&S Code sections 40702, 41512.5, 41512.7, 42311, 42364, and 44380;
- Are clear, in that the amendments are written so that the meaning can be understood by the affected parties;
- Are consistent with other Air District rules, and not in conflict with any state or federal law;
- Are not duplicative of other statutes, rules or regulations; and
- Reference H&S Code sections 40702, 41512.5, 41512.7, 42311, 42364, and 44380.

RULE DEVELOPMENT PROCESS

The regulation 3 rule development process runs in parallel with the proposed budget for the next fiscal year. California Health and Safety Code Section 41512.5 requires a district board, prior to adopting or revising fees applicable to emission sources that are not permitted, to hold a public hearing at least 30 days prior to the meeting of the district board at which the amendments are adopted or revised. This provision applies to Schedule L: Asbestos Operations, Schedule R: Equipment Registration Fees, Schedule S: Naturally Occurring Asbestos Operations, and Schedule V: Open Burning. There are no proposed changes to Schedule L. The following are the key dates and activities in the rule development process:

Budget & Fee Regulation Schedule	Date
Finance and Administration Committee briefing – Cost Recovery Strategy	December 17, 2025
Public Workshop for Regulation 3 amendments	February 26, 2026
Community Workshop on the Budget and Fee Regulation	March 10, 2026
Finance and Administration Committee briefing	March 18, 2026
Finance and Administration Committee briefing	April 15, 2026
First Public Hearing on Regulation 3 amendments to receive testimony	April 29, 2026
Written Public Hearing comments on Regulation 3 due	May 15, 2026
Second Public Hearing on budget and Regulation 3 to consider adoption	June 3, 2026
Budget and fee amendments effective, if adopted	July 1, 2026

The workshops were held virtually. All other public meetings were presented in-person at the Air District headquarters. They were conducted as hybrid meetings with participation both in-person and via Zoom.

At the December 17 Finance and Administration Committee meeting, staff provided the members with the rule development plan and an opportunity to make changes to the cost recovery strategy. The committee decided to pursue a modified cost recovery strategy that would scale proposed fee increases proportional to the amount of under-recovery.

The Air District distributed the notice for a public workshop to all active owners of Air-District-permitted and registered facilities, asbestos contractors, naturally occurring asbestos contacts, open burning contacts, fire agencies, and other potentially interested stakeholders and posted the notice on the Air District website. On February 17, the Air District posted its initial draft rule proposal. At the February 26 workshop, staff presented the initial concepts for the draft Regulation 3 amendments. There were eight (8) stakeholders that attended the public workshop held as a Zoom webinar. Additional documents were posted to the Regulation 3 Rule Development webpage as they became available, such as the 2026 Cost Recovery Report.

The legal notice for the public hearings was published on or about April 21, 2026 in the

three (3) major Bay Area Newspapers, Contra Costa Times, San Francisco Chronicle, and San Jose Mercury. Notifications for the public hearings were also sent via email to interested parties that subscribe for Rules and Regulations notifications.

PUBLIC COMMENTS

All written comments along with Air District responses from the public workshop until the end of the public comment period of May 15, 2026 are documented in Appendix A.

CONCLUSIONS

Air District staff has determined that the proposed fee amendments meet the findings of necessity, authority, clarity, consistency, non-duplication and reference specified in H&S Code section 40727, and recommends that the Board of Directors make findings to this effect. Specifically, the proposed amendments:

- Are necessary to fund the Air District's efforts to attain and maintain federal and state air quality standards, and to reduce public exposure to toxic air contaminants;
- Are authorized by H&S Code sections 40702, 40726, 42311, 41512.5, 41512.7, 42364, and 44380;
- Are clear, in that the amendments are written so that the meaning can be understood by the affected parties;
- Are consistent with other Air District rules, and not in conflict with any state or federal law;
- Are not duplicative of other statutes, rules or regulations; and
- Reference H&S Code sections 40702, 40726, 42311, 41512.5, 41512.7, 42364, and 44380.

The proposed fee amendments will be used by the Air District to recover the costs of issuing permits and notifications, ensuring and verifying compliance, verifying emissions, and other associated regulatory activities. The Air District fees subject to this rulemaking are in amounts no more than necessary to cover the reasonable costs of the Air District's regulatory activities, and the manner in which the Air District fees allocate those costs to a payer bear a fair and reasonable relationship to the payer's burdens on the Air District regulatory activities and benefits received from those activities. After adoption of the proposed amendments, permit fee revenue would still be below the Air District's regulatory program activity costs associated with permitted sources. Similarly, fee revenue for non-permitted sources would be below the Air District's costs of regulatory programs related to these sources. Fee increases for authorities to construct and permits to operate would not exceed 15% per year as required under H&S Code section 41512.7.

ACKNOWLEDGEMENTS

Key staff members who also contributed to this rule amendment proposal were:

- David Joe, Manager – Rules & Strategic Policy
- Tracy Lee, Manager – Compliance & Enforcement
- Jody Mackenzie, Manager – Finance Office
- The Web Team

APPENDIX A:
COMMENTS AND RESPONSES

Commenter 1

- Received: February 26, 2026 (During Public Workshop)
- Sheikh Nayeem – Applied Materials

Comment 1: Inquired about how to anticipate renewal fees for future years.

Air District Response to Comment 1: The Air District Provided guidance on how to anticipate future costs based on previous invoices and proposed amendments.

Commenter 2

- Received: February 26, 2026 (During Public Workshop)
- Received: March 18, 2026 (During Finance and Administration Committee Meeting)
- Received: April 15, 2026 (During Finance and Administration Committee Meeting)
- Received: April 28, 2026 (In Writing)
- Bob Brown – Western States Petroleum Association (WSPA)

Comment 1: WSPA represents a large portion of the fee-paying community and has previously commented on a desire for the Air District to more clearly identify specific effort when billing time (e.g., indicating the project, source, application, etc.).

Air District Response to Comment 1: The Air District's current labor code timekeeping system allocates staff time based on the work done in the specific fee schedules, which are distinguishable from each other based on the categories of equipment regulated, or by the specific regulated program. The existing timecoding methods ensure that we correctly designate work under the specific fees that we charge for our programs, in accordance with law. Further timekeeping details would not change our fee setting methodology, and it is unclear what the added value would be to our permitted facilities.

Comment 2: Expressed a desire to further review cost containment opportunities.

Air District Response to Comment 2: The Air District continuously reviews and implements cost containment and efficiency improvement opportunities in its programs. Some solutions are longer-term and will take time before the benefits are realized.

About every five to seven years, the Air District hires a consultant to review and update the cost recovery and containment study. During the 2021 study, the consultant interviewed all divisions in fee-supported programs and several stakeholders to examine opportunities for containment and efficiency. The Air District is actively reinitiating this study and intends to seek novel opportunities to contain costs and to use resources more efficiently.

Comment 3: Requested that the Air District provide periodic progress reports with details of how significant fees are working to improve the levels of service for that schedule.

Air District Response to Comment 3: There is a considerable effort to generate the annual cost recovery reports. This effort begins in December using actual data from the first half of the fiscal year and predictive data for the balance of the fiscal year. Thethe cost recovery reports provide the information (cost recovery for the prior fiscal year and average cost recovery for the prior three fiscal years) to make some preliminary assumptions on the cost recovery for specific fee schedules for the next fiscal year.

Fee amendments from the cost recovery do not address the level of service. Level of service is typically addressed in new staffing (budget process), reallocation of existing resources, and program efficiencies. Several positions approved by the Board in September 2025 to address the work backlog. Program efficiencies are being addressed in the action plan from the management audit. Staff has already committed to periodically report to the Board on progress in the permit program.

Commenter 3

- Received: March 18, 2026 (During Finance and Administration Committee Meeting)
- Received: April 29, 2026 (During Board Meeting)
- Received: May 15, 2026 (In Writing)
- Peter Okurowski – California Council for Environmental and Economic Balance (CCEEB)

Comment 1: The Board should not approve fee increases until Staff demonstrates it has measurable improved permitting times.

Air District Response to Comment 1: The proposed fee amendments for cost recovery are an effort to recover costs based on past revenue and expenses. Implementing the action plan from the management audit will be an ongoing continuous effort. Some recommendations will take time to implement, but efficiencies will be reflected in future cost recovery analyses. The fee increases are required to continue the mission of the air district, including the issuance of permits.

Comment 2**:** The commenter noted that the magnitude of the cost recovery gap has not reduced in recent years despite the Board's strategy.

Air District Response to Comment 2: The Air District's cost recovery is not a static target and is impacted by efforts to improve level of service. The association of increased costs and revenue does not necessarily mean that service has not improved.

Comment 3: The commenter believes that another cost recovery study is not necessary.

Air District Response to Comment 3: It is generally good practice to do periodic studies so that novel opportunities for improvement may be identified.

Comment 4: The commenter notes that some over-recovered fee schedules should not be increased.

Air District Response to Comment 4: The Air District's methodology, which is supported by applicable law, uses a data-driven approach to setting each fee at the appropriate rate for each program. While it is true that if you look at individual fees in isolation, some over-recovered fees are being increased this year, such increases are supported by the applicable data and relevant methodology at the program-level.

Comment 5: The commenter recommends the Board halt collection of Schedule X fees.

Air District Response to Comment 5: The Air District notes that Schedule X-related work has historically lagged behind the fee collection, however substantial ongoing investment is required and underway. Collection of these fees is appropriate and justified.

Commenter 3

- Received: May 15, 2026 (In Writing)
- Brent Eastep, Sr. Manager, Environmental – Phillips 66

Comment 1: The commenter urges Air District staff to develop and implement cost-containment standards in lieu of proposing to increase fees.

Air District Response to Comment 1: The Air District continuously seeks for cost-containment opportunities and implements them as appropriate. Fees and cost containment are both important elements for achieving cost recovery.

Comment 2: The commenter notes that some fee schedules are over-recovered and yet no fee decreases are proposed.

Air District Response to Comment 2: The Air District's methodology, which is supported by applicable law, uses a data-driven approach to setting each fee at the appropriate rate for each program. While it is true that if you look at individual fees in isolation, some over-recovered fees are being increased this year, such increases are supported by the applicable data and relevant methodology at the program-level.

Comment 3: The commenter questions compliance with Proposition 26 relating to the reasonability of the costs incurred by the Air District.

Air District Response to Comment 3: The Air District is statutorily authorized to collect revenue to offset expenses incurred by administration of its programs. The annual Cost Recovery Report demonstrates that incurred costs are not fully recovered and therefore fees for such programs are justified.

Comment 4: The commenter desires to know what the Air District has learned regarding fees that are assessed by similar agencies.

Air District Response to Comment 4: The Air District notes that similar agencies have substantively different fee structures that make direct comparison difficult. The Air District plans to include a review of other agency cost recovery programs as part of the Cost Recovery and Containment Study scheduled this year.

APPENDIX B:
PROPOSED REGULATORY LANGUAGE – REGULATION 3: FEES

June 3, 2026

REGULATION 3
FEES

INDEX

3-100 GENERAL

3-101 Description
3-102 Deleted July 12, 1989
3-103 Exemption, Abatement Devices
3-104 Deleted August 2, 1995
3-105 Exemption, Excavation of Contaminated Soil and Removal of Underground Storage Tank Operation Fees
3-106 Deleted December 2, 1998
3-107 Exemption, Sources Exempt from Permit Requirements

3-200 DEFINITIONS

3-201 Cancelled Application
3-202 Gasoline Dispensing Facility
3-203 Filing Fee
3-204 Initial Fee
3-205 Authority to Construct
3-206 Modification
3-207 Permit to Operate Fee
3-208 Deleted June 4, 1986
3-209 Small Business
3-210 Solvent Evaporating Source
3-211 Source
3-212 Deleted August 2, 1995
3-213 Major Stationary Source
3-214 Deleted March 1, 2000
3-215 Deleted March 1, 2000
3-216 Deleted March 1, 2000
3-217 Deleted March 1, 2000
3-218 Deleted March 1, 2000
3-219 Deleted March 1, 2000
3-220 Deleted March 1, 2000
3-~~3~~2221 Deleted March 1, 2000
3-222 Deleted March 1, 2000
3-223 Start-up Date
3-224 Permit to Operate
3-225 Deleted June 3, 2015
3-226 Air Toxics "Hot Spots" Information and Assessment Act of 1987
3-227 Toxic Air Contaminant, or TAC
3-228 Deleted December 2, 1998
3-229 Deleted December 2, 1998
3-230 Deleted December 2, 1998
3-231 Deleted December 2, 1998
3-232 Deleted December 2, 1998
3-233 Deleted December 2, 1998
3-234 Deleted December 2, 1998
3-235 Deleted December 2, 1998
3-236 Deleted December 2, 1998
3-237 PM_{10}

3-238 Risk Assessment Fee
3-239 Toxic Surcharge
3-240 Biogenic Carbon Dioxide
3-241 Green Business
3-242 Incident
3-243 Incident Response
3-244 Permit to Operate Renewal Date
3-245 Permit Renewal Period
3-246 Overburdened Community

3-300 STANDARDS

3-301 Hearing Board Fees
3-302 Fees for New and Modified Sources
3-303 Back Fees
3-304 Alteration
3-305 Cancellation or Withdrawal
3-306 Change in Conditions
3-307 Transfers
3-308 Change of Location
3-309 Deleted June 21, 2017
3-310 Fee for Constructing Without a Permit
3-311 Banking
3-312 Emission Caps and Alternative Compliance Plans
3-313 Deleted May 19, 1999
3-314 Deleted August 2, 1995
3-315 Costs of Environmental Documentation
3-316 Deleted June 6, 1990
3-317 Asbestos Operation Fee
3-318 Public Notice Fee
3-319 Major Stationary Source Fees
3-320 Toxic Inventory Fees
3-321 Deleted December 2, 1998
3-322 Deleted June 5, 2024
3-323 Pre-Certification Fees
3-324 Deleted June 7, 2000
3-325 Deleted December 2, 1998
3-326 Deleted December 2, 1998
3-327 Permit to Operate, Renewal Fees
3-328 Fee for OEHHA Risk Assessment Reviews
3-329 Fees for New Source Review Health Risk Assessment
3-330 Fee for Renewing an Authority to Construct
3-331 Registration Fees
3-332 Naturally Occurring Asbestos Fees
3-333 Major Facility Review (MFR) and Synthetic Minor Application Fees
3-334 Greenhouse Gas Fees
3-335 Deleted June 5, 2024
3-336 Open Burning Operation Fees
3-337 Exemption Fees
3-338 Incident Response Fees
3-339 Refining Emissions Tracking Fees
3-340 Major Stationary Source Community Air Monitoring Fees
3-341 Fee for Risk Reduction Plan
3-342 Fee for Facility-Wide Health Risk Assessment
3-343 Fees for Air Dispersion Modeling

3-344 Rounding
3-345 Evaluation of Plans, Regulation 6
3-346 Request for a Petition, Regulation 8
3-347 Evaluation of Reports, Organic Waste Recovery Sites

3-400 ADMINISTRATIVE REQUIREMENTS

3-401 Permits
3-402 Single Anniversary Date
3-403 Change in Operating Parameters
3-404 Deleted June 7, 2000
3-405 Fees Not Paid
3-406 Deleted June 4, 1986
3-407 Deleted August 2, 1995
3-408 Permit to Operate Valid for 12 Months
3-409 Deleted June 7, 2000
3-410 Deleted August 2, 1995
3-411 Advance Deposit of Funds
3-412 Deleted December 2, 1998
3-413 Toxic "Hot Spots" Information and Assessment Act Revenues
3-414 Deleted December 2, 1998
3-415 Failure to Pay - Further Actions
3-416 Adjustment of Fees
3-417 Temporary Amnesty for Unpermitted and Unregistered Sources
3-418 Temporary Incentive for Online or Electronic Transactions
3-419 Industry Compliance School

3-500 MONITORING AND RECORDS (None Included)

3-600 MANUAL OF PROCEDURES (None Included)

FEE SCHEDULES

SCHEDULE A HEARING BOARD FEES
SCHEDULE B COMBUSTION OF FUEL
SCHEDULE C STATIONARY CONTAINERS FOR THE STORAGE OF ORGANIC LIQUIDS
SCHEDULE D GASOLINE TRANSFER AT GASOLINE DISPENSING FACILITIES, BULK PLANTS AND TERMINALS
SCHEDULE E SOLVENT EVAPORATING SOURCES
SCHEDULE F MISCELLANEOUS SOURCES
SCHEDULE H SEMICONDUCTOR AND RELATED OPERATIONS
SCHEDULE I DRY CLEANERS
SCHEDULE J DELETED February 19, 1992
SCHEDULE K SOLID WASTE DISPOSAL SITES
SCHEDULE L ASBESTOS OPERATIONS
SCHEDULE M MAJOR STATIONARY SOURCE FEES
SCHEDULE N TOXIC INVENTORY FEES
SCHEDULE O DELETED May 19, 1999
SCHEDULE P MAJOR FACILITY REVIEW FEES
SCHEDULE Q DELETED June 5, 2024
SCHEDULE R EQUIPMENT REGISTRATION FEES
SCHEDULE S NATURALLY OCCURRING ASBESTOS OPERATIONS
SCHEDULE T GREENHOUSE GAS FEES
SCHEDULE U DELETED June 7, 2023
SCHEDULE V OPEN BURNING

SCHEDULE W REFINING EMISSIONS TRACKING FEES
SCHEDULE X MAJOR STATIONARY SOURCE COMMUNITY AIR MONITORING FEES

REGULATION 3
FEES

(Adopted June 18, 1980)

3-100 GENERAL

3-101 Description: This regulation establishes the regulatory fees charged by the Air District.

(Amended 7/6/83, 11/2/83, 2/21/90, 12/16/92, 8/2/95, 12/2/98, 5/21/03, 5/21/08, 5/20/09, 6/19/13, 6/4/25)

3-102 Deleted July 12, 1989

3-103 Exemption, Abatement Devices: Installation, modification, or replacement of abatement devices on existing sources are subject to fees pursuant to Section 3-302.3. All abatement devices are exempt from annual permit renewal fees. However, emissions from abatement devices, including any secondary emissions, shall be included in facility-wide emissions calculations when determining the applicability of and the fees associated with Schedules M, N, P, and T.

(Amended 6/4/86; 7/1/98; 6/7/00; 5/21/08)

3-104 Deleted August 2, 1995

3-105 Exemption, Excavation of Contaminated Soil and Removal of Underground Storage Tank Operation Fees: Fees shall not be required, pursuant to Section 3-322, for operations associated with the excavation of contaminated soil and the removal of underground storage tanks if one of the following is met:

105.1 The tank removal operation is being conducted within a jurisdiction where the APCO has determined that a public authority has a program equivalent to the Air District program and persons conducting the operations have met all the requirements of the public authority.

105.2 Persons submitting a written notification for a given site have obtained an Authority to Construct or Permit to Operate in accordance with Regulation 2, Rule 1, Section 301 or 302. Evidence of the Authority to Construct or the Permit to Operate must be provided with any notification required by Regulation 8, Rule 40.

(Adopted 1/5/94; Amended 5/21/03, 6/4/25)

3-106 Deleted December 2, 1998

3-107 Exemption, Sources Exempt from Permit Requirements: Any source that is exempt from permit requirements pursuant to Regulation 2, Rule 1, Sections 103 through 128 is exempt from permit fees. However, emissions from exempt sources shall be included in facility-wide emissions calculations when determining the applicability of and the fees associated with Schedules M, N, and P.

(Adopted 6/7/00)

3-200 DEFINITIONS

3-201 Cancelled Application: Any application which has been withdrawn by the applicant or cancelled by the APCO for failure to pay fees or to provide the information requested to make an application complete.

(Amended 6/4/86, 4/6/88)

3-202 Gasoline Dispensing Facility: Any stationary facility which dispenses gasoline directly into the fuel tanks of vehicles, such as motor vehicles, aircraft or boats. The facility shall be treated as a single source which includes all necessary equipment for the exclusive use of the facility, such as nozzles, dispensers, pumps, vapor return lines, plumbing and storage tanks.

(Amended 2/20/85)

3-203 Filing Fee: A fixed administrative fee

(Amended 6/4/86, 6/7/23)

3-204 Initial Fee: The fee required based on the type and size of the source or an hourly rate of actual costs incurred by the Air District.

(Amended 6/4/86, 6/7/23, 6/4/25)

3-205 **Authority to Construct:** Written authorization from the APCO, pursuant to Section 2-1-301, for a source to be constructed or modified or for a source whose emissions will be reduced by the construction or modification of an abatement device.

(Amended 6/4/86)

3-206 **Modification:** See Section 1-217 of Regulation 1.

3-207 **Permit to Operate Fee:** The fee required for the annual renewal of a permit to operate or for the first year of operation (or prorated portion thereof) of a new or modified source which received an authority to construct.

(Amended 6/4/86, 7/15/87, 12/2/98, 6/7/00)

3-208 **Deleted June 4, 1986**

3-209 **Small Business:** A business with no more than 10 employees and gross annual income of no more than $1,500,000 that is not an affiliate of a non-small business.

(Amended 6/4/86, 6/6/90, 6/7/00, 6/15/05, 6/16/10, 6/4/25)

3-210 **Solvent Evaporating Source:** Any source utilizing organic solvent, as part of a process in which evaporation of the solvent is a necessary step. Such processes include, but are not limited to, solvent cleaning operations, painting and surface coating, rotogravure coating and printing, flexographic printing, adhesive laminating, etc. Manufacture or mixing of solvents or surface coatings is not included.

(Amended 7/3/91)

3-211 **Source:** See Section 1-227 of Regulation 1.

3-212 **Deleted August 2, 1995**

3-213 **Major Stationary Source:** For the purpose of Schedule M, a major stationary source shall be any Air District permitted plant, building, structure, stationary facility or group of facilities under the same ownership, leasehold, or operator which, in the base calendar year, emitted to the atmosphere organic compounds, oxides of nitrogen (expressed as nitrogen dioxide), oxides of sulfur (expressed as sulfur dioxide), or PM_{10} in an amount calculated by the APCO equal to or exceeding 50 tons per year.

(Adopted 11/2/83; Amended 2/21/90, 6/6/90, 8/2/95, 6/7/00, 6/4/25)

3-214 **Deleted October 20, 1999, effective March 1, 2000**

3-215 **Deleted October 20, 1999, effective March 1, 2000**

3-216 **Deleted October 20, 1999, effective March 1, 2000**

3-217 **Deleted October 20, 1999, effective March 1, 2000**

3-218 **Deleted October 20, 1999, effective March 1, 2000**

3-219 **Deleted October 20, 1999, effective March 1, 2000**

3-220 **Deleted October 20, 1999, effective March 1, 2000**

3-221 **Deleted October 20, 1999, effective March 1, 2000**

3-222 **Deleted October 20, 1999, effective March 1, 2000**

3-223 **Start-up Date:** Date when new or modified equipment under an authority to construct begins operating. The holder of an authority to construct is required to notify the APCO of this date at least 3 days in advance. For new sources, or modified sources whose authorities to construct have expired, operating fees are charged from the startup date.

(Adopted 6/4/86; Amended 6/6/90)

3-224 **Permit to Operate:** Written authorization from the APCO pursuant to Section 2-1-302.

(Adopted 6/4/86; Amended 6/7/00)

3-225 **Deleted June 3, 2015**

3-226 **Air Toxics "Hot Spots" Information and Assessment Act of 1987:** The Air Toxics "Hot Spots" Information and Assessment Act of 1987 directs the California Air Resources Board and the Air Quality Management Districts to collect information from industry on emissions of potentially toxic air contaminants and to inform the public about such emissions and their impact on public health. It also directs the Air Quality Management District to collect fees sufficient to cover the necessary state and Air District costs of implementing the program.

(Adopted 10/21/92; Amended 6/15/05, 6/4/25)

3-227 **Toxic Air Contaminant, or TAC:** An air pollutant that may cause or contribute to an increase in mortality or in serious illness or that may pose a present or potential hazard to human health. For the purposes of this rule, TACs consist of the substances listed in Table 2-5-1 of Regulation 2, Rule 5.

(Adopted 10/21/92; Amended 6/15/05)

3-228 **Deleted December 2, 1998**

3-229 **Deleted December 2, 1998**

3-230 **Deleted December 2, 1998**

3-231 **Deleted December 2, 1998**

3-232 **Deleted December 2, 1998**

3-233 **Deleted December 2, 1998**

3-234 **Deleted December 2, 1998**

3-235 **Deleted December 2, 1998**

3-236 **Deleted December 2, 1998**

3-237 **PM_{10}:** See Section 2-1-229 of Regulation 2, Rule 1.

(Adopted 6/7/00)

3-238 **Risk Assessment Fee:** Fee for a new or modified source of toxic air contaminants for which a health risk assessment (HRA) is required under Regulation 2-5-401, for an HRA required under Regulation 11, Rule 18, or for an HRA prepared for other purposes (e.g., for determination of permit exemption in accordance with Regulations 2-1-316, 2-5-301 and 2-5-302; or for determination of exemption from emission control requirements pursuant to Regulation 8-47-113 and 8-47-402).

(Adopted 6/15/05; Amended 6/21/17)

3-239 **Toxic Surcharge**: Fee paid in addition to the permit to operate fee for a source that emits one or more toxic air contaminants at a rate which exceeds a chronic trigger level listed in Table 2-5-1.

(Adopted 6/15/05)

3-240 **Biogenic Carbon Dioxide:** Carbon dioxide emissions resulting from materials that are derived from living cells, excluding fossil fuels, limestone and other materials that have been transformed by geological processes. Biogenic carbon dioxide originates from carbon (released in the form of emissions) that is present in materials that include, but are not limited to, wood, paper, vegetable oils, animal fat, and food, animal and yard waste.

(Adopted 5/21/08)

3-241 **Green Business:** A business or government agency that has been certified under the Bay Area Green Business Program coordinated by the Association of Bay Area Governments and implemented by participating counties.

(Adopted 6/19/10)

3-242 **Incident:** A non-routine release of an air contaminant that may cause adverse health consequences to the public or to emergency personnel responding to the release, or that may cause a public nuisance or off-site environmental damage.

(Adopted 6/19/13)

3-243 **Incident Response:** The Air District's response to an incident. The Air District's incident response may include the following activities: i) inspection of the incident-emitting equipment and facility records associated with operation of the equipment; ii) identification and analysis of air quality impacts, including without limitation, identifying areas impacted by the incident, modeling, air monitoring, and source sampling; iii) engineering analysis of the specifications or operation of the equipment; and iv) administrative tasks associated with processing complaints and reports.

(Adopted 6/19/13, Amended 6/4/25)

3-244 **Permit to Operate Renewal Date:** The first day of a Permit to Operate's Permit Renewal Period.

(Adopted 6/19/13)

3-245 **Permit Renewal Period:** The length of time the source is authorized to operate pursuant to a Permit to Operate.

(Adopted 6/19/13)

3-246 **Overburdened Community:** As defined in Regulation 2, Rule 1

(Adopted 6/15/22)

3-300 STANDARDS

3-301 **Hearing Board Fees:** Applicants for variances or appeals or those seeking to revoke or modify variances or abatement orders or to rehear a Hearing Board decision shall pay the applicable fees, including excess emission fees, set forth in Schedule A.

(Amended 6/7/00)

3-302 **Fees for New and Modified Sources:** Applicants for authorities to construct and permits to operate new sources shall pay for each new source: a filing fee of $~~669~~684, the initial fee, the risk assessment fee, the permit to operate fee, and toxic surcharge (given in Schedules B, C, D, E, F, H, I or K). Applicants for authorities to construct and permits to operate modified sources shall pay for each modified source, a filing fee of $~~669~~684, the initial fee, the risk assessment fee, and any incremental increase in permit to operate and toxic surcharge fees. Where more than one of the schedules is applicable to a source, the fee paid shall be the highest of the applicable schedules. If any person requests more than three HRA scenarios required pursuant to Regulation 2, Rule 5 in any single permit application, they shall pay an additional risk assessment fee for each of these scenarios. Except for gasoline dispensing facilities (Schedule D) and semiconductor facilities (Schedule H), the size to be used for a source when applying the schedules shall be the maximum size the source will have after the construction or modification. Where applicable, fees for new or modified sources shall be based on maximum permitted usage levels or maximum potential to emit including any secondary emissions from abatement equipment. The fee rate applied shall be based on the fee rate in force on the date the application is submitted.

302.1 Small Business Discount: If an applicant qualifies as a small business and the source falls under schedules B, C, D (excluding gasoline dispensing facilities), E, F, H, I or K, the filing fee, initial fee, and risk assessment fee shall be reduced by 50%. All other applicable fees shall be paid in full. If an applicant also qualifies for a Green Business Discount, only the Small Business Discount (i.e., the 50% discount) shall apply.

302.2 Deleted July 3, 1991

302.3 Fees for Abatement Devices: Applicants for an authority to construct and permit to operate abatement devices where there is no other modification to the source shall pay a $~~669~~684 filing fee and initial and risk assessment fees that are equivalent to 50% of the initial and risk assessment fees for the source being abated, not to exceed a total of $~~13,952~~14,273. For abatement devices abating more than one source, the initial fee shall be 50% of the initial fee for the source having the highest initial fee.

302.4 Fees for Reactivated Sources: Applicants for a Permit to Operate reactivated, previously permitted equipment shall pay the full filing, initial, risk assessment, permit, and toxic surcharge fees.

302.5 Deleted June 3, 2015

302.6 Green Business Discount: If an applicant qualifies as a green business, the filing fee, initial fee, and risk assessment fee shall be reduced by 10%. All other applicable fees shall be paid in full.

302.7 Fee for applications in an Overburdened Community: An applicant with a project that requires a Health Risk Assessment in an Overburdened Community shall pay a fee of $1,000 in addition to any other permit application fees.

302.8 Risk Assessment Fee: When the Risk Assessment Fee (RAF) is required for more than one source, the first toxic air contaminant (TAC) source is the source with the highest calculated RAF.

(Amended 5/19/82, 7/6/83, 6/4/86, 7/15/87, 6/6/90, 7/3/91, 6/15/94, 10/8/97, 7/1/98, 5/19/99, 6/7/00, 6/6/01,5/1/02, 5/21/03, 6/2/04, 6/15/05, 6/7/06, 5/2/07, 5/21/08, 5/20/09, 6/16/10, 5/4/11, 6/6/12, 6/19/13, 6/4/14, 6/3/15, 6/15/16, 6/21/17, 6/6/18, 6/5/19, 6/16/21, 6/15/22, 6/7/23, 6/5/24, 6/4/25~~, DATE~~)

3-303 **Back Fees:** An applicant required to obtain a permit to operate existing equipment in accordance with Air District regulations shall pay back fees equal to the permit to operate fees and toxic surcharges given in the appropriate Schedule (B, C, D, E, F, H, I or K) prorated from the effective date of permit requirements. Where more than one of these schedules is applicable to a source, the fee paid shall be the highest of the applicable schedules. The applicant shall also pay back fees equal to toxic inventory fees pursuant to Section 3-320 and

Schedule N. The maximum back fee shall not exceed a total of five years' permit, toxic surcharge, and toxic inventory fees. An owner/operator required to register existing equipment in accordance with Air District regulations shall pay back fees equal to the annual renewal fee given in Schedule R prorated from the effective date of registration requirements, up to a maximum of five years.

(Amended 5/19/82, 7/6/83, 6/4/86, 7/15/87, 6/6/90, 7/3/91, 10/8/97, 6/15/05, 5/20/09, 6/4/25)

3-304 **Alteration:** Except as provided below, an applicant to alter an existing permitted source shall pay the filing fee and 50% of the initial fee for the source, provided that the alteration does not result in an increase in emissions of any regulated air pollutant.

304.1 Schedule D Fees: Applicants for alteration to a gasoline dispensing facility subject to Schedule D shall pay a fee of 1.75 times the filing fee.

304.2 Schedule G Fees: Applicants for alteration to a permitted source subject to Schedule G-3, G-4, or G-5 shall pay the filing fee, 100% of the initial fee under Schedule G-2, and the risk assessment fee under Schedule G-2, if required. The applicant shall pay the permit renewal and the toxic surcharge fees applicable to the source under Schedules G-3, G-4, or G-5.

(Amended 6/4/86, 11/15/00, 6/2/04, 6/3/15, 6/15/16, 6/6/18, 6/5/19, 6/5/24, 6/4/25, DATE)

3-305 **Cancellation or Withdrawal:** There will be no refund of the initial fee and filing fee if an application is cancelled or withdrawn. There will be no refund of the risk assessment fee if the risk assessment has been conducted prior to the application being cancelled or withdrawn. If an application for identical equipment for the same project is submitted within six months of the date of cancellation or withdrawal, the initial fee will be credited in full against the fee for the new application.

(Amended 7/6/83, 4/6/88, 10/8/97, 6/15/05, 6/21/17, 6/16/21)

3-306 **Change in Conditions:** If an applicant applies to change the conditions on an existing authority to construct or permit to operate, the applicant will pay the following fees. There will be no change in anniversary date.

306.1 Administrative Condition Changes: An applicant applying for an administrative change in permit conditions shall pay a fee equal to the filing fee for a single source, provided the following criteria are met:

1.1 The condition change applies to a single source or a group of sources with shared permit conditions.

1.2 The condition change does not subject the source(s) to any Air District Regulations or requirements that were not previously applicable.

1.3 The condition change does not result in any increase in emissions of POC, NPOC, NO_x, CO, SO_2, or PM_{10} at any source or the emission of a toxic air contaminant above the trigger levels identified in Table 2-5-1

1.4 The condition change does not require a public notice.

306.2 Other Permit Condition Changes: Applicant shall pay the filing, initial, and risk assessment fees required for new and modified equipment under Section 3-302. If the condition change will result in higher permit to operate fees, the applicant shall also pay any incremental increases in permit to operate fees and toxic surcharges.

(Amended 7/6/83, 6/4/86, 6/6/90, 10/8/97, 6/7/00, 6/15/05, 6/21/17, 6/7/23, 6/4/25)

3-307 **Transfers:** The owner/operator of record is the person to whom a permit is issued or, if no permit has yet been issued to a facility, the person who applied for a permit. Permits are valid only for the owner/operator of record. Upon submittal of a $102 transfer of ownership fee, permits are re-issued to the new owner/operator of record with no change in expiration dates. For expired permits or registrations, the new owner/operator is responsible for all outstanding fees.

(Amended 2/20/85, 6/4/86, 11/5/86, 4/6/88, 10/8/97, 5/1/02, 5/21/03, 6/02/04, 6/19/13, 6/4/14, 6/15/16, 6/7/23)

3-308 **Change of Location:** An applicant who wishes to move an existing source, which has a permit to operate, shall pay no fee if the move is on the same facility. If the move is not on the same facility, the source shall be considered a new source and subject to Section 3-302. This section does not apply to portable permits meeting the requirements of Regulation 2-1-220 and 413.

(Amended 7/6/83; 6/4/86; 6/15/05)

3-309 Deleted June 21, 2017

3-310 **Fee for Constructing Without a Permit:** An applicant for an authority to construct and a permit

to operate a source, which has been constructed or modified without an authority to construct, shall pay the following fees:

310.1 Sources subject to permit requirements on the date of initial operation shall pay fees for new construction pursuant to Section 3-302, any back fees pursuant to Section 3-303, and a late fee equal to 100% of the initial fee. A modified gasoline dispensing facility subject to Schedule D that is not required to pay an initial fee shall pay fees for a modified source pursuant to Section 3-302, back fees, and a late fee equal to 100% of the filing fee.

310.2 Sources previously exempt from permit requirements that lose their exemption due to changes in Air District, state, or federal regulations shall pay a permit to operate fee and toxic surcharge for the coming year and any back fees pursuant to Section 3-303.

310.3 Sources previously exempt from permit requirements that lose their exemption due to a change in the manner or mode of operation, such as an increased throughput, shall pay fees for new construction pursuant to Section 3-302. In addition, sources applying for permits after commencing operation in a non-exempt mode shall also pay a late fee equal to 100% of the initial fee and any back fees pursuant to Section 3-303.

310.4 Sources modified without a required authority to construct shall pay fees for modification pursuant to Section 3-302 and a late fee equal to 100% of the initial fee.

(Amended 7/6/83, 4/18/84, 6/4/86, 6/6/90, 7/3/91, 8/2/95, 10/8/97, 6/02/04, 6/15/05, 6/6/12, 6/4/25)

3-311 Emission Banking Fees: An applicant to bank emissions for future use, to convert an emission reduction credit (ERC), to change assigned conditions, to transfer ownership of an ERC, or to make any administrative changes shall pay the following fees:

311.1 Banking ERCs: An applicant to bank emissions for future use shall pay a filing fee of $~~669~~684 per source plus the initial fee given in Schedules B, C, D, E, F, H, I or K. Where more than one of these schedules is applicable to a source, the fee paid shall be the highest of the applicable schedules.

311.2 Converting Existing ERCs to Interchangeable Emission Reduction Credits (IERCs): An applicant to convert an existing ERC into an IERC shall pay a filing fee of $~~669~~684 per source plus the initial fee given in Schedules B, C, D, E, F, H, I or K. Where more than one of these schedules is applicable to a source, the fee paid shall be the highest of the applicable schedules.

311.3 Transferring ERC Ownership: An applicant to transfer an ERC it currently owns to another owner shall pay a filing fee of $~~669~~684.

311.4 Evaluation of Existing ERCs for $PM_{2.5}$: An applicant to evaluate an existing PM_{10} ERC shall pay a filing fee of $~~669~~684 per source and an evaluation fee equivalent to the total actual and reasonable time incurred by Air District staff at the hourly rate of $~~205~~210 per hour not to exceed the initial fee given in Schedules B, C, D, E, F, H, I or K. Where more than one of these schedules is applicable to a source, the fee paid shall be the highest of the applicable schedules.

311.5 ERC Condition Change: An applicant to request a change in condition shall pay a filing fee of $~~669~~684 and an evaluation fee equivalent to the total actual and reasonable time incurred by Air District staff at the hourly rate of $~~205~~210 per hour not to exceed the initial fee given in Schedules B, C, D, E, F, H, I or K. Where more than one of these schedules is applicable to a source, the fee paid shall be the highest of the applicable schedules.

311.6 ~~Lost~~ ERC Certificate Reissuance: An applicant, who is not an official facility contact or ERC contact, to recover a lost ERC certificate shall pay a fee of $684 per ERC certificate. If the APCO determines that the ERC certificate is ineligible for reissuance, the fee is not refundable.

(Amended 7/6/83, 6/4/86, 7/15/87, 7/3/91, 6/15/94, 7/1/98, 5/19/99, 6/7/00, 6/6/01, 5/1/02, 5/21/03,6/02/04, 6/15/05, 6/7/06, 5/2/07, 5/21/08, 5/20/09, 6/16/10, 5/4/11, 6/6/12, 6/19/13, 6/4/14, 6/3/15, 6/15/16, 6/21/17, 6/6/18, 6/5/19, 6/16/21, 6/15/22, 6/7/23, 6/5/24, 6/4/25, DATE)

3-312 Emission Caps and Alternative Compliance Plans: Any facility which elects to use an alternative compliance plan contained in:

312.1 Regulation 8 ("bubble") to comply with an Air District emission limitation or to use an annual or monthly emission limit to acquire a permit in accordance with the provisions

of Regulation 2, Rule 2, shall pay an additional annual fee equal to fifteen percent of the total plant permit to operate fee.

312.2 Regulation 2, Rule 9, or Regulation 9, Rule 10 shall pay an annual fee of $~~1,695~~1,734 for each source included in the alternative compliance plan, not to exceed $~~16,946~~17,336.

(Adopted 5/19/82; Amended 6/4/86, 5/19/99, 6/7/00, 6/6/01, 5/1/02, 5/23/03, 6/2/04,6/15/05, 6/7/06, 5/2/07, 5/21/08, 5/20/09, 6/16/10, 5/4/11, 6/6/12, 6/19/13, 6/4/14, 6/3/15, 6/15/16, 6/21/17, 6/6/18, 6/5/19, 6/16/21, 6/15/22, 6/7/23, 6/5/24, 6/4/25, DATE)

3-313 Deleted May 19, 1999

3-314 Deleted August 2, 1995

3-315 Costs of Environmental Documentation: An applicant for an Authority to Construct shall pay, in addition to the fees required under Section 3-302 and in any applicable schedule, the Air District's costs of performing any environmental evaluation and preparing and filing any documents pursuant to the California Environmental Quality Act (Public Resources Code, Section 21000, et seq), including the costs of any outside consulting assistance which the Air District may employ in connection with the preparation of any such evaluation or documentation, as well as the Air District's reasonable internal costs (including overhead) of processing, reviewing, or filing any environmental evaluation or documentation.

(Adopted 12/18/85; Amended 5/1/02, 6/3/15, 6/4/25)

3-316 Deleted June 6, 1990

3-317 Asbestos Operation Fees: After July 1, 1988, persons submitting a written plan, as required by Regulation 11, Rule 2, Section 401, to conduct an asbestos operation shall pay the fee given in Schedule L.

(Adopted 7/6/88; Renumbered 9/7/88; Amended 8/2/95)

3-318 Public Notice Fee: An applicant for an authority to construct or permit to operate subject to the public notice requirements of Regulation 2-1-412 shall pay, in addition to the fees required under Section 3-302 and in any applicable schedule, a fee to cover the expense of preparing and distributing the public notices to the affected persons specified in Regulation 2-1-412 as follows:

318.1 A fee of $2,272 per application, and

318.2 The Air District's cost exceeding $2,272 of preparing and distributing the public notice.

318.3 The Air District shall refund to the applicant the portion of any fee paid under this Section that exceeds the Air District's cost of preparing and distributing the public notice.

(Adopted 11/1/89; Amended 10/8/97, 7/1/98, 5/19/99, 6/7/00, 5/21/03, 6/2/04, 6/16/10, 6/15/16, 6/21/17, 6/6/18, 6/4/25)

3-319 Major Stationary Source Fees: Any major stationary source emitting 50 tons per year of organic compounds, sulfur oxides, nitrogen oxides, or PM_{10} shall pay a fee based on Schedule M. This fee is in addition to permit and other fees otherwise authorized to be collected from such facilities and shall be included as part of the annual permit renewal fees.

(Adopted 6/6/90; Amended 8/2/95, 6/7/00)

3-320 Toxic Inventory Fees: Any facility that emits one or more toxic air contaminants shall pay an annual fee based on Schedule N. This fee will be in addition to permit to operate, toxic surcharge, and other fees otherwise authorized to be collected from such facilities.

(Adopted 10/21/92; Amended 5/19/99, 5/21/03, 6/2/04, 6/15/05, 6/7/06, 5/2/07, 5/20/09, 6/16/10, 5/4/11, 6/15/16, 6/21/17, 6/5/19, 6/16/21, 6/15/22, 6/7/23, 6/5/24. 6/4/25)

3-321 Deleted December 2, 1998

3-322 Deleted June 5, 2024

3-323 Pre-Certification Fees: An applicant seeking to pre-certify a source, in accordance with Regulation 2, Rule 1, Section 415, shall pay the filing fee, initial fee and permit to operate fee given in the appropriate schedule.

(Adopted 6/7/95)

3-324 Deleted June 7, 2000

3-325 Deleted December 2, 1998

3-326 Deleted December 2, 1998

3-327 Permit to Operate, Renewal Fees: After the expiration of the initial permit to operate, the permit to operate shall be renewed on an annual basis or other time period as approved by the APCO. The fee required for the renewal of a permit to operate is the permit to operate fee and

toxic surcharge listed in Schedules B, C, D, E, F, H, I, and K, prorated for the period of coverage, pursuant to Section 3-207.

When more than one of the schedules is applicable to a source, the fee paid shall be the highest of the applicable schedules. Renewal fees are applicable to all sources required to obtain permits to operate in accordance with Air District regulations. Renewal fees shall include any applicable major stationary source fees based on Schedule M, toxic inventory fees based on Schedule N, major facility review fees based on Schedule P, greenhouse gas fees based on Schedule T, refining emissions tracking fees based on Schedule W, and community air monitoring fees based on Schedule X. Where applicable, renewal fees shall be based on the current usage or emission levels that have been reported to or calculated by the Air District.

327.1 Renewal Processing Fee: In addition, the facility shall also pay a processing fee at the time of renewal that covers each Permit Renewal Period as follows:

- 1.1 $~~132~~ 135 for facilities with one permitted source, including gasoline dispensing facilities,
- 1.2 $~~261~~ 267 for facilities with 2 to 5 permitted sources,
- 1.3 $~~520~~ 532 for facilities with 6 to 10 permitted sources,
- 1.4 $~~781~~ 799 for facilities with 11 to 15 permitted sources,
- 1.5 $~~1,037~~1,061 for facilities with 16 to 20 permitted sources,
- 1.6 $1~~,296~~1,326 for facilities with more than 20 permitted sources.

327.2 Assembly Bill 617 Community Health Impact Fee: An owner/operator of a permitted facility subject to Schedule P (Major Facility Review Fees) shall pay an Assembly Bill 617 community health impact fee of 5.7 percent of the facility's total renewal fee, up to a maximum fee of $~~129,815~~132,801 per year per facility owner.

327.3 Criteria Pollutant and Toxic Emissions Reporting (CTR): The owner/operator of a permitted facility shall pay a CTR fee of 4.4 percent of the facility's total renewal fee, up to a maximum fee of $~~64,908~~66,401 per year.

327.4 Overburdened Community renewal fee: The owner/operator of a permitted facility in an Overburdened Community shall pay a fee of 15 percent of the facility's total renewal fee, up to a maximum fee of $~~282,207~~288,698 per year.

327.5 Shutdown sources: There is no refund for sources that shutdown during the permit to operate period of coverage.

(Adopted 6/7/00; Amended 6/2/04, 6/16/04, 6/15/05, 6/7/06, 5/2/07, 5/21/08, 5/20/09, 6/16/10, 5/4/11, 6/6/12, 6/19/13, 6/4/14, 6/3/15, 6/15/16, 6/21/17,6/6/18, 6/5/19, 6/3/20, 6/16/21, 11/3/21, 6/15/22, 6/7/23, 6/5/24, 6/4/25, DATE)

3-328 Fee for OEHHA Risk Assessment Reviews: Any facility that submits a health risk assessment to the Air District in accordance with Section 44361 of the California Health and Safety Code shall pay any fee requested by the State Office of Environmental Health Hazard Assessment (OEHHA) for reimbursement of that agency's costs incurred in reviewing the risk assessment.

(Adopted 6/7/00, Amended 6/4/25)

3-329 Fees for New Source Review Health Risk Assessment: Any person required to submit a health risk assessment (HRA) pursuant to Regulation 2-5-401 shall pay an appropriate Risk Assessment Fee pursuant to Regulation 3-302 and Schedules B, C, D, E, F, H, I or K. In addition, any person that requests that the Air District prepare or review an HRA (e.g., for determination of permit exemption in accordance with Regulations 2-1-316, 2-5-301 and 2-5-302; or for determination of exemption from emission control requirements pursuant to Regulation 8-47-113 and 8-47-402) shall pay a Risk Assessment Fee. A Risk Assessment Fee shall be assessed for each source that is proposed to emit a toxic air contaminant (TAC) at a rate that exceeds a trigger level in Table 2-5-1: Toxic Air Contaminant Trigger Levels. If a project requires an HRA due to total project emissions, but TAC emissions from each individual source are less than the Table 2-5-1 trigger levels, a Risk Assessment Fee shall be assessed for the source in the project with the highest TAC emissions.

(Adopted 6/15/05; Amended 6/21/17, 6/4/25)

3-330 Fee for Renewing an Authority to Construct: An applicant seeking to renew an authority to construct in accordance with Regulation 2-1-407 shall pay a fee of 50% of the initial fee in effect

at the time of the renewal. If the Air District determines that an authority to construct cannot be renewed, any fees paid under this section shall be credited in full against the fee for a new authority to construct for functionally equivalent equipment submitted within six months of the date the original authority to construct expires.

330.1 Expired Authority to Construct: If an applicant does not notify the Air District with their intent to renew the Authority to Construct prior to its expiration, the applicant shall pay $100 per application in addition to any other fees under this section if eligible to renew.

(Adopted 6/15/05; Amended 6/7/23, 6/5/24, 6/4/25)

3-331 **Registration Fees:** Any person who is required to register equipment under Air District rules shall submit a registration fee, and any annual fee thereafter, as set out in Schedule R. There is no refund for registered equipment/operations that shutdown during the period of coverage.

(Adopted 6/6/07; Amended 6/16/10, 6/7/23, 6/5/24, 6/4/25)

3-332 **Naturally Occurring Asbestos Fees**: After July 1, 2007, any person required to submit or amend an Asbestos Dust Mitigation Plan (ADMP) pursuant to Title 17 of the California Code of Regulations, Section 93105, Asbestos Air Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations shall pay the fee(s) set out in Schedule S.

(Adopted 6/6/07; Amended 6/5/19)

3-333 **Major Facility Review (MFR) and Synthetic Minor Application Fees**: Any facility that applies for, or is required to undergo, an initial MFR permit, an amendment to an MFR permit, a minor or significant revision to an MFR permit, a reopening of an MFR permit, a renewal of an MFR permit, an initial synthetic minor operating permit, or a revision to a synthetic minor operating permit, shall pay the applicable fees set forth in Schedule P.

(Adopted 5/21/08)

3-334 **Greenhouse Gas Fees:** Any permitted facility with greenhouse gas emissions shall pay a fee based on Schedule T. This fee is in addition to permit and other fees otherwise authorized to be collected from such facilities, and shall be included as part of the annual permit renewal fees.

(Adopted 5/21/08)

3-335 **Deleted June 5, 2024**

3-336 **Open Burning Operation Fees:** Effective July 1, 2013, any person required to provide notification to the Air District prior to burning; submit a petition to conduct a Filmmaking or Public Exhibition fire; receive an acreage burning allocation to conduct a Stubble fire; or submit a smoke management plan and receive an acreage burning allocation to conduct a Wildland Vegetation Management (Prescribed Burning) fire or Marsh Management fire shall pay the fee given in Schedule V.

(Adopted 6/19/13; Amended 6/3/20, 6/4/25)

3-337 **Exemption Fee:** An applicant who wishes to receive a certificate of exemption shall pay a filing fee of $~~669~~684 per exempt source.

(Adopted 6/19/13; Amended 6/4/14; 6/3/15, 6/21/17, 6/16/21, 6/15/22, 6/7/23, 6/4/25, DATE)

3-338 **Incident Response Fee:** Any facility required to obtain a Air District permit, and any Air District-regulated area-wide or indirect source, that is the site where an incident occurs to which the Air District responds, shall pay a fee equal to the Air District's actual costs in conducting the incident response as defined in Section 3-243, including without limitation, the actual time and salaries, plus overhead, of the Air District staff involved in conducting the incident response and the cost of any materials. *(Adopted 6/19/13, Amended 6/4/25)*

3-339 **Refining Emissions Tracking Fees:** Any person required to submit an Annual Emissions Inventory, Monthly Crude Slate Report, or air monitoring plan in accordance with Regulation 12, Rule 15 shall pay the applicable fees set forth in Schedule W.

(Adopted 6/15/16, Amended 11/03/21)

3-340 **Major Stationary Source Community Air Monitoring Fees:** Any major stationary source emitting 35 tons per year of organic compounds, sulfur oxides, nitrogen oxides, carbon monoxide or PM_{10} shall pay a community air monitoring fee based on Schedule X. This fee is in addition to permit and other fees otherwise authorized to be collected from such facilities and shall be included as part of the annual permit renewal fees.

(Adopted 6/15/16)

3-341 **Fee for Risk Reduction Plan:** Any person required to submit a Risk Reduction Plan in accordance with Regulation 11, Rule 18 shall pay the applicable fees set forth below:

341.1 $~~2,054~~2,101 for facilities with one source subject to risk reduction pursuant to Regulation 11, Rule 18, including gasoline dispensing facilities;

341.2 $~~4,108~~4,202 for facilities with 2 to 5 sources subject to risk reduction pursuant to Regulation 11, Rule 18;

341.3 $~~8,214~~8,403 for facilities with 6 to 10 sources subject to risk reduction pursuant to Regulation 11, Rule 18;

341.4 $~~16,428~~16,806 for facilities with 11 to 15 sources subject to risk reduction pursuant to Regulation 11, Rule 18;

341.5 $~~32,857~~33,613 for facilities with 16 to 20 sources subject to risk reduction pursuant to Regulation 11, Rule 18;

341.6 $~~43,808~~44,816 for facilities with more than 20 sources subject to risk reduction pursuant to Regulation 11, Rule 18.

(Adopted 6/21/17, Amended 6/5/19, 6/3/20, 6/16/21, 6/15/22, 6/7/23, 6/5/24, 6/4/25, DATE)

3-342 **Fee for Facility-Wide Health Risk Assessment:** Any person required to undergo a health risk assessment (HRA) to assess compliance with the Regulation 11, Rule 18 risk action levels shall pay a risk assessment fee for each source pursuant to Regulation 3-329 and Schedules B, C, D, E, F, H, I or K. The maximum fee required for any single HRA of a facility conducted pursuant to Regulation 11, Rule 18 shall not exceed a total of $~~205,351~~210,074.

If a facility retains a Air District-approved consultant to complete the required facility-wide HRA, the facility shall pay a fee to cover the Air District's costs of performing the review of the facility-wide HRA, including the costs of any outside consulting assistance which the Air District may employ in connection with any such review, as well as the Air District's reasonable internal costs (including overhead) of processing, reviewing, or approving the facility-wide HRA. The total HRA review cost shall be determined based on the Air District's actual review time in hours multiplied by an hourly charge of $~~281~~ 287 per hour. Facilities shall pay an HRA review fee as indicated below and the Air District's cost exceeding the applicable HRA review fees indicated below for performing the review of the facility-wide HRA:

342.1 $~~3,370~~3,448 for facilities with one to 10 sources subject to risk reduction pursuant to Regulation 11, Rule 18, including gasoline dispensing facilities;

342.2 $~~9,035~~9,243 for facilities with 11 to 50 sources subject to risk reduction pursuant to Regulation 11, Rule 18;

342.3 $~~19,167~~19,608 for facilities with more than 50 sources subject to risk reduction pursuant to Regulation 11, Rule 18.

The Air District shall refund to the applicant the portion of any fee paid under this Section that exceeds the Air District's cost of performing the review of the facility-wide HRA.

(Adopted 6/21/17; Amended 6/6/18,6/5/19, 6/16/21, 6/15/22, 6/7/23, 6/5/24, 6/4/25, DATE)

3-343 **Fees for Air Dispersion Modeling:** An applicant for an Authority to Construct or Permit to Operate shall pay, in addition to the fees required under Section 3-302 and 3-329 and in any applicable schedule, the Air District's costs of performing any air dispersion modeling needed to determine compliance with any Air District regulatory requirement. The total air dispersion modeling fee cost shall be determined based on the Air District's actual review time in hours multiplied by an hourly charge of $~~281~~ 287 per hour. This fee shall also apply for costs incurred in reviewing air dispersion modeling submittals by applicants and the costs of any outside consulting assistance which the Air District may employ in connection with the preparation of any such evaluation or documentation, as well as the Air District's reasonable internal costs (including overhead) of processing, reviewing, or approving the air dispersion modeling.

(Adopted 6/5/19; Amended 6/16/21, 6/15/22, 6/7/23, 6/5/24, 6/4/25)

3-344 **Rounding:** Each fee will be rounded to the nearest dollar.

(Adopted 6/15/22)

3-345 **Evaluation of Plans, Regulation 6:** For any plan required in any rule in Regulation 6, the requestor shall pay the following fees:

345.1 A filing fee of $~~669~~684; and

345.2 An initial fee equivalent to the total actual and reasonable time incurred by Air District

staff at the hourly rate or prorated of $~~205~~210 per hour not to exceed the minimum initial fee(s) in the schedule for the applicable source(s).

(Adopted 6/7/23, 6/5/24, 6/4/25~~,~~ DATE)

3-346 **Request for a Petition, Regulation 8:** For any petition required in any rule in Regulation 8, the requestor shall pay the following fees:

346.1 A filing fee of $~~669~~684; and

346.2 An initial fee equivalent to the total actual and reasonable time incurred by Air District staff at the hourly rate or prorated of $~~205~~210 per hour not to exceed the minimum initial fee in Schedule E.

(Adopted 6/7/23, 6/5/24, 6/4/25~~,~~ DATE)

3-347 **Evaluation of Reports, Organic Waste Recovery Sites:** For the evaluation of any report not currently specified in Schedule K as required by federal, state or Air District rule, the owner/operator shall pay the following fees:

347.1 A filing fee of $~~669~~684; and

347.2 An initial fee equivalent to the total actual and reasonable time incurred by Air District staff at the hourly rate or prorated of $~~205~~210 per hour.

(Adopted 6/7/23, 6/5/24, 6/4/25~~,~~ DATE)

3-400 ADMINISTRATIVE REQUIREMENTS

3-401 **Permits:** Definitions, standards, and conditions contained in Regulation 2, Permits, are applicable to this regulation.

3-402 **Single Anniversary Date:** The APCO may assign a single anniversary date to a facility on which all its renewable permits to operate expire and will require renewal. Fees will be prorated to compensate for different time periods resulting from change in anniversary date.

3-403 **Change in Operating Parameters:** See Section 2-1-404 of Regulation 2, Rule 1.

3-404 **Deleted June 7, 2000**

3-405 **Fees Not Paid:** If an applicant or owner/operator fails to pay the fees specified on the invoice by the due date, the following procedure(s) shall apply:

405.1 Renewal of Authority to Construct: The ~~application will be cancelled but can be reactivated upon payment of fees~~Authority to Construct shall be canceled.

405.2 New Permit to Operate: The Permit to Operate shall not be issued, and the facility will be notified that operation, including startup, is not authorized.

~~2.1 Fees received during the first 30 days following the due date must include a late fee equal to 10 percent of all fees specified on the invoice.~~Deleted DATE

~~2.2 Fees received more than 30 days after the due date must include a late fee equal to 25 percent of all fees specified on the invoice.~~Deleted DATE

405.3 Renewal of Permit to Operate: The owner/operator of a facility must renew the Permit to Operate in order to continue to be authorized to operate the source. Permit to Operate Fees for the Permit Renewal Period shall be calculated using fee schedules in effect on the Permit to Operate Renewal Date. The permit renewal invoice will include all fees to be paid in order to renew the Permit to Operate, as specified in Section 3-327. If not renewed as of the date of the next Permit Renewal Period, a Permit to Operate lapses and further operation is no longer authorized. The Air District will notify the facility that the permit has lapsed. Reinstatement of lapsed Permits to Operate will require the payment of all unpaid prior Permit to Operate fees and associated reinstatement fees for each unpaid prior Permit Renewal Period, in addition to all fees specified on the permit renewal invoice.

405.4 Reinstatement of Lapsed Permit to Operate: To reinstate a Permit to Operate, the owner/operator must pay all of the following fees:

4.1 The applicable Permit to Operate Fees for the current year, as specified in Regulation 3-327, and the applicable reinstatement fee, if any, calculated as follows:

4.1.1 Fees received ~~during the first 30 days following~~after the due date must include all fees specified on the permit renewal invoice plus a

reinstatement fee equal to 10 percent of all fees specified on the invoice.

4.1.2 ~~Fees received more than 30 days after the due date, but less than one year after the due date, must include all fees specified on the permit renewal invoice plus a reinstatement fee equal to 25 percent of all fees specified on the invoice.~~Deleted DATE

4.2 The applicable Permit to Operate Fees specified in Regulation 3-327 for each prior Permit Renewal Period for which all Permit to Operate Fees and associated reinstatement fees have not been paid. Each year's Permit to Operate Fee shall be calculated at the fee rates in effect on that year's Permit to Operate Renewal Date. The reinstatement fee for each associated previously-unpaid Permit to Operate Fee shall be calculated in accordance with Regulation 3-405.4.1~~, and 4.1.2.~~

Each year or period of the lapsed Permit to Operate is deemed a separate Permit Renewal Period. The oldest outstanding Permit to Operate Fee and reinstatement fees shall be paid first.

405.5 Registration and Other Fees: Persons who have not paid the fee by the invoice due date, shall pay the following late fee in addition to the original invoiced fee. Fees shall be calculated using fee schedules in effect at the time of the fees' original determination.

5.1 Fees received ~~during the first 30 days following~~after the due date must include an additional late fee equal to 10 percent of all fees specified on the invoice.

5.2 ~~Fees received more than 30 days after the due date must include an additional late fee equal to 25 percent of all fees specified on the invoice.~~Deleted DATE

(Amended 7/6/83, 6/4/86, 11/5/86, 2/15/89, 6/6/90, 7/3/91, 8/2/95, 12/2/98, 6/15/05, 6/7/06, 6/6/12, 6/19/13, 6/4/14, 6/6/18,6/5/19, 6/7/23, 6/4/25, DATE)

3-406 Deleted June 4, 1986

3-407 Deleted August 2, 1995

3-408 Permit to Operate Valid for 12 Months: A Permit to Operate is valid for 12 months from the date of issuance or other time period as approved by the APCO.

(Adopted 6/4/86; Amended 6/7/00)

3-409 Deleted June 7, 2000

3-410 Deleted August 2, 1995

3-411 Advance Deposit of Funds: The APCO may require that at the time of the filing of an application for an Authority to Construct for a project for which the Air District is a lead agency under the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.), the applicant shall make an advance deposit of funds, in an amount to be specified by the APCO, to cover the costs which the Air District estimates to incur in connection with the Air District's performance of its environmental evaluation and the preparation of any required environmental documentation. In the event the APCO requires such an estimated advance payment to be made, the applicant will be provided with a full accounting of the costs actually incurred by the Air District in connection with the Air District's performance of its environmental evaluation and the preparation of any required environmental documentation.

(Adopted 12/18/85; Amended 8/2/95, 6/4/25)

3-412 Deleted December 2, 1998

3-413 Toxic "Hot Spots" Information and Assessment Act Revenues: The APCO shall transmit to the California Air Resources Board, for deposit into the Air Toxics "Hot Spots" Information and Assessment Fund, the revenues determined by the ARB to be the Air District's share of statewide Air Toxics "Hot Spot" Information and Assessment Act expenses.

(Adopted 10/21/92; Amended 6/7/23, 6/4/25)

3-414 Deleted December 2, 1998

3-415 Failure to Pay - Further Actions: When an applicant or owner/operator fails to pay the fees specified on the invoice by the due date, the APCO may take the following actions against the applicant or owner/operator:

415.1 Issuance of a Notice to Comply.

415.2 Issuance of a Notice of Violation.

415.3 Revocation of an existing Permit to Operate. The APCO shall initiate proceedings to revoke permits to operate for any person who is delinquent for more than one month. The revocation process shall continue until payment in full is made or until permits are revoked.

415.4 The withholding of any other Air District services as deemed appropriate until payment in full is made.

(Adopted 8/2/95; Amended 12/2/98, 6/15/05, 6/4/25)

3-416 **Adjustment of Fees**: The APCO or designees may, upon finding administrative error by Air District staff in the calculation, imposition, noticing, invoicing, and/or collection of any fee set forth in this rule, rescind, reduce, increase, or modify the fee. A request for such relief from an administrative error, accompanied by a statement of why such relief should be granted, must be received within two years from the date of payment.

(Adopted 10/8/97, Amended 6/4/25)

3-417 **Temporary Amnesty for Unpermitted and Unregistered Sources:** The APCO has the authority to declare an amnesty period, during which the Air District may waive all or part of the back fees and/or late fees for sources that are currently operating without valid Permits to Operate and/or equipment registrations.

(Adopted 6/16/10, Amended 6/4/25)

3-418 **Temporary Incentive for Online or Electronic Transactions:** The APCO has the authority to declare an incentive period for transactions made using the online system or other electronic processes, during which the Air District may waive all or any part of the fees for these transactions.

(Adopted 6/6/18; Amended 6/7/23, 6/4/25)

3-419 **Industry Compliance School:** The APCO may reduce fees by an amount deemed appropriate if the owner/operator of the source attends an Industry Compliance School sponsored by the Air District.

(Adopted 6/7/23, Amended 6/4/25)

SCHEDULE A
HEARING BOARD FEES[1]
Established by the Board of Directors December 7, 1977 Resolution No. 1046
(Code section references are to the California Health & Safety Code, unless otherwise indicated)

		Large Companies	Small Business	Third Party
1.	For each application for variance exceeding 90 days, in accordance with §42350, including applications on behalf of a class of applicants, which meet the requirements of the Hearing Board Rules for a valid and proper class action for variance	$12,241	$1,832	
	Plus, for each hearing in addition to the first hearing necessary to dispose of said variance application in accordance with §42350, the additional sum of	$6,130	$618	
2.	For each application for variance not exceeding 90 days, in accordance with §42350, including applications on behalf of a class of applicants, which meet the requirements of the Hearing Board Rules for a valid and proper class action for variance	$7,350	$1,832	
	Plus, for each hearing in addition to the first hearing necessary to dispose of said variance application, in accordance with §42350, the additional sum of	$3,670	$618	
3.	For each application to modify a variance in accordance with §42356 ...	$4,876	$618	
	Plus, for each hearing in addition to the first hearing on said application to modify a variance, in accordance with §42345, necessary to dispose of the application, the additional sum of.....	$3,670	$618	
4.	For each application to extend a variance, in accordance with §42357 ..	$4,876	$618	
	Plus, for each hearing in addition to the first hearing on an application to extend a variance, in accordance with §42357, necessary to dispose of the application, the additional sum of.....	$3,670	$618	
5.	For each application to revoke a variance	$7,350	$618	
6.	For each application for approval of a Schedule of Increments of Progress in accordance with §41703	$4,876	$618	
7.	For each application for variance in accordance with §41703, which exceeds 90 days	$12,241	$1,832	
	Plus, for each hearing in addition to the first hearing on said application for variance in accordance with §41703, the additional sum of	$6,130	$618	
8.	For each application for variance in accordance with §41703, not to exceed 90 days	$7,350	$1,832	
	Plus, for each hearing in addition to the hearing on said application for a variance in accordance with §41703, the additional sum of	$3,670	$618	
9.	For each Appeal (Permit, Banking, Title V).....	$12,241 per hearing day	$6,130 per hearing day	$6,130 for entire appeal period
10.	For each application for intervention in accordance with Hearing Board Rules §§2.3, 3.6 & 4.6.....	$6,130	$1,233	
11.	For each application to Modify or Terminate an abatement order	$12,241 per hearing day	$6,130 per hearing day	
12.	For each application for an interim variance in accordance with §42351	$6,130	$1,233	
13.	For each application for an emergency variance in accordance with §42359.5.....	$3,056	$618	

		Large Companies	Small Business	Third Party
14.	For each application to rehear a Hearing Board decision in accordance with §40861	100% of previous fee charged	100% of previous fee charged	
15.	Excess emission fees	See Attachment I	See Attachment I	
16.	Miscellaneous filing fee for any hearing not covered above	$6,130	$1,832	$1,832
17.	For each published Notice of Public Hearing	Cost of Publication	$0	$0
18.	Court Reporter Fee (to be paid only if Court Reporter required for hearing)	Actual Appearance and Transcript costs per hearing solely dedicated to one Docket	$0	Actual Appearance and Transcript costs per hearing solely dedicated to one Docket

NOTE 1 Any applicant who believes they have a hardship for payment of fees may request a fee waiver from the Hearing Board pursuant to Hearing Board Rules.

(Amended 10/8/97, 5/19/99, 6/7/00, 6/6/01, 5/1/02, 5/21/03, 6/2/04, 6/15/05, 6/7/06, 5/2/07, 5/21/08, 5/20/09, 6/16/10, 5/4/11, 6/6/12, 6/19/13, 6/4/14, 6/3/15, 6/15/16, 6/21/17, 6/6/18, 6/5/19, 6/16/21, 6/15/22, 6/7/23, 6/5/24, 6/4/25)

SCHEDULE A
ATTACHMENT I
EXCESS EMISSION FEE

A. General

(1) Each applicant or petitioner for a variance from these Rules and Regulations shall pay to the Clerk or Deputy Clerk of the Hearing Board, in addition to the other filing fees required in Schedule A, an emission fee based on the total weight of emissions discharged, per source or product, other than those described in division (B) below, during the variance period in excess of that allowed by these rules in accordance with the schedule set forth in Table I.

(2) Where the total weight of emission discharged cannot be easily calculated, the petitioner shall work in concert with Air District staff to establish the amount of excess emissions to be paid.

(3) In the event that more than one rule limiting the discharge of the same contaminant is violated, the excess emission fee shall consist of the fee for violation which will result in the payment of the greatest sum. For the purposes of this subdivision, opacity rules and particulate mass emissions shall not be considered rules limiting the discharge of the same contaminant.

B. Excess Visible Emission Fee

Each applicant or petitioner for a variance from Regulation 6 or Health and Safety Code Section 41701 shall pay to the Clerk or Deputy Clerk of the Hearing Board, in addition to the filing fees required in Schedule A and the excess emission fees required in (A) above (if any), an emission fee based on the difference between the percent opacity allowed by Regulation 6 and the percent opacity of the emissions allowed from the source or sources operating under the variance, in accordance with the schedule set forth in Table II.

In the event that an applicant or petitioner is exempt from the provisions of Regulation 6, the applicant or petitioner shall pay a fee calculated as described herein above, but such fee shall be calculated based upon the difference between the opacity allowed under the variance and the opacity allowed under the provisions of Health and Safety Code Section 41701, in accordance with the schedule set forth in Table II.

C. Applicability

The provisions of subdivision (A) shall apply to all variances that generate excess emissions.

D. Fee Determination

(1) The excess emission fees shall be calculated by the petitioner based upon the requested number of days of operation under variance multiplied by the expected excess emissions as set forth in subdivisions (A) and (B) above. The calculations and proposed fees shall be set forth in the petition.

(2) The Hearing Board may adjust the excess emission fee required by subdivisions (A) and (B) of this rule based on evidence regarding emissions presented at the time of the hearing.

E. Small Businesses

(1) A small business shall be assessed twenty percent (20%) of the fees required by subdivisions (A) and (B), whichever is applicable. "Small business" is defined in the Fee Regulation.

(2) Request for exception as a small business shall be made by the petitioner under penalty of perjury on a declaration form provided by the Executive Officer which shall be submitted to the Clerk or Deputy Clerk of the Hearing Board at the time of filing a petition for variance.

F. Group, Class and Product Variance Fees

Each petitioner included in a petition for a group, class or product variance shall pay the filing fee specified in Schedule A, and the excess emission fees specified in subdivisions (A) and (B), whichever is applicable.

G. Adjustment of Fees

If after the term of a variance for which emission fees have been paid, petitioner can establish, to the satisfaction of the Executive Officer/APCO, that emissions were actually less than those upon which the fee was based, a pro rata refund shall be made.

H. Fee Payment/Variance Invalidation

(1) Excess emission fees required by subdivisions (A) and (B), based on an estimate provided during the variance Hearing, are due and payable within fifteen (15) days of the granting of the variance. The petitioner shall be notified in writing of any adjustment to the amount of excess emission fees due, following Air District staff's verification of the estimated emissions. Fee payments to be made as a result of an adjustment are due and payable within fifteen (15) days of notification of the amount due.

(2) Failure to pay the excess emission fees required by subdivisions (A) and (B) within fifteen (15) days of notification that a fee is due shall automatically invalidate the variance. Such notification may be given by personal service or by deposit, postpaid, in the United States mail and shall be due fifteen (15) days from the date of personal service or mailing. For the purpose of this rule, the fee payment shall be considered to be received by the Air District if it is postmarked by the United States Postal Service on or before the expiration date stated on the billing notice. If the expiration date falls on a Saturday, Sunday, or a state holiday, the fee payment may be postmarked on the next business day following the Saturday, Sunday, or the state holiday with the same effect as if it had been postmarked on the expiration date.

TABLE I
SCHEDULE OF EXCESS EMISSIONS FEES

Air Contaminants	All at $10.19 per pound
Organic gases, except methane and those containing sulfur	
Carbon Monoxide	
Oxides of nitrogen (expressed as nitrogen dioxide)	
Gaseous sulfur compounds (expressed as sulfur dioxide)	
Particulate matter	
Toxic Air Contaminants	All at $50.72 per pound
Arsenic (inorganic)	
Asbestos	
Benzene	
Beryllium	
1,3-Butadiene	
Cadmium	
Carbon tetrachloride	
Chlorinated dioxins and dibenzofurans (15 species)	
Diesel exhaust particulate matter	
1,4-Dioxane	
Ethylene dibromide	
Ethylene dichloride	
Ethylene oxide	
Formaldehyde	
Hexavalent chromium	
Lead	
Methylene chloride	
Nickel	
Perchloroethylene	
Polynuclear aromatic hydrocarbons (PAH)	
Trichloroethylene	
Vinyl chloride	

TABLE II
SCHEDULE OF EXCESS VISIBLE EMISSION FEE

For each source with opacity emissions in excess of twenty percent (20%), but less than forty percent (40%) (where the source is in violation of Regulation 6 and California Health and Safety Code Section 41701), the fee is calculated as follows:

Fee = (Opacity* equivalent - 20) x number of days allowed in variance x $10.42

For each source with opacity emissions in excess of forty percent (40%) (where the source is in violation of Regulation 6 and California Health and Safety Code Section 41701), the fee is calculated as follows:

Fee = (Opacity* equivalent - 40) x number of days allowed by variance x $10.42

* Where "Opacity" equals maximum opacity of emissions in percent (not decimal equivalent) allowed by the variance. Where the emissions are darker than the degree of darkness equivalent to the allowed Ringelmann number, the percentage equivalent of the excess degree of darkness shall be used as "opacity."

(Adopted 6/7/00; Amended 5/1/02, 5/21/03, 6/2/04, 6/15/05, 6/7/06, 5/2/07, 5/21/08, 5/20/09, 6/16/10, 5/4/11, 6/6/12, 6/19/13, 6/4/14, 6/3/15, 6/15/16, 6/21/17, 6/6/18, 6/5/19, 6/16/21, 6/7/23, 6/5/24, 6/4/25)

SCHEDULE B
COMBUSTION OF FUEL
(Adopted June 18, 1980)

For each source that burns fuel, which is not a flare and not exempted by Regulation 2, Rule 1, the fee shall be computed based on the maximum gross combustion capacity (expressed as higher heating value, HHV) of the source.

1. INITIAL FEE: $107.28 per MM BTU/HOUR
   a. The minimum fee per source is: $573
   b. The maximum fee per source is: $200,137
2. RISK ASSESSMENT FEE (RAF), if required pursuant to Regulation 3-329 or 3-342.
   a. RAF for first toxic air contaminant (TAC) source in application: $~~669~~684 plus $107.28 per MM BTU/hr
   b. Minimum RAF for first TAC source: $1,379
   c. RAF for each additional TAC source: $107.28 per MM BTU/hr *
   d. Minimum RAF per additional TAC source: $573 *
   e. Maximum RAF per source is: $200,137
   * RAF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1
3. PERMIT TO OPERATE FEE: $53.64 per MM BTU/HOUR
   a. The minimum fee per source is: $407
   b. The maximum fee per source is: $100,069
4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1.
5. Applicants for an authority to construct and permit to operate a project, which burns municipal waste or refuse-derived fuel, shall pay in addition to all required fees, an additional fee to cover the costs incurred by OEHHA, and/or a qualified contractor designated by OEHHA, in reviewing a risk assessment as required under H&S Code Section 42315. The fee shall be transmitted by the Air District to OEHHA and/or the qualified contractor upon completion of the review and submission of comments in writing to the Air District.
6. A surcharge equal to 100% of all required initial and permit to operate fees shall be charged for sources permitted to burn one or more of the following fuels: coke, coal, wood, tires, black liquor, and municipal solid waste.

NOTE: MM BTU is million BTU of higher heat value
One MM BTU/HR = 1.06 gigajoules/HR

(Amended 6/5/85; 6/4/86, 3/4/87, 6/6/90, 7/3/91, 6/15/94, 10/8/97, 7/1/98, 7/1/98, 5/19/99, 6/7/00, 6/6/01, 5/1/02, 5/21/03, 6/2/04, 6/15/05, 6/7/06, 5/2/07, 5/21/08, 5/20/09, 6/16/10, 5/4/11, 6/6/12, 6/19/13, 6/4/14, 6/3/15, 6/15/16, 6/21/17,6/6/18,6/5/19, 6/16/21, 6/15/22, 6/7/23, 6/5/24, 6/4/25, DATE)

SCHEDULE C
STATIONARY CONTAINERS FOR THE STORAGE OF ORGANIC LIQUIDS
(Adopted June 18, 1980)

For each stationary container of organic liquids which is not exempted from permits by Regulation 2 and which is not part of a gasoline dispensing facility, the fee shall be computed based on the container volume, as follows:

1. INITIAL FEE: 0.185 cents per gallon
   a. The minimum fee per source is: $204
   b. The maximum fee per source is: $27,858

2. RISK ASSESSMENT FEE (RAF), if required pursuant to Regulation 3-329 or 3-342.
   a. RAF for first toxic air contaminant (TAC) source in application: ~~$669~~684 plus 0.185 cents per gallon
   b. Minimum RAF for first TAC source: $678
   c. RAF for each additional TAC source: 0.185 cents per gallon *
   d. Minimum RAF per additional TAC source: $204 *
   e. Maximum RAF per source is: $27,858
      * RAF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1

3. PERMIT TO OPERATE FEE: 0.093 cents per gallon
   a. The minimum fee per source is: $147
   b. The maximum fee per source is: $13,928

4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1.

(Amended 2/20/85, 6/5/85, 6/4/86, 7/3/91, 6/15/94, 7/1/98, 5/19/99, 6/7/00, 6/6/01, 5/1/02, 5/21/03, 6/2/04, 6/15/05, 6/7/06, 5/2/07, 5/20/09, 6/16/10, 6/6/12, 6/19/13, 6/4/14, 6/3/15, 6/15/16, 6/21/17, 6/6/18,6/5/19, 6/16/21, 6/15/22, 6/7/23, 6/5/24, 6/4/25, DATE)

SCHEDULE D
GASOLINE TRANSFER AT GASOLINE DISPENSING FACILITIES, BULK PLANTS AND TERMINALS
(Adopted June 18, 1980)

A. All gasoline dispensing facilities shall pay the following fees:

1. INITIAL FEE: $378.10 per single product nozzle (spn)
$378.10 per product for each multi-product nozzle (mpn)

2. PERMIT TO OPERATE FEE: $144.82 per single product nozzle (spn)
$144.82 per product for each multi-product nozzle (mpn)

3. Initial fees and permit to operate fees for hardware modifications at a currently permitted gasoline dispensing facility shall be consolidated into a single fee calculated according to the following formula:

$$\$522.91 \times \{[(mpn_{proposed})(\text{products per nozzle}) + spn_{proposed}] - [(mpn_{existing})(\text{products per nozzle}) + spn_{existing}]\}$$

mpn = multi-product nozzles
spn = single product nozzles

The above formula includes a toxic surcharge.

If the above formula yields zero or negative results, no initial fees or permit to operate fees shall be charged.

For the purposes of calculating the above fees, a fuel blended from two or more different grades shall be considered a separate product.

Other modifications to facilities' equipment, including but not limited to tank addition/replacement/conversion, vapor recovery piping replacement, moving or extending pump islands, will not be subject to initial fees or permit to operate fees.

4. RISK ASSESSMENT FEE (RAF) if required pursuant to Regulation 3-329 or 3-342 (including increases in permitted throughput for which a health risk assessment is required.) of:

a. $4,064 per application for a new gas dispensing facility

b. $~~1,034~~1,189 per application for all other

5. Nozzles used exclusively for the delivery of diesel fuel or other fuels exempt from permits shall pay no fee. Multi-product nozzles used to deliver both exempt and non-exempt fuels shall pay fees for the non-exempt products only.

B. All bulk plants, terminals or other facilities using loading racks to transfer gasoline or gasohol into trucks, railcars or ships shall pay the following fees:

1. INITIAL FEE: $4,966 per single product loading arm
$4,966 per product for multi-product arms

2. RISK ASSESSMENT FEE (RAF), if required pursuant to Regulation 3-329 or 3-342.
   a. RAF for first toxic air contaminant (TAC) source in application: $5,623
   b. RAF for each additional TAC source: $4,966 *
   * RAF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1

3. PERMIT TO OPERATE FEE: $1,384 per single product loading arm
$1,384 per product for multi-product arms

4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1.

C. Fees in (A) above are in lieu of tank fees. Fees in (B) above are in addition to tank fees.

(Amended 2/20/85, 6/5/85, 6/4/86, 7/3/91, 6/15/94, 10/8/97, 7/1/98, 5/19/99, 6/7/00, 6/6/01, 5/1/02, 5/21/03, 6/2/04, 6/15/05, 6/7/06, 5/2/07, 5/21/08, 5/20/09, 6/16/10, 5/4/11, 6/6/12, 6/19/13, 6/4/14, 6/3/15, 6/15/16, 6/21/17, 6/6/18, 6/5/19, 6/16/21, 6/15/22, 6/7/23, 6/5/24, 6/4/25, DATE)

SCHEDULE E
SOLVENT EVAPORATING SOURCES
(Adopted June 18, 1980)

For each solvent evaporating source, as defined in Section 3-210 except for dry cleaners, the fee shall be computed based on the net amount of organic solvent processed through the sources on an annual basis (or anticipated to be processed, for new sources) including solvent used for the cleaning of the sources.

1. INITIAL FEE:
   a. The fee per source is: $~~3,309~~3,600 per 1,000 gallons
   b. The minimum fee per source is: $~~1,647~~1,792
   c. The maximum fee per source is: $~~131,491~~143,062
2. RISK ASSESSMENT FEE (RAF), if required pursuant to Regulation 3-329 or 3-342.
   a. RAF for first toxic air contaminant (TAC) source in application:$~~669~~684 plus initial fee
   b. Minimum RAF for first TAC source: $~~2,714~~2,953
   c. RAF for each additional TAC source: equal to initial fee *
   d. Minimum RAF per additional TAC source: $~~1,647~~1,792 *
   e. Maximum RAF per source is: $~~131,491~~143,062
   * RAF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1
3. PERMIT TO OPERATE FEE:
   a. The fee per source is: $~~1,647~~1,792 per 1,000 gallons
   b. The minimum fee per source is: $~~1,188~~1,293
   c. The maximum fee per source is: $~~65,740~~71,525
4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1.

(Amended 5/19/82, 10/17/84, 6/5/85, 6/4/86, 10/8/87, 7/3/91, 6/15/94, 7/1/98, 5/19/99, 6/7/00, 6/6/01, 5/1/02, 5/21/03, 6/2/04, 6/15/05, 6/7/06, 5/2/07, 5/21/08, 5/20/09, 6/16/10, 5/4/11, 6/6/12, 6/19/13, 6/4/14, 6/3/15, 6/15/16, 6/21/17, 6/6/18, 6/5/19, 6/16/21, 6/15/22, 6/7/23, 6/5/24, 6/4/25, DATE)

SCHEDULE F
MISCELLANEOUS SOURCES
(Adopted June 18, 1980)

For each source not governed by Schedules B, C, D, E, H or I, (except for those sources in the special classification lists, G-1 - G-5) the fees are:

1. INITIAL FEE: $~~1,236~~1,421

2. RISK ASSESSMENT FEE (RAF), if required pursuant to Regulation 3-329 or 3-342.

   a. RAF for first (toxic air contaminant) TAC source in application: $~~2,322~~2,670
   b. RAF for each additional TAC source: $~~1,236~~1,421 *
      * RAF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1

3. PERMIT TO OPERATE FEE: $~~899~~1,034

4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1. List of special classifications requiring graduated fees is shown in Schedules G-1, G-2, G-3, G-4, and G-5.

G-1 FEES FOR SCHEDULE G-1. For each source in a G-1 classification, fees are:

1. INITIAL FEE: $~~10,041~~11,547

2. RAF, if required pursuant to Regulation 3-329 or 3-342.

   a. RAF for first TAC source in application: $~~11,394~~13,103
   b. RAF for each additional TAC source: $~~10,041~~11,547*
      * RAF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1

3. PERMIT TO OPERATE FEE: $~~5,013~~5,765

4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1.

G-2 FEES FOR SCHEDULE G-2. For each source in a G-2 classification, fees are:

1. INITIAL FEE: $~~13,255~~15,243

2. RAF, if required pursuant to Regulation 3-329 or 3-342.

   a. RAF for first TAC source in application: $~~14,608~~16,799
   b. RAF for each additional TAC source: $~~13,255~~15,243 *
      * RAF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1

3. PERMIT TO OPERATE FEE: $~~6,623~~7,616

4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1.

G-3 FEES FOR SCHEDULE G-3. For each source in a G-3 classification, fees are:

1. INITIAL FEE: $~~69,949~~80,441

2. RAF, if required pursuant to Regulation 3-329 or 3-342.

   a. RAF for first TAC source in application: $~~71,090~~81,754

b. RAF for each additional TAC source: $~~69,949~~80,441 *
   * RAF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1

3. PERMIT TO OPERATE FEE: $~~34,968~~40,213

4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1.

G-4 FEES FOR SCHEDULE G-4. For each source in a G-4 classification, fees are:

1. INITIAL FEE: $~~175,263~~201,552

2. RAF, if required pursuant to Regulation 3-329 or 3-342.

   a. RAF for first TAC source in application: $~~176,616~~203,108
   b. RAF for each additional TAC source: $~~175,263~~201,552*
      * RAF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1

3. PERMIT TO OPERATE FEE: $~~87,627~~100,771

4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1.

G-5 FEES FOR SCHEDULE G-5. For each source in a G-5 classification, fees are:

1. INITIAL FEE: $~~78,677~~81,509

2. RAF is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk assessment is required under Regulation 2-5-401.

   a. RAF for first TAC source in application: $~~79,379~~82,237
   b. RAF for each additional TAC source: $~~78,677~~81,509*
      * RAF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1

3. PERMIT TO OPERATE FEE: $~~39,338~~40,754

4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1.

(Amended 5/19/82, 6/5/85, 6/4/86, 6/6/90, 7/3/91, 6/15/94, 10/8/97, 7/1/98, 5/19/99, 6/7/00, 6/6/01, 5/1/02, 5/21/03, 6/2/04, 6/15/05, 6/7/06, 5/2/07, 5/21/08, 5/20/09, 6/16/10, 5/4/11, 6/6/12, 6/19/13, 6/4/14, 6/3/15, 6/15/16, 6/21/17, 6/6/18, 6/5/19, 6/16/21, 6/15/22, 6/7/23, 6/5/24, 6/4/25, DATE)

SCHEDULE G-1
(Adopted June 18, 1980)

Equipment or Process Description	Materials Processed or Produced
Asphalt Roofing Manufacturing – Asphalt Dipping	Asphalt Roofing or Related Materials
Calcining Kilns, excluding those processing cement, lime, or coke (see G-4 for cement, lime, or coke Calcining Kilns)	Any Materials except cement, lime, or coke
Chemical Manufacturing, Inorganic – Processing Units with a Capacity of 1,000 Gallons/Hour or more	Any Inorganic Materials
Chemical Manufacturing, Inorganic – Processing Units with a Capacity of 5 Tons/Hour or more	Any Inorganic Materials
Chemical Manufacturing, Inorganic – Reactors with a Capacity of 1,000 Gallons or more	Any Inorganic Materials
Chemical Manufacturing, Organic – Latex Dipping	Any latex materials
Chemical Manufacturing, Organic – Processing Units with a Capacity of 1,000 Gallons/Hour or more	Any Organic Materials
Chemical Manufacturing, Organic – Processing Units with a Capacity of 5 Tons/Hour or more	Any Organic Materials
Chemical Manufacturing, Organic – Reactors with a Capacity of 1,000 Gallons or more	Any Organic Materials
Compost Operations – Windrows, Static Piles, Aerated Static Piles, In-Vessel, or similar methods	Any waste materials such as yard waste, food waste, agricultural waste, mixed green waste, bio-solids, animal manures, etc.
Crushers	Any minerals or mineral products such as rock, aggregate, cement, concrete, or glass; waste products such as building or road construction debris; and any wood, wood waste, green waste; or similar materials
Electroplating Equipment	Hexavalent Decorative Chrome with permitted capacity greater than 500,000 amp-hours per year or Hard Chrome
Foil Manufacturing – Any Converting or Rolling Lines	Any Metal or Alloy Foils
Gasification or Pyrolysis Reactors	Any
Galvanizing Equipment	Any
Glass Manufacturing – Batching Processes including storage and weigh hoppers or bins, conveyors, and elevators	Any Dry Materials
Glass Manufacturing – Mixers	Any Dry Materials
Glass Manufacturing – Molten Glass Holding Tanks	Any molten glass
Grinders	Any minerals or mineral products such as rock, aggregate, cement, concrete, or glass; waste products such as building or road construction debris; and any wood, wood waste, green waste; or similar materials
Incinerators – Crematory	Human and/or animal remains
Incinerators – Flares	Any waste gases
Incinerators – Other (see G-2 for hazardous or municipal solid waste incinerators, see G-3 for medical or infectious waste incinerators)	Any Materials except hazardous wastes, municipal solid waste, medical or infectious waste

SCHEDULE G-1

Equipment or Process Description	Materials Processed or Produced
Incinerators – Pathological Waste (see G-3 for medical or infectious waste incinerators)	Pathological waste only
Loading and/or Unloading Operations – Bulk Plants and Bulk Terminals, excluding those loading gasoline or gasohol (see Schedule D for Bulk Plants and Terminals loading gasoline or gasohol)	Any Organic Materials except gasoline or gasohol
Refining – Alkylation Units	Any Hydrocarbons
Refining – Asphalt Oxidizers	Any Hydrocarbons
Refining – Benzene Saturation Units/Plants	Any Hydrocarbons
Refining – Catalytic Reforming Units	Any Hydrocarbons
Refining – Chemical Treating Units including alkane, naphthenic acid, and naptha merox treating, or similar processes	Any Hydrocarbons
Refining – Converting Units including Dimersol Plants, Hydrocarbon Splitters, or similar processes	Any Hydrocarbons
Refining – Distillation Units, excluding crude oil units with capacity > 1,000 barrels/hour (see G-3 for > 1,000 barrels/hour crude distillation units)	Any Hydrocarbons
Refining – Hydrogen Manufacturing	Hydrogen or Any Hydrocarbons
Refining – Hydrotreating or Hydrofining	Any Hydrocarbons
Refining – Isomerization	Any Hydrocarbons
Refining – MTBE Process Units/Plants	Any Hydrocarbons
Refining – Sludge Converter	Any Waste Materials
Refining – Solvent Extraction	Any Hydrocarbons
Refining – Sour Water Stripping	Any Process or Wastewater
Refining – Storage (enclosed)	Coke or Coke Products
Refining – Waste Gas Flares(not subject to Regulation 12, Rule 11)	Any Refining Gases
Refining – Miscellaneous Other Process Units	Any Hydrocarbons
Remediation Operations, Groundwater – Strippers	Contaminated Groundwater
Remediation Operations, Soil – Any Equipment (excluding sub-slab depressurization equipment)	Contaminated Soil
Spray Dryers	Any Materials
Sterilization Equipment	Ethylene Oxide
Wastewater Treatment, Industrial – Oil-Water Separators, excluding oil-water separators at refineries (see G-2 for Refining - Oil-Water Separators)	Wastewater from any industrial facilities except refineries
Wastewater Treatment, Industrial – Strippers including air strippers, nitrogen strippers, dissolved air flotation units, or similar equipment and excluding strippers at refineries (see G-2 for Refining – Strippers)	Wastewater from any industrial facilities except refineries
Wastewater Treatment, Industrial - Storage Ponds, excluding storage ponds at refineries (see G-2 for Refining – Storage Ponds)	Wastewater from any industrial facilities except refineries
Wastewater Treatment, Municipal – Preliminary Treatment	Municipal Wastewater
Wastewater Treatment, Municipal – Primary Treatment	Municipal Wastewater
Wastewater Treatment, Municipal – Digesters	Municipal Wastewater
Wastewater Treatment, Municipal – Sludge Handling Processes, excluding sludge incinerators (see G-2 for sludge incinerators)	Sewage Sludge

(Amended 6/4/86, 6/6/90, 5/19/99, 6/7/00, 6/2/04, 6/15/05, 6/6/18, 11/3/21, DATE)

SCHEDULE G-2
(Adopted June 6, 1990)

Equipment or Process Description	Materials Processed or Produced
Asphalt Roofing Manufacturing – Asphalt Blowing	Asphalt Roofing or Related Materials
Asphaltic Concrete Manufacturing – Aggregate Dryers	Any Dry Materials
Asphaltic Concrete Manufacturing – Batch Mixers	Any Asphaltic Concrete Products
Asphaltic Concrete Manufacturing – Drum Mixers	Any Asphaltic Concrete Products
Asphaltic Concrete Manufacturing – Other Mixers and/or Dryers	Any Dry Materials or Asphaltic Concrete Products
Concrete or Cement Batching Operations – Mixers	Any cement, concrete, or stone products or similar materials
Furnaces – Electric	Any Mineral or Mineral Product
Furnaces – Electric Induction	Any Mineral or Mineral Product
Furnaces – Glass Manufacturing	Soda Lime only
Furnaces – Reverberatory	Any Ores, Minerals, Metals, Alloys, or Related Materials
Incinerators – Hazardous Waste including any unit required to have a RCRA permit	Any Liquid or Solid Hazardous Wastes
Incinerators – Solid Waste, excluding units burning human/animal remains or pathological waste exclusively (see G-1 for Crematory and Pathological Waste Incinerators)	Any Solid Waste including Sewage Sludge (except human/animal remains or pathological waste)
Metal Rolling Lines, excluding foil rolling lines (see G-1 for Foil Rolling Lines)	Any Metals or Alloys
Metal Shredding (maximum capacity of less than or equal to 150 tons per hour)	Any Metals or Alloys
Refining – Stockpiles (open)	Coke or coke products only
Refining, Wastewater Treatment – Oil-Water Separators	Wastewater from refineries only
Refining, Wastewater Treatment – Strippers including air strippers, nitrogen strippers, dissolved air flotation units, or similar equipment	Wastewater from refineries only
Refining, Wastewater Treatment – Storage Ponds	Wastewater from refineries only
Pickling Lines or Tanks	Any Metals or Alloys
Sulfate Pulping Operations – All Units	Any
Sulfite Pulping Operations – All Units	Any

(Amended 6/7/00, 11/3/21, 6/7/23)

SCHEDULE G-3
(Adopted June 18, 1980)

Equipment or Process Description	Materials Processed or Produced
Furnaces – Electric Arc	Any Metals or Alloys
Furnaces – Electric Induction	Any Metals or Alloys
Incinerators – Medical Waste, excluding units burning pathological waste exclusively (see G-1 for Pathological Waste Incinerators)	Any Medical or Infectious Wastes
Loading and/or Unloading Operations – Marine Berths	Any Organic Materials
Metal Shredding (maximum capacity greater than 150 tons per hour)	Any Metals or Alloys
Refining – Cracking Units including hydrocrackers and excluding thermal or fluid catalytic crackers (see G-4 for Thermal Crackers and Catalytic Crackers)	Any Hydrocarbons
Refining – Distillation Units (crude oils) including any unit with a capacity greater than 1,000 barrels/hour (see G-1 for other distillation units)	Any Crude Oils
Phosphoric Acid Manufacturing – All Units (by any process)	Phosphoric Acid

(Amended 5/19/82; Amended and renumbered 6/6/90; Amended 6/7/00, 6/15/05, 5/2/07, 11/3/21, 6/7/23)

SCHEDULE G-4
(Adopted June 6, 1990)

Equipment or Process Description	Materials Processed or Produced
Acid Regeneration Units	Sulfuric or Hydrochloric Acid only
Annealing Lines (continuous only)	Metals and Alloys
Calcining Kilns (see G-1 for Calcining Kilns processing other materials)	Cement, Lime, or Coke only
Fluidized Bed Combustors	Solid Fuels only
Nitric Acid Manufacturing – Any Ammonia Oxidation Processes	Ammonia or Ammonia Compounds
Refining - Coking Units including fluid cokers, delayed cokers, flexicokers, and coke kilns	Coke and Coke Products
Refining - Cracking Units including fluid catalytic crackers and thermal crackers and excluding hydrocrackers (see G-3 for Hydrocracking Units)	Any Hydrocarbons
Refining - Sulfur Removal including any Claus process or any other process requiring caustic reactants	Any Refining Gas
Sulfuric Acid Manufacturing – Any Chamber or Contact Process	Any Solid, Liquid or Gaseous Fuels Containing Sulfur

(Amended 6/7/00, 11/3/21)

SCHEDULE G-5

Equipment or Process Description	Materials Processed or Produced
Refinery Flares (subject to Regulation 12, Rule 11)	Any Vent Gas (as defined in section 12-11-210 and section 12-12-213)

(Adopted 5/2/07; Amended 11/3/21)

SCHEDULE H
SEMICONDUCTOR AND RELATED OPERATIONS
(Adopted May 19, 1982)

All of the equipment within a semiconductor fabrication area will be grouped together and considered one source. The fee shall be as indicated:

1. INITIAL FEE:

   a. The minimum fee per source is: $~~1,436~~1,651

   b. The maximum fee per source is: $~~114,879~~132,111

   The initial fee includes fees for each type of operation listed in Parts 1c and 1d performed at the fabrication area. If the type of solvent operation is not listed in Parts 1c and 1d, then the minimum fee applies.

   c. SOLVENT CLEANING OPERATIONS, such as usage of:

   Solvent Sinks (as defined in Regulation 8-30-214);
   Solvent Spray Stations (as defined in Regulation 8-30-221);
   Solvent Vapor Stations (as defined in Regulation 8-30-222); and
   Wipe Cleaning Operation (as defined in Regulation 8-30-225).

   The fee is based on the gross throughput of organic solvent processed through the solvent cleaning operations on an annual basis (or anticipated to be processed, for new sources):

   $~~971~~ 1,117 per 1,000 gallon

   d. COATING OPERATIONS, such as application of:

   Photoresist (as defined in Regulation 8-30-215); other wafer coating;
   Solvent-Based Photoresist Developer (as defined in Regulation 8-30-219); and other miscellaneous solvent usage.

   The fee is based on the gross throughput of organic solvent processed through the coating operations on an annual basis (or anticipated to be processed, for new sources):

   $~~2,883~~3,315 per 1,000 gallon

2. RISK ASSESSMENT FEE (RAF), if required pursuant to Regulation 3-329 or 3-342.

   a. RAF for first toxic air contaminant (TAC) source in application: $~~669~~684 plus initial fee

   b. Minimum RAF for first TAC source: $~~2,497~~2,872

   c. RAF for each additional TAC source * equal to initial fee

   d. Minimum RAF per additional TAC source: $~~1,436~~ 1,651*

   e. Maximum RAF per source is: $~~114,879~~132,111

   * RAF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1

3. PERMIT TO OPERATE FEE:

   a. The minimum fee per source is: $~~1,038~~1,194

   b. The maximum fee per source is: $~~57,430~~66,045

   The permit to operate fee includes fees for each type of operation listed in Parts 3c and 3d performed at the fabrication area. If the type of solvent operation is not listed in Parts 3c and

3d, then the minimum fee applies.

c. SOLVENT CLEANING OPERATIONS, such as usage of:

Solvent Sinks (as defined in Regulation 8-30-214);
Solvent Spray Stations (as defined in Regulation 8-30-221);
Solvent Vapor Stations (as defined in Regulation 8-30-222); and
Wipe Cleaning Operation (as defined in Regulation 8-30-225).

The fee is based on the gross throughput of organic solvent processed through the solvent cleaning operations on an annual basis (or anticipated to be processed, for new sources):

$~~488~~ 561 per 1,000 gallon

d. COATING OPERATIONS, such as application of:

Photoresist (as defined in Regulation 8-30-215); other wafer coating;
Solvent-Based Photoresist Developer (as defined in Regulation 8-30-219); and other miscellaneous solvent usage.
The fee is based on the gross throughput of organic solvent processed through the coating operations on an annual basis (or anticipated to be processed, for new sources):

$~~1,436~~1,651 per 1,000 gallon

4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1.

(Amended 1/9/85, 6/5/85, 6/4/86, 7/3/91, 6/15/94, 10/8/97, 7/1/98, 5/19/99, 10/20/99, 6/7/00, 6/6/01, 5/1/02,5/21/03, 6/2/04, 6/15/05, 6/7/06, 5/2/07, 5/21/08, 5/20/09, 6/16/10, 5/4/11, 6/6/12, 6/19/13, 6/4/14, 6/3/15, 6/15/16, 6/21/17, 6/6/18, 6/5/19, 6/16/21, 6/15/22, 6/7/23, 6/5/24, 6/4/25, DATE)

SCHEDULE I
DRY CLEANERS
(Adopted July 6, 1983)

For permitted dry cleaners, the fee shall be computed based on each cleaning machine, except that machines with more than one drum shall be charged based on each drum, regardless of the type or quantity of solvent, as follows:

1. INITIAL FEE FOR A DRY CLEANING MACHINE (per drum):
   a. If the washing or drying capacity is no more than 100 pounds: ~~$791~~809
   b. If the washing or drying capacity exceeds 100 pounds: ~~$791~~ 809 plus
      For that portion of the capacity exceeding 100 pounds: 23.00 per pound

2. RISK ASSESSMENT FEE (RAF), if required pursuant to Regulation 3-329 or 3-342.
   a. RAF for first toxic air contaminant (TAC) source in application: ~~$669~~684 plus initial fee
   b. Minimum RAF for first TAC source: ~~$1,405~~1,437
   c. RAF for each additional TAC source: equal to initial fee*
   d. Minimum RAF per additional TAC source: ~~$791~~809*
      * RAF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1

3. PERMIT TO OPERATE FEE FOR A DRY CLEANING MACHINE (per drum):
   a. If the washing or drying capacity is no more than 100 pounds: ~~$577~~590
   b. If the washing or drying capacity exceeds 100 pounds: ~~$577~~ 590 plus
      For that portion of the capacity exceeding 100 pounds: ~~$11.68~~11.95 per pound

4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1.

(Amended 10/17/84, 6/5/85, 6/4/86, 7/3/91, 6/15/94, 10/8/97, 7/1/98, 5/19/99, 6/7/00, 6/6/01, 5/1/02, 5/21/03, 6/02/04, 6/15/05, 6/7/06, 5/2/07, 5/21/08, 5/20/09, 6/16/10, 5/4/11, 6/6/12, 6/19/13, 6/4/14, 6/3/15, 6/15/16, 6/21/17, 6/6/18, 6/5/19, 6/15/22, 6/7/23, 6/5/24, 6/4/25, DATE)

SCHEDULE K
SOLID WASTE DISPOSAL SITES
(Adopted July 15, 1987)

1. INITIAL FEE:

a.	Landfill (Decomposition Process)	$~~11,682~~13,434
b.	Active Landfill (Waste and Cover Material Dumping Process)	$~~5,839~~6,715
c.	Active Landfill (Excavating, Bulldozing, and Compacting Processes)	$~~5,839~~6,715

2. RISK ASSESSMENT FEE (RAF), if required pursuant to Regulation 3-329 or 3-342.

a.	RAF for first toxic air contaminant (TAC) source in application:	$~~669~~684 plus initial fee
b.	RAF for each additional TAC source:	equal to initial fee*

* RAF for additional TAC sources is only applicable to those sources that emit one or more TACs at a rate that exceeds a trigger level listed in Table 2-5-1

3. PERMIT TO OPERATE FEE:

a.	Landfill (Decomposition Process)	$~~5,839~~6,715
b.	Active Landfill (Waste and Cover Material Dumping Process)	$~~2,919~~3,357
c.	Active Landfill (Excavating, Bulldozing, and Compacting Processes)	$~~2,919~~3,357

4. TOXIC SURCHARGE is only applicable for a source that emits one or more TACs at a rate that exceeds a chronic trigger level listed in Table 2-5-1: the permit to operate fee shall be raised by ten percent. This fee shall not be assessed for TACs not listed in Table 2-5-1.

5. Evaluation of Reports and Questionnaires:

a.	Evaluation of Solid Waste Air Assessment Test Report as required by Health & Safety Code Section 41805.5(g)	$~~6,437~~7,403
b.	Evaluation of Inactive Site Questionnaire as required by Health & Safety Code Section 41805.5(b)	$~~3,227~~3,711
c.	Evaluation of Solid Waste Air Assessment Test Report in conjunction with evaluation of Inactive Site Questionnaire as required by Health & Safety Code Section 41805.5(b)	$~~3,227~~3,711
d.	Evaluation of Initial or Amended Design Capacity Reports as required by Regulation 8, Rule 34, Section 405	$~~2,374~~2,730
e.	Evaluation of Initial or Periodic NMOC Emission Rate Reports as required by Regulation 8, Rule 34, Sections 406 or 407	$~~6,787~~7,805
f.	Evaluation of Closure Report as required by Regulation 8, Rule 34, Section 409	$~~2,374~~2,730
g.	Evaluation of Annual Report as required by Regulation 8, Rule 34, Section 411	$~~5,940~~6,831

6. For the purposes of this fee schedule, landfill shall be considered active, if it has accepted solid waste for disposal at any time during the previous 12 months or has plans to accept solid waste for disposal during the next 12 months.

(Amended 7/3/91, 6/15/94, 10/8/97, 7/1/98, 5/19/99, 10/6/99, 6/7/00, 6/6/01, 5/1/02, 5/21/03, 6/2/04, 6/15/05, 6/7/06, 5/2/07, 5/21/08, 5/20/09, 6/16/10, 5/4/11, 6/6/12, 6/19/13, 6/4/14, 6/3/15, 6/15/16, 6/21/17, 6/6/18, 6/5/19, 6/16/21, 6/15/22, 6/7/23, 6/5/24, 6/4/25, DATE)

SCHEDULE L
ASBESTOS OPERATIONS
(Adopted July 6, 1988)

1. Asbestos Operations conducted at single family dwellings are subject to the following fees:

a.	OPERATION FEE:	$185	for amounts 100 to 500 square feet or linear feet.
		$679	for amounts 501 square feet or linear feet to 1,000 square feet or linear feet.
		$988	for amounts 1001 square feet or liner feet to 2,000 square feet or linear feet.
		$1,358	for amounts greater than 2,000 square feet or linear feet.
b.	Cancellation:	$90	of above amounts non-refundable for notification processing.

2. Asbestos Operations, other than those conducted at single family dwellings, are subject to the following fees:

a.	OPERATION FEE:	$524	for amounts 100 to 159 square feet or 100 to 259 linear feet or 35 cubic feet
		$754	for amounts 160 square feet or 260 linear feet to 500 square or linear feet or greater than 35 cubic feet.
		$1,098	for amounts 501 square feet or linear feet to 1,000 square feet or linear feet.
		$1,620	for amounts 1001 square feet or liner feet to 2,500 square feet or linear feet.
		$2,309	for amounts 2501 square feet or linear feet to 5,000 square feet or linear feet.
		$3,169	for amounts 5001 square feet or linear feet to 10,000 square feet or linear feet.
		$4,031	for amounts greater than 10,000 square feet or linear feet.
b.	Cancellation:	$248	of above amounts non-refundable for notification processing.

3. Demolitions (including zero asbestos demolitions) conducted at a single-family dwelling are subject to the following fee:

a.	OPERATION FEE:	$90	
b.	Cancellation:	$90	(100% of fee) non-refundable, for notification processing.

4. Demolitions (including zero asbestos demolitions) other than those conducted at a single family dwelling are subject to the following fee:

a.	OPERATION FEE:	$372	
b.	Cancellation:	$248	of above amount non-refundable for notification processing.

5. Asbestos operations with less than 10 days prior notice (excluding emergencies) are subject to the following additional fee:

a.	OPERATION FEE:	$619	

6. Asbestos demolition operations for the purpose of fire training are exempt from fees.

(Amended 9/5/90, 1/5/94, 8/20/97, 10/7/98, 7/19/00, 8/1/01, 6/5/02, 7/2/03, 6/2/04, 6/6/07, 5/21/08, 5/20/09, 6/16/10, 6/15/11, 6/6/12, 6/19/13, 6/4/14, 6/3/15, 6/15/16,6/5/19)

SCHEDULE M
MAJOR STATIONARY SOURCE FEES
(Adopted June 6, 1990)

For each major stationary source emitting 50 tons per year or more of Organic Compounds, Sulfur Oxides, Nitrogen Oxides, and/or PM_{10}, the fee shall be based on the following:

1.	Organic Compounds	$~~164.07~~167.84 per ton
2.	Sulfur Oxides	$~~164.07~~167.84 per ton
3.	Nitrogen Oxides	$~~164.07~~167.84 per ton
4.	PM_{10}	$~~164.07~~167.84 per ton

Emissions calculated by the APCO shall be based on the data reported for the most recent 12-month period prior to billing. In calculating the fee amount, emissions of Organic Compounds, Sulfur Oxides, Nitrogen Oxides, or PM_{10}, if occurring in an amount less than 50 tons per year, shall not be counted.

(Amended 7/3/91, 6/15/94, 7/1/98, 5/9/99, 6/7/00, 6/6/01, 5/1/02, 5/21/03, 6/2/04, 6/15/05, 6/7/06, 5/2/07, 5/21/08, 5/20/09, 6/16/10, 6/4/14, 6/3/15, 6/15/16, 6/21/17, 6/6/18, 6/5/19, 6/16/21, 6/15/22, 6/7/23, 6/5/24, 6/4/25~~.~~ DATE)

SCHEDULE N
TOXIC INVENTORY FEES
(Adopted October 21, 1992)

For each stationary source emitting substances covered by California Health and Safety Code Section 44300 *et seq.*, the Air Toxics "Hot Spots" Information and Assessment Act of 1987, which have trigger levels listed in Table 2-5-1, a fee based on the weighted emissions of the facility shall be assessed based on the following formulas:

1. A fee of $7.44 for each gasoline product dispensing nozzle in a Gasoline Dispensing Facility; or
2. A fee calculated by multiplying the facility's weighted toxic inventory (w_i) by the following factor:

Air Toxic Inventory Fee Factor	$1.13 per weighted pound per year

Using the last reported data, the facility's weighted toxic inventory (w_i) is calculated as a sum of the individual TAC emissions multiplied by either the inhalation cancer potency factor for the TAC (see Regulation 2, Rule 5, Table 2-5-1, column 10) times 28.6 if the emission is a carcinogen, or by the reciprocal of the chronic inhalation reference exposure level for the TAC (see Regulation 2, Rule 5, Table 2-5-1, column 8) if the emission is not a carcinogen.

(Amended 12/15/93, 6/15/05, 5/2/07, 6/16/10, 5/4/11, 6/4/14, 6/3/15, 6/15/16,6/6/18,6/5/19, 6/3/20, 6/16/21, 6/15/22, 6/7/23)

SCHEDULE P
MAJOR FACILITY REVIEW FEES
(Adopted November 3, 1993)

1. MFR / SYNTHETIC MINOR ANNUAL FEES

Each facility, which is required to undergo major facility review in accordance with the requirements of Regulation 2, Rule 6, shall pay annual fees (1a and 1b below) for each source holding an Air District Permit to Operate. These fees shall be in addition to and shall be paid in conjunction with the annual renewal fees paid by the facility. However, these MFR permit fees shall not be included in the basis to calculate Alternative Emission Control Plan (bubble) or toxic air contaminant surcharges. If a major facility applies for and obtains a synthetic minor operating permit, the requirement to pay the fees in 1a and 1b shall terminate as of the date the APCO issues the synthetic minor operating permit.

a. MFR SOURCE FEE ..... $~~1,504~~1,730 per source

b. MFR EMISSIONS FEE..... $~~59.16~~68.03 per ton of regulated air pollutants emitted

Each MFR facility and each synthetic minor facility shall pay an annual monitoring fee (1c below) for each pollutant measured by an Air District-approved continuous emission monitor or an Air District-approved parametric emission monitoring system.

c. MFR/SYNTHETIC MINOR MONITORING FEE$~~15,027~~17,281 per monitor per pollutant

2. SYNTHETIC MINOR APPLICATION FEES

Each facility that applies for a synthetic minor operating permit or a revision to a synthetic minor operating permit shall pay application fees according to 2a and either 2b (for each source holding an Air District Permit to Operate) or 2c (for each source affected by the revision). If a major facility applies for a synthetic minor operating permit prior to the date on which it would become subject to the annual major facility review fee described above, the facility shall pay, in addition to the application fee, the equivalent of one year of annual fees for each source holding an Air District Permit to Operate.

a. SYNTHETIC MINOR FILING FEE ..... $~~2,093~~2,407 per application

b. SYNTHETIC MINOR INITIAL PERMIT FEE..... $~~1,504~~1,730 per source

c. SYNTHETIC MINOR REVISION FEE..... $~~1,504~~1,730 per source modified

3. MFR APPLICATION FEES

Each facility that applies for or is required to undergo: an initial MFR permit, an amendment to an MFR permit, a minor or significant revision to an MFR permit, a reopening of an MFR permit or a renewal of an MFR permit shall pay, with the application and in addition to any other fees required by this regulation, the MFR filing fee and any applicable fees listed in 3b-h below. The fees in 3b apply to each source in the initial permit. The fees in 3g apply to each source in the renewal permit, The fees in 3d-f apply to each source affected by the revision or reopening.

a. MFR FILING FEE ..... $~~2,093~~2,407 per application

b. MFR INITIAL PERMIT FEE..... $~~2,093~~2,407 per source

c. MFR ADMINISTRATIVE AMENDMENT FEE..... $~~592~~ 681 per application

d. MFR MINOR REVISION FEE ..... $~~2,972~~3,418 per source modified

e. MFR SIGNIFICANT REVISION FEE ..... $~~5,540~~6,371 per source modified

f. MFR REOPENING FEE..... $~~1,817~~2,090 per source modified

g. MFR RENEWAL FEE..... $~~883~~ 1,015 per source

Each facility that requests a permit shield or a revision to a permit shield under the provisions of Regulation 2, Rule 6 shall pay the following fee for each source (or group of sources, if the requirements for these sources are grouped together in a single table in the MFR permit) that is covered by the requested shield. This fee shall be paid in addition to any other applicable fees.

h. MFR PERMIT SHIELD FEE..... $~~3,129~~3,598 per shielded source or group of sources

4. MFR PUBLIC NOTICE FEES

Each facility that is required to undergo a public notice related to any permit action pursuant to Regulation 2-6 shall pay the following fee upon receipt of an Air District invoice.

MFR PUBLIC NOTICE FEE ..... Cost of Publication

5. MFR PUBLIC HEARING FEES

If a public hearing is required for any MFR permit action, the facility shall pay the following fees upon receipt of an Air District invoice.

a. MFR PUBLIC HEARING FEE .... Cost of Public Hearing not to exceed $~~25,575~~29,411

b. NOTICE OF PUBLIC HEARING FEE ..... Cost of distributing Notice of Public Hearing

6. POTENTIAL TO EMIT DEMONSTRATION FEE

Each facility that makes a potential to emit demonstration under Regulation 2-6-312 in order to avoid the requirement for an MFR permit shall pay the following fee:

a. PTE DEMONSTRATION FEE..... $~~358~~ 412 per source, not to exceed $~~35,158~~40,432

(Amended 6/15/94, 10/8/97, 7/1/98, 5/19/99, 6/7/00, 6/6/01, 5/1/02, 5/21/03, 6/2/04, 6/15/05, 6/7/06, 5/2/07, 5/21/08, 5/20/09, 6/16/10, 5/4/11, 6/6/12, 6/19/13, 6/4/14, 6/3/15, 6/15/16, 6/21/17, 6/6/18, 6/5/19, 6/16/21, 6/15/22, 6/7/23, 6/5/24, 6/4/25, DATE)

SCHEDULE R
EQUIPMENT REGISTRATION FEES

1. Persons operating commercial cooking equipment who are required to register equipment as required by Air District rules are subject to the following fees:

a.	Conveyorized Charbroiler REGISTRATION FEE:	$~~744~~ 595 per facility
b.	Conveyorized Charbroiler ANNUAL RENEWAL FEE:	$~~209~~ 167 per facility
c.	Under-fired Charbroiler REGISTRATION FEE:	$~~744~~ 595 per facility
d.	Under-fired Charbroiler ANNUAL RENEWAL FEE:	$~~209~~ 167 per facility

2. Persons operating non-halogenated dry cleaning equipment who are required to register equipment as required by Air District rules are subject to the following fees:

a.	Dry Cleaning Machine REGISTRATION FEE:	$~~371~~297
b.	Dry Cleaning Machine ANNUAL RENEWAL FEE:	$~~259~~207

3. Persons operating diesel engines who are required to register equipment as required by Air District or State rules are subject to the following fees:

a.	Diesel Engine REGISTRATION FEE:	$~~250~~200
b.	Diesel Engine ANNUAL RENEWAL FEE:	$~~166~~133
c.	Diesel Engine ALTERNATIVE COMPLIANCE PLAN FEE (for each plan submitted under Air District Regulation 11-17-402):	$~~250~~200

4. Persons operating boilers, steam generators and process heaters who are required to register equipment by Air District Regulation 9-7-404 are subject to the following fees:

a.	REGISTRATION FEE	$~~137~~ 110 per device
b.	ANNUAL RENEWAL FEE:	$~~115~~ 92 per device

5. Persons owning or operating graphic arts operations who are required to register equipment by Air District Regulation 8-20-408 are subject to the following fees:

a.	REGISTRATION FEE:	$~~446~~357
b.	ANNUAL RENEWAL FEE:	$~~278~~222

6. Persons owning or operating mobile refinishing operations who are required to register by Air District Regulation 8-45-4 are subject to the following fees:

a.	REGISTRATION FEE	$~~209~~167
b.	ANNUAL RENEWAL FEE	$~~123~~98

(Adopted 7/6/07, Amended 12/5/07, 5/21/08, 7/30/08, 11/19/08, 12/3/08, 5/20/09, 6/16/10, 6/15/11, 6/6/12, 6/19/13, 6/4/14, 6/3/15, 6/15/16, 6/21/17, 6/6/18, 6/4/25, DATE)

SCHEDULE S
NATURALLY OCCURRING ASBESTOS OPERATIONS

1. ASBESTOS DUST MITIGATION PLAN INITIAL REVIEW AND AMENDMENT FEES:

   Any person submitting an Asbestos Dust Mitigation Plan (ADMP) for initial review of a Naturally Occurring Asbestos (NOA) project shall pay the following fee (including NOA Discovery Notifications which would trigger an ADMP review): $~~1,278~~1,470

   Any person submitting a request to amend an existing ADMP shall pay the following fee: $~~654~~752

2. AIR MONITORING PROCESSING FEE:

   NOA projects requiring an Air Monitoring component as part of the ADMP approval are subject to the following fee in addition to the ADMP fee: $~~9,856~~11,334

3. GEOLOGIC EVALUATION FEE:

   Any person submitting a Geologic Evaluation for exemption from Section 93105 shall pay the following fee: $~~4,867~~5,597

4. INSPECTION FEES:
   a. The owner of any property for which an ADMP is required shall pay fees to cover the costs incurred by the Air District in conducting inspections to determine compliance with the ADMP on an ongoing basis. Inspection fees shall be invoiced by the Air District on a quarterly basis, and at the conclusion of dust generating activities covered under the ADMP, based on the actual time spent in conducting such inspections, and the following time and materials rate: $~~219~~224 ~~-~~per hour

   b. The owner of any property for which Geologic Evaluation is required shall pay fees to cover the costs incurred by the Air District. Inspection fees shall be invoiced by the Air District, based on the actual time spent in conducting such inspections, and the following time and materials rate: $~~219~~224 ~~-~~per hour

(Adopted 6/6/07; Amended 5/21/08, 5/20/09, 6/16/10, 6/15/11, 6/6/12, 6/19/13, 6/4/14, 6/3/15, 6/15/16, 6/21/17, 6/6/18, 6/5/19, 6/16/21, 6/15/22, 6/7/23, 6/5/24, 7/2/25, DATE)

SCHEDULE T
GREENHOUSE GAS FEES

For each permitted facility emitting greenhouse gases, the fee shall be based on the following:

1. Carbon Dioxide Equivalent (CDE) Emissions $0.174 per metric ton

Emissions calculated by the APCO shall be based on the data reported for the most recent 12-month period prior to billing. The annual emissions of each greenhouse gas (GHG) listed below shall be determined by the APCO for each permitted (i.e., non-exempt) source. For each emitted GHG, the CDE emissions shall be determined by multiplying the annual GHG emissions by the applicable Global Warming Potential (GWP) value. The GHG fee for each facility shall be based on the sum of the CDE emissions for all GHGs emitted by the facility, except that no fee shall be assessed for emissions of biogenic carbon dioxide.

Global Warming Potential Relative to Carbon Dioxide*

GHG	CAS Registry Number	GWP**
Carbon Dioxide	124-38-9	1
Methane	74-82-8	34
Nitrous Oxide	10024-97-2	298
Nitrogen Trifluoride	7783-54-2	17,885
Sulfur Hexafluoride	2551-62-4	26,087
HCFC-22	75-45-6	2,106
HCFC-123	306-83-2	96
HCFC-124	2837-89-0	635
HCFC-141b	1717-00-6	938
HCFC-142b	75-68-3	2,345
HCFC-225ca	422-56-0	155
HCFC-225cb	507-55-1	633
HFC-23	75-46-7	13,856
HFC-32	75-10-5	817
HFC-125	354-33-6	3,691
HFC-134a	811-97-2	1,549
HFC-143a	420-46-2	5,508
HFC-152a	75-37-6	167
HFC-227ea	431-89-0	3,860
HFC-236fa	690-39-1	8,998
HFC-245fa	460-73-1	1,032
HFC-365mfc	406-58-6	966
HFC-43-10-mee	138495-42-8	1,952
PFC-14	75-73-0	7,349
PFC-116	76-16-4	12,340
PFC-218	76-19-7	9,878
PFC-318	115-25-3	10,592

* Source: Myhre, G., et al., 2013: Anthropogenic and Natural Radiative Forcing (and Supplementary Material). In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., et al. (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. Available from www.ipcc.ch.

** GWPs compare the integrated radiative forcing over a specified period (i.e.100 years) from a unit mass pulse emission to compare the potential climate change associated with emissions of different GHGs. GWPs listed include climate-carbon feedbacks.

(Adopted 5/21/08; Amended 5/20/09, 6/16/10, 6/4/14, 6/3/15, 6/15/16, 6/21/17, 6/6/18,6/5/19, 6/16/21, 6/15/22, 6/7/23, 6/5/24)

SCHEDULE V
OPEN BURNING

1. Any prior notification required by Regulation 5, Section 406 is subject to the following fee:

   a. OPERATION FEE: $~~199~~229

   b. The operation fee paid as part of providing notification to the Air District prior to burning will be determined for each property, as defined in Regulation 5, Section 217, and will be valid for one year from the fee payment date when a given fire is allowed, as specified in Regulation 5, Section 401 for the following fires:

Regulation 5 Section – Fire	Burn Period
401.1 - Disease and Pest	January 1 – December 31
401.2 - Crop Replacement[1]	October 1 – April 30
401.3 - Orchard Pruning and Attrition[2]	November 1 – April 30
401.4 - Double Cropping Stubble	June 1 – August 31
401.6 - Hazardous Material[1]	January 1 – December 31
401.7 - Fire Training	January 1 – December 31
401.8 - Flood Debris	October 1 – May 31
401.9 - Irrigation Ditches	January 1 – December 31
401.10 - Flood Control	January 1 – December 31
401.11 - Range Management[1]	July 1 – April 30
401.12 - Forest Management[1]	November 1 – April 30
401.14 - Contraband	January 1 – December 31

   [1] Any Forest Management fire, Range Management fire, Hazardous Material fire not related to Public Resources Code 4291, or any Crop Replacement fire for the purpose of establishing an agricultural crop on previously uncultivated land, that is expected to exceed 10 acres in size or burn piled vegetation cleared or generated from more than 10 acres is defined in Regulation 5, Section 213 as a type of Prescribed Burning and, as such, is subject to the Prescribed Burning operation fee in Section 3 below.

   [2] Upon the determination of the APCO that heavy winter rainfall has prevented this type of burning, the burn period may be extended to no later than June 30.

   c. Any person who provided notification required under Regulation 5, Section 406, who seeks to burn an amount of material greater than the amount listed in that initial notification, shall provide a subsequent notification to the Air District under Regulation 5, Section 406 and shall pay an additional open burning operation fee prior to burning.

2. Any Marsh Management fire conducted pursuant to Regulation 5, Section 401.13 is subject to the following fee, which will be determined for each property by the proposed acreage to be burned:

   a. OPERATION FEE: $944 for 50 acres or less
   $1,285 for more than 50 acres but less than or equal to 150 acres
   $1,619 for more than 150 acres

   b. The operation fee paid for a Marsh Management fire will be valid for a Fall or Spring burning period, as specified in Regulation 5, Subsection 401.13. Any burning subsequent to either of these time periods shall be subject to an additional open burning operation fee.

3. Any Wildland Vegetation Management fire (Prescribed Burning) conducted pursuant to Regulation 5, Section 401.15 is subject to the following fee, which will be determined for each prescribed burning project by the proposed acreage to be burned:

   a. OPERATION FEE: $796 for 50 acres or less
   $1,079 for more than 50 acres but less than or equal to 150 acres

$1,404 for more than 150 acres

b. The operation fee paid for a prescribed burn project will be valid for the burn project approval period, as determined by the Air District. Any burning subsequent to this time period shall be subject to an additional open burning operation fee.

4. Any Filmmaking fire conducted pursuant to Regulation 5, Section 401.16 and any Public Exhibition fire conducted pursuant to Regulation 5, Section 401.17 is subject to the following fee:

a. OPERATION FEE: $1,029

b. The operation fee paid for a Filmmaking or Public Exhibition fire will be valid for the burn project approval period, as determined by the Air District. Any burning subsequent to this time period shall be subject to an additional open burning operation fee.

5. Any Stubble fire conducted pursuant to Regulation 5, Section 401.5 that requires a person to receive an acreage burning allocation prior to ignition is subject to the following fee, which will be determined for each property by the proposed acreage to be burned:

a. OPERATION FEE:
$~~509~~585 for 25 acres or less
$~~714~~821 for more than 25 acres but less than or equal to 75 acres
$~~867~~997 for more than 75 acres but less than or equal to 150 acres
$~~1,021~~1,174 for more than 150 acres

b. The operation fee paid for a Stubble fire will be valid for one burn period, which is the time period beginning September 1 and ending December 31, each calendar year. Any burning subsequent to this time period shall be subject to an additional open burning operation fee.

6. All fees paid pursuant to Schedule V are non-refundable.

7. All fees required pursuant to Schedule V must be paid before conducting a fire.

(Adopted 6/1913; Amended 6/4/14, 6/3/15, 6/15/16, 6/21/17, 6/6/18 ,6/5/19, 6/3/20, 6/16/21, 6/15/22, 6/7/23, 6/5/24, 7/2/25, DATE)

SCHEDULE W
REFINING EMISSIONS TRACKING FEES

1. ANNUAL EMISSIONS INVENTORIES:

   Any Refinery owner/operator required to submit an Annual Emissions Inventory Report in accordance with Regulation 12, Rule 15, Section 401 shall pay the following fees:

   a. Initial submittal: $~~118,388~~136,146
   b. Each subsequent annual submittal: $~~59,195~~68,074

   Any Support Facility owner/operator required to submit an Annual Emissions Inventory Report in accordance with Regulation 12, Rule 15, Section 401 shall pay the following fees:

   a. Initial submittal: $~~7,237~~8,323
   b. Each subsequent annual submittal: $~~3,618~~4,161

2. AIR MONITORING PLANS:

   Any person required to submit an air monitoring plan in accordance with Regulation 12, Rule 15, Section 403 shall pay a one-time fee of $~~16,443~~18,909.

(Adopted 6/15/16; Amended 6/5/19, 6/16/21, 11/3/21, 6/15/22, 6/7/23, 6/5/24, 6/4/25, DATE)

SCHEDULE X
MAJOR STATIONARY SOURCE COMMUNITY AIR MONITORING FEES

For each major stationary source, emitting 35 tons per year or more of Organic Compounds, Sulfur Oxides, Nitrogen Oxides, Carbon Monoxide and/or PM_{10} within the vicinity of an Air District proposed community air monitoring location, the fee shall be based on the following:

1.	Organic Compounds	$60.61 per ton
2.	Sulfur Oxides	$60.61 per ton
3.	Nitrogen Oxides	$60.61 per ton
4.	Carbon Monoxide	$60.61 per ton
5.	PM_{10}	$60.61 per ton

Emissions calculated by the APCO shall be based on the data reported for the most recent 12-month period prior to billing. In calculating the fee amount, emissions of Organic Compounds, Sulfur Oxides, Nitrogen Oxides, Carbon Monoxide, or PM_{10}, if occurring in an amount less than 35 tons per year, shall not be counted.

(Adopted: 6/15/16; Amended: 6/21/17, 6/4/25)

Eastern Research Group, Inc.

Socioeconomic Analysis for Amendments to Regulation 3: Fees

Final Report

Submitted to:
Bay Area Air District
375 Beale Street, Suite 600
San Francisco, CA 94105

Submitted by:
Eastern Research Group, Inc.
561 Virginia Rd, Building 4, Ste 300
Concord, MA 01742

April 29, 2026

Contents

Executive Summary 1
Introduction 2
Description of Proposed Rule Amendments 2
Amendments to Regulatory Fees 2
Regional Trends 4
Affected Populations 7
Regulatory Fee Schedule Amendments 7
Impacted Business Establishments 7
Impacts 12
Regulatory Fee Amendments: Industry Impacts 12
Approach 12
Results 13
Uncertainty 18
Regulatory Fee Amendments: Consumer Impacts 18
Approach 18
Results 19
Uncertainty 19
Regulatory Fee Amendments: Macroeconomic Analysis and Results 19
Model Results 20
Discussion 21
References 23

Executive Summary

Eastern Research Group, Inc. (ERG) conducted a socioeconomic analysis of the proposed amendments to Regulation 3 to determine whether the proposed amendments would have a significant impact on households in the Bay Area Air District (Air District), businesses in the Air District, and the overall District economy. The proposed amendments make mostly administrative updates to Regulation 3, including cleaning up outdated language, adjusting several fee schedules, modifying Risk Assessment Fee calculations, and increasing certain Gas Dispensing Facility fees. Amendments also include reducing some fees (e.g., Schedule R) and removing two obsolete fees. Finally, the proposed amendments add a new Emission Reduction Credit Reissuance Fee and reclassify miscellaneous sources.

To calculate potential costs to regulated businesses from the proposed amendments to Regulation 3, ERG estimated the population of businesses that would be affected by the proposed amendments and calculated the estimated additional cost burden to businesses based on estimated revised fee amounts and schedules. ERG expects that nearly 9,500 facilities across the Air District would incur nearly $3.7 million in incremental fees, comprising about 0.0004 percent of their approximate revenues. Of this total, approximately 7,300 facilities with fewer than 100 employees and $15 million in revenues are likely small businesses[1]. Although accounting for more than 77 percent of establishments, they are expected to incur less than 20 percent of incremental fees, about $726,000.

ERG then conducted an economic impact analysis using the Impact Analysis for Planning (IMPLAN) model to assess the impact of additional $3.7 million in fees on the greater regional economy accounting for the direct effect of the fees plus the spillover indirect and induced impacts. Our findings indicate that the proposed administrative amendments will have negligible socioeconomic impacts, representing less than 0.01 percent of business revenues and 0.01 percent of regional gross domestic product (GDP).

ERG also evaluated household-level impacts by distributing total incremental fees across households in the Air District; the resulting per-household cost is minimal and represents far less than 0.01 percent of median household income.

The results of these analyses show that the impacts of these revised fee schedules are negligible to companies, including those the state considers “small,” and households throughout the Air District.

[1] Per California Government Code 14835, a business is considered a small business if it is (1) independently owned and operated; (2) nondominant in its field of operation; (3) principally located in California; (4) its officers live in California; and, (5) when combined with affiliates, has 100 or fewer employees and average annual gross receipts of $15 million or less over the last three years. This analysis uses a simplified definition that assumes all facilities meet the first four criteria.

Introduction

This report discusses the socioeconomic impact of the proposed amendments to Regulation 3: Fees. Below, we outline ERG's methodology for calculating the cost of the proposed amendments to regulated business establishments.

Description of Proposed Rule Amendments

Amendments to Regulatory Fees

State law authorizes the Air District to assess fees to recover the reasonable costs of regulatory program activities associated with stationary sources of air pollution. Substantial revenue is collected through permit fees, which are designed to cover the program costs related to permitted emission sources. In addition, the Air District may assess fees for area-wide or indirect emission sources that do not require permits, for facilities subject to the State Air Toxics Hot Spots Program (Assembly Bill 2588), and for activities before the Air District's Hearing Board involving variances or permit-related appeals. Regulation 3, which establishes these fees, is maintained and updated regularly under these statutory authorities. In March of 2026, the Bay Area Air District Finance and Administration Committee received initial proposed amendments to Regulation 3 that, if adopted, would alter the Air District's fees and fee schedules and other related regulatory language. According to the Bay Area Air District's March 18 (2026) Finance & Administration Committee Meeting (Hinojosa et al., 2026), the proposed amendments include:

- General clean-up of regulatory language (e.g., removal of obsolete language and typos)
- Increasing administrative fees in Section 300 of Regulation 3 (Fees) by the annual Consumer Price Index (CPIw) of the previous year for Bay Area Urban Wage Earners and Clerical Workers (excluding permit transfer fees and upfront public notice fees)
- Aligning Schedule C (Stationary Containers for the Storage of Organic Liquids) calculation for the Risk Assessment Fee (RAF) to be consistent with other schedules.
- Increasing Schedule D.A (Gasoline Transfer at Gas Dispensing Facilities (GDF)) RAF by 15 percent in Schedule D.A.4.b consistent with existing GDFs for the same work
- Implementation of a new Section 3-311.6 Emission Reduction Credit Reissuance Fee equal to the filing fee of other emission reduction credit-related filing fees
- Reduction of Schedule R (Equipment Registration) fees by 20 percent
- Increasing major stationary source fees (Schedule M) and permitted dry cleaner fees (Schedule I) by CPIw
- Increasing miscellaneous source fees for refinery flares (Schedule G-5) by 3.6 percent
- Increasing solvent evaporating source fees (Schedule E) by 8.8 percent
- Increasing the following fees by 15 percent:
    - Hearing board fees (Schedule A)
    - Miscellaneous source fees except for Schedule G-5 (Schedules F, G-1, G-2, G-3, and G-4)
    - Semiconductor and related operations fees (Schedule H)
    - Solid waste disposal site fees (Schedule K)

    - Major facility review fees (Schedule P)
    - Naturally occurring asbestos operations fees (Schedule S)
    - Open burning operation fee and stubble burn operation fees (Schedule V)
    - Refining emissions tracking fees (Schedule W)
- Removal of two fees
    - Section 3-405.4.1.2 (Fees Not Paid, Reinstatement of Lapsed Permit to Operate)
    - Section 3-405.5 (Fees Not Paid, Registration and Other Fees)
- Reclassification of some general miscellaneous sources from Schedule F to Schedule G1

For existing fees, California Health and Safety Code § 41512.7 sets a 15 percent operation fee increase ceiling for districts with an annual budget of less than one million dollars (FindLaw, 2025). The Bay Area Air District has chosen to implement this limit by limiting increases of each individual fee by 15 percent. As such, the amendments are proposed to increase overall recovery of regulatory program activity costs without increasing any individual fee in excess of 15 percent. The fees proposed for amendment by the Air District affect businesses across a variety of industry sectors in the Air District. In this report, we assess socioeconomic impacts of the proposed amendments to Regulation 3: Fees to the extent data are available and identify any adverse socioeconomic impacts.

Regional Trends

Demographic and economic trends provide regional context for rulemaking and socioeconomic analyses. The following data highlight population, household, and industry characteristics in the Bay Area and California. These data show how the Bay Area aligns with or diverges from statewide trends and provide important baseline information for this analysis.

Table 1 presents population data between 2014 and 2023 in the Bay Area and in California.

Table 1. Population, households, and business establishments in the Bay Area and California, 2014 to 2023

	2014	2023	Total Change, 2014 - 2023	Percent Change, 2014 -2023
Bay Area				
Population	7,561,755	7,508,799	52,956	-0.7%
Households	2,636,267	2,785,482	149,215	5.7%
Average Household Size	2.79	2.74	-0.5	-1.8%
Business Establishments	195,635	209,213	13,578	6.9%
Businesses With Less Than 20 Employees	167,394	178,556	11,162	6.7%
California				
Population	38,802,500	38,965,193	162,693	0.4%
Households	12,758,648	13,699,816	941,168	7.4%
Average Household Size	3.04	2.84	-0.2	-6.6%
Business Establishments	889,646	1,029,689	140,043	15.7%
Businesses With Less Than 20 Employees	766,472	892,347	125,875	16.4%

Source: U.S. Census, 2014b and 2023b, 2014c and 2023c, and 2014d and 2023d

[a] the Bay Area consists of the following counties: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma.

Between 2014 and 2023, the Bay Area's population declined slightly by 0.7 percent, while the statewide population grew by 0.4 percent. Over the same period, the number of business establishments in the Bay Area increased by 6.9 percent, compared to a 15.7-percent increase statewide. Small businesses with fewer than 20 employees grew by 6.7 percent in the Bay Area—slightly below the region's overall establishment growth—whereas statewide, small businesses grew by 16.4 percent, outpacing overall establishment growth.

Table 2 presents employment by industry in the Bay Area and in California.

Table 2. Employment by sector, 2014 to 2023

Industry	Bay Area			California		
	2014	2023	Percent change (2014 - 2023)	2014	2023	Percent change (2014 - 2023)
Agriculture, forestry, fishing and hunting, and mining	31,347	27,912	-11.0%	420,979	379,601	-9.8%
Construction	206,442	233,856	13.3%	1,064,294	1,258,660	18.3%
Manufacturing	397,408	415,512	4.6%	1,718,093	1,684,528	-2.0%
Wholesale trade	93,860	59,719	-36.4%	542,536	406,848	-25.0%
Retail trade	379,270	342,003	-9.8%	1,927,958	1,888,499	-2.0%
Transportation and warehousing, and utilities	159,534	185,804	16.5%	830,311	1,186,824	42.9%
Information	156,929	170,588	8.7%	528,556	553,090	4.6%
Finance and insurance, and real estate and rental and leasing	250,305	220,236	-12.0%	1,083,944	1,013,177	-6.5%
Professional, scientific, and management, and administrative and waste management services	658,347	834,835	26.8%	2,271,628	2,780,335	22.4%
Educational services, and health care and social assistance	776,815	827,778	6.6%	3,681,807	4,238,380	15.1%
Arts, entertainment, and recreation, and accommodation and food services	375,147	317,953	-15.2%	1,860,773	1,838,902	-1.2%
Other services, except public administration	190,905	170,750	-10.6%	953,146	914,766	-4.0%
Public administration	133,227	144,972	8.8%	754,127	882,956	17.1%
Total Employment	**3,809,536**	**3,951,918**	**3.7%**	**17,638,152**	**19,026,566**	**7.9%**

Source: U.S. Census, 2014a and 2023a

As of 2023, the largest industry by employment in the Bay Area was the professional services industry with nearly 835,000 employees, followed closely by the educational services, health care, and social assistance industry. At the state level, the largest industry by employment is the educational services, health care, and social assistance industry, with over 4.2 million employees.

Although employment in the Bay Area in some industries has declined over the past 10 years, certain industries experienced large growth over the same period. The professional services industry, for example, grew by approximately 175,000 employees. The industries with the largest declines in employment include the wholesale trade industry (36 percent decrease) and the arts, entertainment, recreation, accommodation, and food services industry (15 percent decrease). Despite slower growth in the Bay Area compared to California, the Bay Area has seen an overall increase in employment between 2014 and 2023, indicating strong economic growth in the area.

Table 3. Business establishments by sector, 2014-2023

Industry	Bay Area			California		
	2014	2023	Percent change (2014 - 2023)	2014	2023	Percent change (2014 - 2023)
Agriculture, forestry, fishing and hunting, and mining	293	318	8.5%	2,700	2,673	-1.0%
Construction	15,218	18,402	20.9%	67,545	86,763	28.5%
Manufacturing	7,744	7,046	-9.0%	38,293	35,300	-7.8%
Wholesale trade	10,152	8,238	-18.9%	59,379	54,671	-7.9%
Retail trade	21,805	19,436	-10.9%	107,469	106,675	-0.7%
Transportation and warehousing, and utilities	3,853	5,190	34.7%	23,270	40,918	75.9%
Information	5,262	6,604	25.5%	22,148	27,338	23.4%
Finance and insurance, and real estate and rental and leasing	21,875	23,712	8.4%	100,949	114,201	13.1%
Professional, scientific, and management, and administrative and waste management services	43,148	45,923	6.4%	168,487	197,174	17.0%
Educational services, and health care and social assistance	26,440	31,131	17.7%	120,077	149,548	24.5%
Arts, entertainment, and recreation, and accommodation and food services	22,552	25,252	12.0%	104,446	129,808	24.3%
Other services, except public administration	16,521	17,553	6.3%	72,217	83,407	15.5%
Industries not classified	772	406	-47.4%	2,666	1,213	-54.5%
Total Establishments	**195,635**	**209,213**	**6.9%**	**889,646**	**1,029,689**	**15.7%**

Source: U.S. Census, 2014c and 2023c

Note: Estimates of the number of business establishments in the Bay Area in 2023 do not sum to equal the total establishment count listed due to mining sector data suppression affecting Marin County.

The Bay Area experienced substantial variation in establishment growth across industries between 2014 and 2023. Sectors such as construction, information, educational and health services, arts and accommodation services, and transportation and warehousing all saw notable increases in the number of establishments over the period. In contrast, several industries, including manufacturing, wholesale trade, retail trade, and the "industries not classified" category, experienced declines in establishment counts.

Affected Populations

Regulatory Fee Schedule Amendments

There are nearly 9,700 business establishments in the Bay Area that operate approximately 31,000 permitted or registered devices and processes in the Bay Area, most of which are expected to incur fee increases from the proposed regulatory fee schedule amendments to Regulation 3. About 80 percent of impacted facilities operate one emissions source, about 10 percent of impacted facilities operate two emissions sources, and approximately 9 percent operate between three and ten emissions sources. The remaining 1 percent operate anywhere from eleven sources to nearly 300 at a single facility.

Impacted Business Establishments

Regulation 3's fee schedules encompass a wide range of source categories, reflecting the regulation's applicability across the full spectrum of industrial activity. Permitted facilities in the Air District collectively represent roughly 650 distinct industry sectors.

Most facilities in the Air District are small businesses.[2] As facility size increases, whether measured by emissions, operational complexity, or number of sources, the number of facilities considered small businesses decreases. The highest-emitting operations (e.g., refineries, heavy chemical manufacturers, and power plants) are federally designated as Title V facilities.

Affected Businesses

- The proposed Regulation 3 fee and fee schedule changes affect nearly 9,700 businesses
- Affected business establishments span over 650 distinct industry sectors

Overall, Regulation 3 affects a broad cross-section of industry sectors. The fee structure is designed so that higher-emitting facilities pay the highest fees, although the large number of small businesses collectively contributes a substantial share of total revenue. In general, there is an inverse relationship between facility size or type, and the fees assessed per facility.

[2] For this analysis, unless otherwise specified, a small business in considered a facility that has 100 or fewer employees and estimated revenue of $15 million or less.

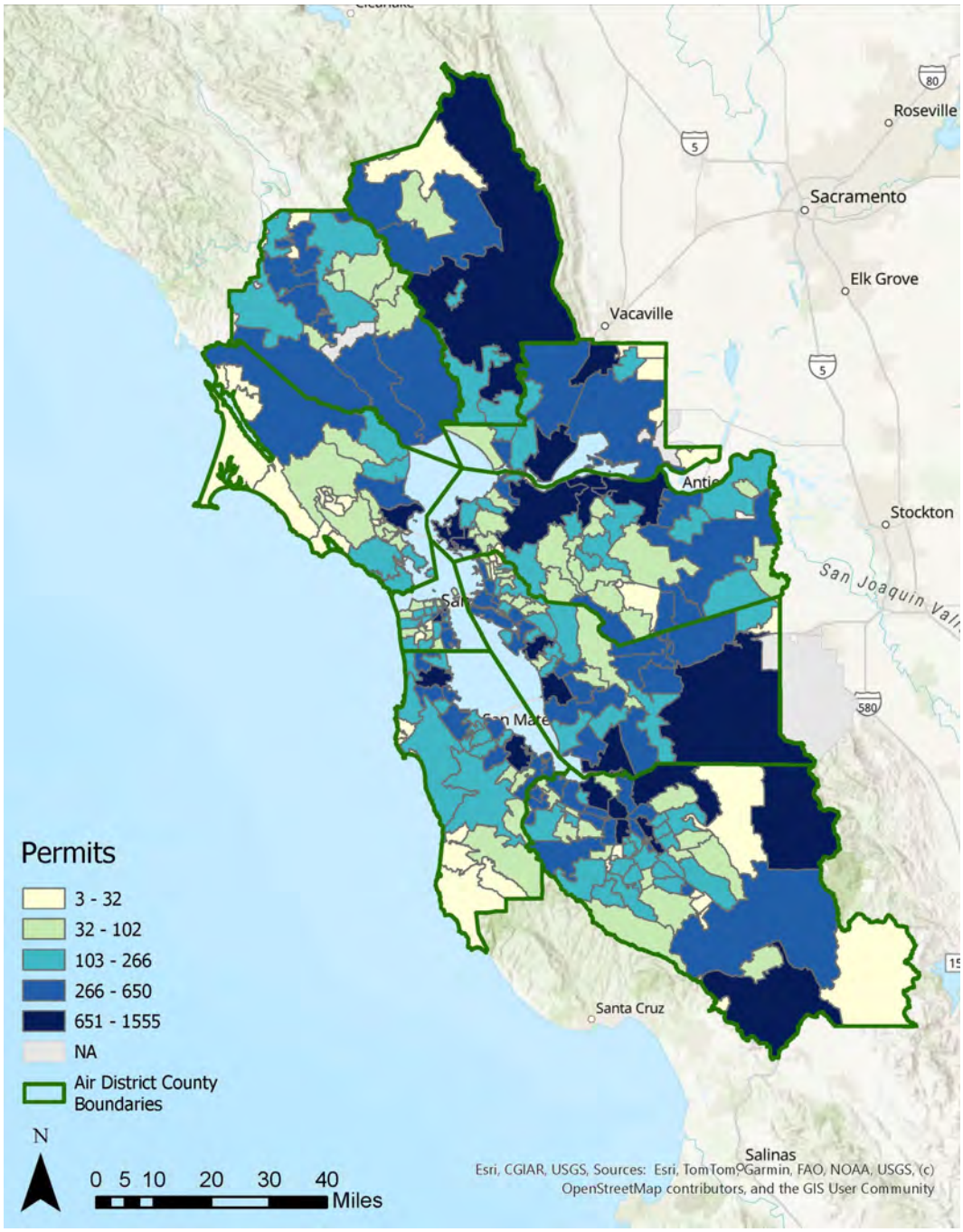


Figure 1. Air District Permits by ZIP Code

Figure 1 presents the distribution of affected permits by county, Figure 2 presents the number of affected facilities by ZIP code and Figure 3 displays the average number of permits per facility by ZIP code. For all three figures, ZIP codes were mapped with the California Department of Technology CA ZIP Code Boundaries shapefile. County boundaries were mapped using the California Department of Education County Boundaries shapefile and clipped using CARB's California Air District Boundaries shapefile. Of the 313 unique five-digit ZIP codes in the data set, 278 were mapped to ZIP codes within the Air District boundaries. Ten ZIP codes mapped to areas outside of the Air District boundaries and 23 did not map to any ZIP codes in the shapefile but matched to Air District Counties when cross referenced with the

Department of Housing and Urban Development's (HUD) HUD USPS ZIP Code Crosswalk.[3] Two ZIP codes did not match to any ZIP code in the HUD USPS Crosswalk or the California ZIP Code shapefile, indicating a possible data entry error or outdated ZIP code. This affected 76 facilities, which are not represented in maps. There are affected facilities throughout the Air District, with pockets of the highest concentration of facilities and permits along the coastline of San Francisco Bay, Suisun Bay and the eastern areas of the Air District.

[3] ZIP code boundaries are subject to change. The California ZIP Code Boundaries shapefile used in this analysis is derived from the ESRI United States ZIP Code Boundaries. ZIP code boundaries regularly change, which may account for the 23 ZIP codes that did not match to the shapefile.

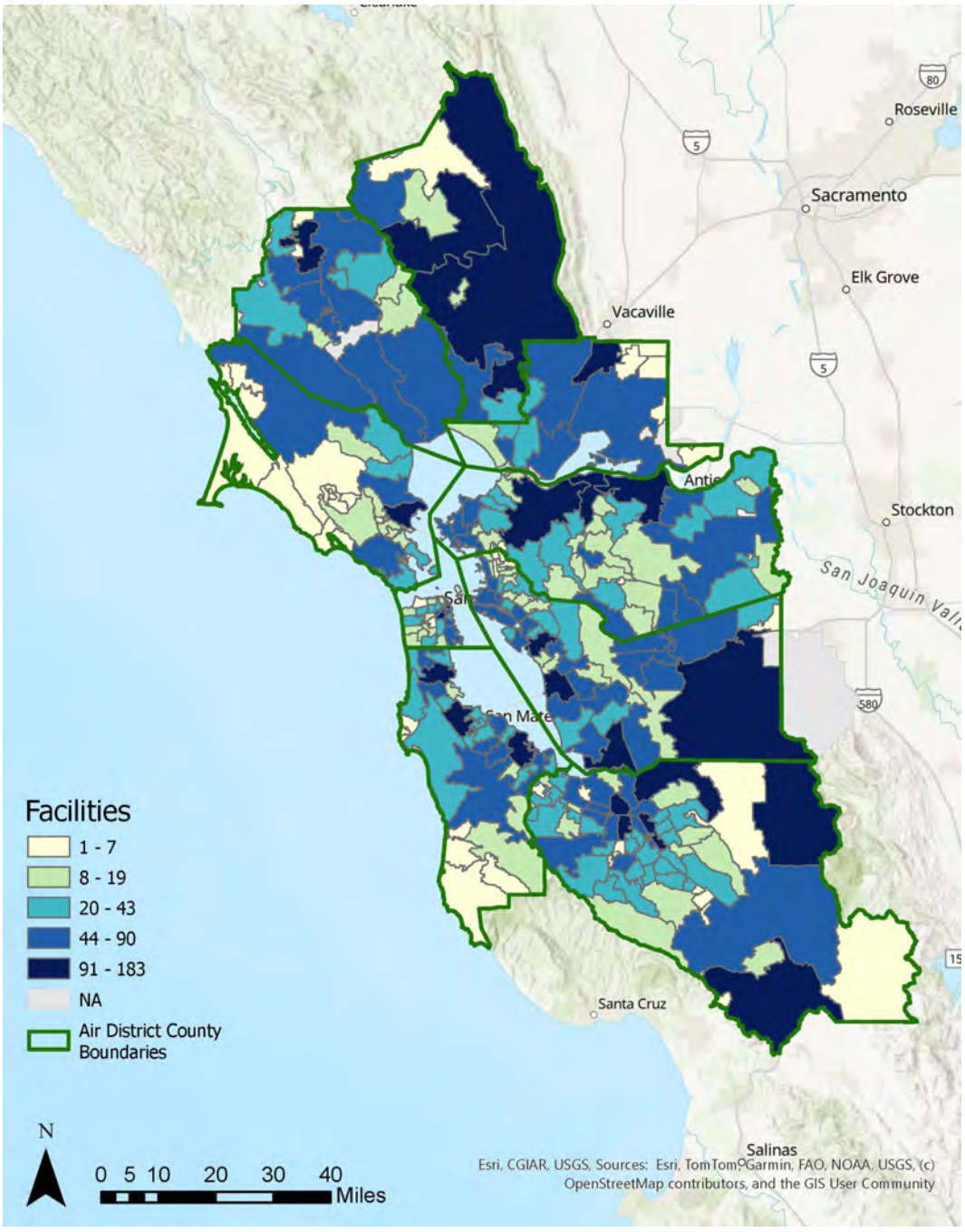


Figure 2. Facilities by Air District ZIP Code

Figure 3 displays the average number of permits per facility by ZIP code. Facilities with higher numbers of permits on average are concentrated around the coastline of San Francisco Bay and the eastern areas of the Air District. The average number of permits per facility in the Air District is 6.6.

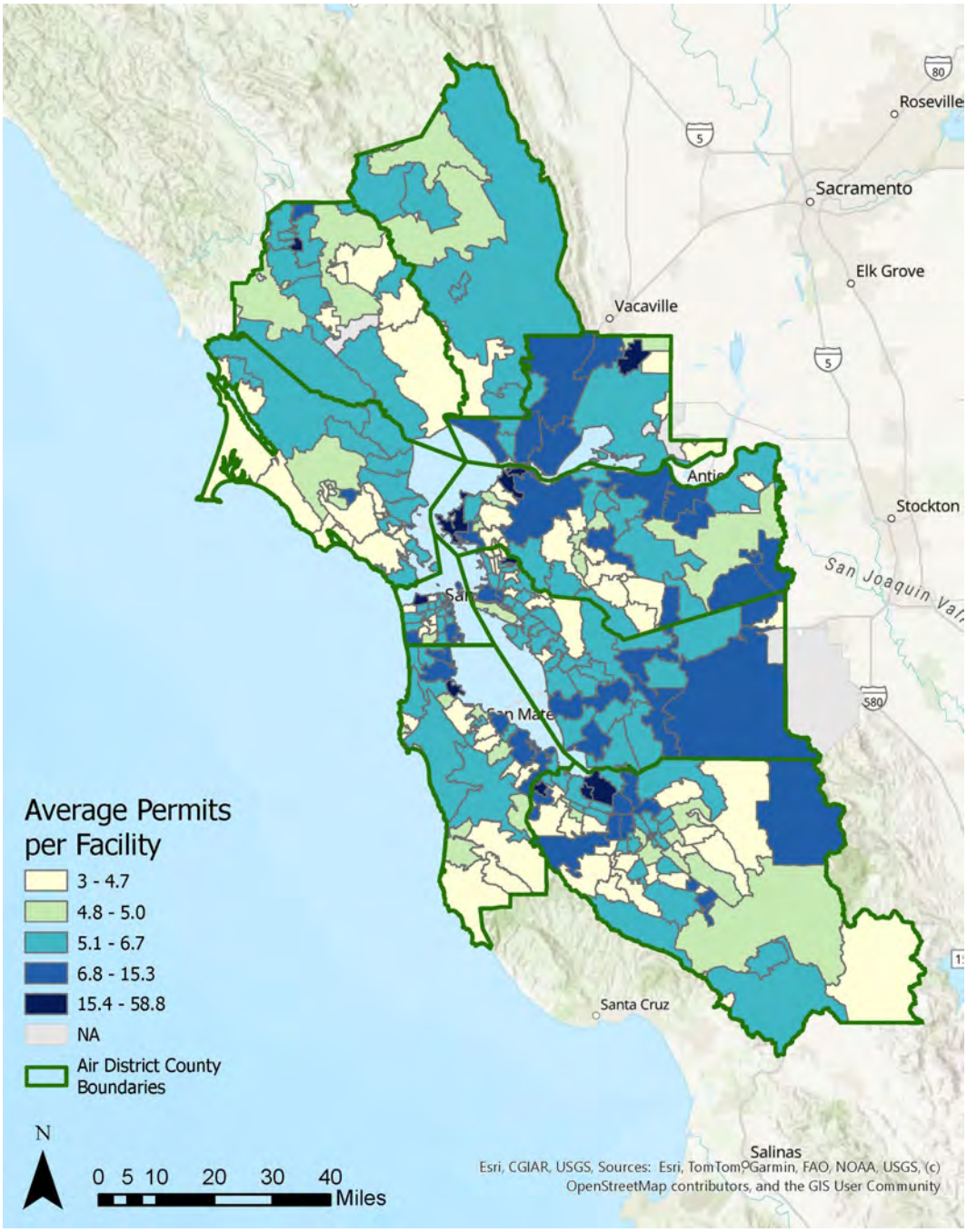


Figure 3. Average Permits per Facility by ZIP Code

Impacts

Regulatory Fee Amendments: Industry Impacts

Approach

A wide array of entities are expected to be affected by the proposed changes in fee schedules. ERG estimated the impact of projected changes to each facility's fee schedules as a percentage of revenue using the methods described below.

Fee Schedules

The Air District provided ERG with anonymized permit fee data for 9,698 facilities. Each facility has corresponding North American Industry Classification System (NAICS) and ZIP information for industry impact analysis and geographic presentation of socioeconomic impacts. Each unique fee that a facility incurred has a corresponding schedule and description of the what the fee is for. This dataset also included the fee amount that facilities paid in the previous year and the projected amount that facilities will pay next year for these same fees. Since this analysis is meant to capture regulatory impacts of fee schedule changes, ERG excluded late and delinquent payment fees. ERG aggregated the current and projected fee amounts for all other fees for each facility and took the difference between the two to calculate the incremental change in fees that each facility is expected to incur.

There are some facilities (about 8 percent of all facilities) for which the incremental change in fees represents a decrease in fees to be paid. In these instances, this means that the aggregate cost of fees are expected to decrease for that facility.

Business Revenues

ERG sourced industry-specific revenue data from a number of sources, with most industry revenues derived from U.S. Census Bureau's Statistics of U.S. Businesses (SUSB) dataset for 2022 (U.S. Census Bureau, 2025a). ERG used SUSB estimates for California, dividing total revenues for a given 6-digit NAICS by the total number of establishments in that NAICS. Since this data captures revenues in 2022-dollars, ERG inflated these estimates using the Bureau of Economic Analysis' (BEA's) GDP price deflators to current dollars (BEA, 2026a).

There are some select 6-digit NAICS for which SUSB does not have California-specific estimates. ERG used data for corresponding 5-digit NAICS for NAICS 212322 (Industrial Sand Mining), 212324 (Kaolin and Ball Clay Mining), and 485112 (Commuter Rail Systems). ERG used data for the corresponding 4-digit NAICS for 525920 (Trusts, Estates, and Agency Accounts) to estimate the average revenue per establishment within that industry.

Estimates for other industries were sourced elsewhere. Data for facilities within the agriculture sector are sourced from the Agriculture Census for 2022 (USDA, 2024). ERG used data from the Bureau of Labor Statistics' (BLS') Quarterly Census of Employment and Wages (QCEW) for Postal Service (NAICS 491110) facilities and private households (814110) (BLS, 2025).

For facilities that are listed within the Public Administration sector, ERG used data from U.S. Census Bureau's Government Units Survey and the Annual Survey of State and Local Government Finances to estimate government receipts per local government entity (U.S. Census Bureau, 2025b and 2025c).

All of this data was used to generate an average revenue per establishment for each NAICS included in the Air District's facility and fee schedule dataset. To generate facility-specific revenue estimates, ERG first determined the average aggregate fees to be paid by facilities in a given NAICS. ERG then took the ratio of aggregated fees to be paid by a specific facility to the average fee for all facilities in the corresponding NAICS. As a final step, ERG multiplied this ratio by the average revenue per establishment for that facility's corresponding NAICS to estimate that facility's annual revenue.

While developing these facility-specific revenue estimates, ERG needed to map older facilities' NAICS codes to a more recent listing. NAICS code lists are updated every five years. For 110 facilities, the industry that was listed in the dataset mapped to multiple newer NAICS codes. This happens when certain aspects of an industry are either significant enough to be considered a separate industry or there is enough differentiation in the product or service that warrants a separation into two or more NAICS. For these facilities, ERG used the NAICS that resulted in the most conservative results (i.e., highest impacts as a result of changes to the fee schedules). Table 4 shows the mapping of NAICS to the NAICS used for this analysis.

Table 4. NAICS Mapping

NAICS Listed	NAICS Mapped	NAICS Used	Facilities
211111	211120, 211130	211130	3
221119	221114, 221115, 221116, 221117, 221118	221118	12
335910	335911, 335912	335912	1
336110	336111, 336112	336112	1
445131	445120, 454110, 454390	445120	2
452112	452210, 452311	452210	42
455110	452210, 454110	454110	1
519290	519130, 519190	519190	1
541711	541713, 541714	541714	39
541712	541713, 541715	541715	8

Another 205 of facilities do not have an industry specified or linked to them in the dataset used. These facilities are excluded from the summarized results. ERG compared these facilities' incremental changes in fees to make sure none of the excluded facilities represent an outsized impact. Only one of these facilities has an incremental cost increase above the average of all incremental cost estimates ($388) for facilities with a corresponding NAICS. In total, $129,758 of projected fees – ultimately representing a net decrease in fees of almost $5,500 – are excluded from this analysis.

Results

Table 5 summarizes the incremental changes in fees and their impacts on business revenue across aggregate sectors. There are no sectors that are expected to incur significant impacts (defined as one percent of revenues).[4] Aggregate results for all facilities show less than $3.7 million in additional fees to be incurred, an extremely small sum compared to total revenue. Even if we remove Public Administration from the total results[5], fees still represent less than 0.01 percent of overall revenue.

ERG also includes petroleum refineries in this summary table, since this industry alone incurs nearly 60 percent of the incremental fee increases within the manufacturing sector.

[4] While some regulatory impact analyses use a profit screening test to determine economic feasibility (defined as ten percent of profit), using a profit test relies on published IRS corporate net income data that lack transparency, comprehensive coverage within industries, and statistical reliability where sample sizes may be statistically inadequate.

[5] Because the facilities in the Public Administration sector are government-owned and operated, we use these facilities' operating budgets as a proxy for revenue, which is not directly comparable to business revenues. The public sector also comprises a substantial portion of the aggregate "revenues" presented in Table 5, which may skew the aggregate results.

Table 5. Summary of Incremental Fee Costs and Impacts

Sector	Description	Facilities	Total Incremental Fees	Total Revenue	Fees as % of Revenue
11	Agriculture, Forestry, Fishing and Hunting	93	$4,281	$229,497,669	0.0019%
21	Mining, Quarrying, and Oil and Gas Extraction	32	$137,728	$496,240,346	0.0278%
22	Utilities	802	$555,474	$13,949,528,466	0.0040%
23	Construction	179	$16,929	$2,081,710,774	0.0008%
31-33	Manufacturing	1,040	$2,169,451	$75,298,014,810	0.0029%
324110	*Petroleum Refineries [a]*	*7*	*$1,260,090*	*$35,209,879,055*	*0.0036%*
42	Wholesale Trade	185	$138,497	$10,369,356,476	0.0013%
44-45	Retail Trade	2,486	$25,161	$23,164,090,830	0.0001%
48-49	Transportation and Warehousing	207	$119,461	$25,184,331,918	0.0005%
51	Information	702	$7,809	$14,720,882,129	0.0001%
52	Finance and Insurance	73	$259	$9,919,310,700	0.0000%
53	Real Estate and Rental and Leasing	676	$9,735	$2,743,462,471	0.0004%
54	Professional, Scientific, and Technical Services	250	$45,700	$2,692,608,255	0.0017%
55	Management of Companies and Enterprises	7	$39	$48,381,594	0.0001%
56	Administrative and Support and Waste Management and Remediation Services	173	$207,099	$1,095,810,587	0.0189%
61	Educational Services	109	$35,019	$2,956,696,255	0.0012%
62	Health Care and Social Assistance	278	$17,026	$34,720,433,232	0.0000%
71	Arts, Entertainment, and Recreation	48	$479	$744,108,886	0.0001%
72	Accommodation and Food Services	163	$1,654	$912,527,015	0.0002%
81	Other Services (except Public Administration)	1,169	$145,759	$1,943,935,175	0.0075%
92	Public Administration	792	$44,232	$743,828,111,050	0.0000%
Total		**9,464**	**$3,681,792**	**$967,099,038,639**	**0.0004%**

Note: Totals may not equal the sum of their parts due to rounding.

[a] NAICS 324110 is included to capture the incremental impact to petroleum refineries. Estimates presented for this industry are not included in the totals.

ERG separately analyzes costs and impacts on small businesses, which are defined according to California Government Code 14835 as meeting the following criteria:

- Must be independently owned and operated;
- Cannot be dominant in its field of operation;
- Must have its principal office located in California;
- Must have its owners (or officers in the case of a corporation) domiciled in California; and
- Together with its affiliates, be either:
    - A business with 100 or fewer employees, and average annual gross receipts of $15 million or less over the previous three tax years, or
    - A manufacturer with 100 or fewer employees

For this analysis, ERG assumed that all facilities met the first four criteria. ERG also assumed that each facility was independent from one another. These assumptions are likely to overestimate the number of small businesses captured for this analysis. ERG compared estimated revenue and employment[6] for each facility to defined thresholds above, resulting in an estimated 7,318 facilities linked to small businesses. Table 6 shows the resulting impacts for these facilities. While 77.3 percent of all affected facilities are considered small businesses for this analysis, they only account for 3.6 percent of all revenues across the Air District's affected facilities. At the same time, these small facilities are expected to incur 19.7 percent of the fee increases, which means that the fee increases for the average small facility result in an impact that is about 5.5 times greater relative to revenues than that of the average facility, regardless of size. This is primarily because the fee revisions' impact on all facilities in the District is very small. Even with these fee increases though, the impacts to small facilities are still extremely small, with fees representing approximately 0.002 percent of aggregate revenues.

[6] ERG derived employment similarly to revenue estimates, multiplying together the ratio of a facility's incremental fees to the industry average and the average employment within that industry.

Table 6. Summary of Incremental Fee Costs and Impacts on Small Businesses

Sector	Description	Facilities	Total Incremental Fees	Total Revenue	Fees as % of Revenue
11	Agriculture, Forestry, Fishing and Hunting	92	$2,724	$193,002,354	0.0014%
21	Mining, Quarrying, and Oil and Gas Extraction	26	$53,377	$175,348,361	0.0304%
22	Utilities	728	$130,279	$1,846,863,583	0.0071%
23	Construction	138	$4,970	$720,263,473	0.0007%
31-33	Manufacturing	656	$208,224	$3,662,108,937	0.0057%
42	Wholesale Trade	99	$14,083	$730,514,686	0.0019%
44-45	Retail Trade	2,199	$11,943	$15,205,531,381	0.0001%
48-49	Transportation and Warehousing	172	$27,239	$456,076,887	0.0060%
51	Information	503	$3,828	$4,064,286,267	0.0001%
52	Finance and Insurance	54	$354	$253,781,197	0.0001%
53	Real Estate and Rental and Leasing	655	$1,563	$2,187,528,644	0.0001%
54	Professional, Scientific, and Technical Services	218	$21,053	$982,254,173	0.0021%
55	Management of Companies and Enterprises	4	$14	$15,433,921	0.0001%
56	Administrative and Support and Waste Management and Remediation Services	157	$98,439	$562,687,669	0.0175%
61	Educational Services	91	$1,794	$425,246,404	0.0004%
62	Health Care and Social Assistance	153	$1,555	$534,717,700	0.0003%
71	Arts, Entertainment, and Recreation	42	$267	$207,028,520	0.0001%
72	Accommodation and Food Services	157	$365	$530,656,581	0.0001%
81	Other Services (except Public Administration)	1,166	$143,525	$1,880,331,218	0.0076%
92	Public Administration	8	-$20	$19,143,891	-0.0001%
Total		**7,318**	**$725,576**	**$34,652,805,844**	**0.0021%**

Note: Totals may not equal the sum of their parts due to rounding.

ERG also examined results for a subset of industries (auto body shops, coffee roasters, dry cleaners, and gas dispencing facilities) to determine if small businesses in these industries might be vulnerable to impacts. For this analysis, these four industries are defined as follows:

- Auto Body Shops: Any facility listed as having an auto body coating operation are considered auto body shops for this analysis, except for those the Air District identified themselves as not small businesses.
- Coffee Roasters: Facilities listed as having permits to operate roasters that process coffee are captured as coffee roasters for this analysis. Any facility with a maximum usage rate of less than 140 kilograms per hour is considered small businesses.
- Dry cleaners: Any facility within NAICS 812310 (Coin-Operated Laundries and Drycleaners) and 812320 (Drycleaning and Laundry Services except Coin-Operated) is included as a dry cleaner, with those facilities operating with non-halogenated dry cleaning machines considered small businesses.
- Gas Dispensing Facilities: Facilities with at least three gas products on-site are considered retail gas dispensing facilities for this analysis. Any facility that has less than 37 gas products and with all permit-to-operate fees covering gasoline dispensing operations is classified as a small business.

Table 7 shows the same type of information as in Table 5 for these industries, while Table 8 also captures impacts for those businesses defined as small. Impacts on these specific industries are also minimal and do not represent significant impacts for small businesses either. Based on the definitions of small businesses outlined above, 92.9 percent of all affected facilities in these selected industries are considered small businesses for this analysis. These small facilities account for 66.1 percent of the fee increases and 75.6 percent of all revenues across these four industries.

Table 7. Incremental Fee Costs and Impacts on Specified Industries

Industry	Facilities	Total Incremental Fees	Total Revenue	Fees as % of Revenue
Auto Body Shops	799	$111,994	$3,845,383,946	0.0029%
Coffee Roasters	65	$13,635	$757,070,819	0.0018%
Dry Cleaners	256	-$11,364	$145,537,339	-0.0078%
Gas Dispensing Facilities	1,580	$54,390	$19,531,417,565	0.0003%
Total	**2,700**	**$168,655**	**$24,279,409,668**	**0.0007%**

Note: Totals may not equal the sum of their parts due to rounding.

Table 8. Incremental Fee Costs and Impacts on Small Businesses within Specified Industries

Industry	Facilities [a]	Total Incremental Fees	Total Revenue	Fees as % of Revenue
Auto Body Shops	796	$111,686	$3,832,937,263	0.0029%
Coffee Roasters	43	$5,811	$295,209,387	0.0020%
Dry Cleaners	242	-$13,313	$98,912,258	-0.0135%
Gas Dispensing Facilities	1,427	$7,254	$14,136,249,723	0.0001%
Total	**2,508**	**$111,438**	**$18,363,308,631**	**0.0006%**

Note: Totals may not equal the sum of their parts due to rounding.

[a] The definition of small businesses accounted for in this table differs from the definition used for small businesses shown in Table 6. The definition of small businesses for this table is based on data supplied by the Air District and is outlined in the bulleted list above.

Uncertainty

Since ERG had to approximate facility revenue using industry averages and relate fees to revenue to determine business size, there is uncertainty in the results described above. With that said and given the results from the impact analysis outlined above, ERG developed a set of comparative estimates to show how much the revenue estimates or incremental fee estimates would have to differ in order to represent impacts of just 0.1 percent of revenues. For the incremental fees to amount to just 0.1 percent of revenues, total revenues estimated among all facilities would have to have been overestimated by a factor of 264. Even if we remove Public Administration from this comparison, revenues would have to be overestimated by a factor of 63. Similarly, the incremental fees estimated here would have to be greater than $970 million to represent 0.1 percent of revenues. This level of impact still does not reflect significant impacts, commonly defined as 1 percent of revenues.

For this analysis, ERG used statewide data from its variety of sources to estimate revenue per establishment in each industry. As an alternative, ERG compared these results to estimates derived using county-specific data from U.S. Census Bureau's County Business Patterns (CBP) dataset for 2022 (U.S. Census, 2024). The CBP dataset does not capture all NAICS affected by the fee schedule revisions but does cover a significant majority of them. Multiplying estimates of employees per establishment for the counties in the Air District from CBP by the number of affected facilities in the Air District's dataset and the revenue per employee estimates from SUSB, ERG estimated higher aggregate revenues across these industries than those derived using SUSB profile data. This finding means impacts from ERG's analysis presented throughout this section are greater than would have been found had we used CBP District-specific data.

Regulatory Fee Amendments: Consumer Impacts

Approach

To analyze potential impacts to consumers, ERG compared the incremental fee changes from the industry impacts analysis (about $3.7 million in total) to household income. According to the U.S. Census Bureau's American Community Survey (ACS), there were 2,785,482 households across the nine counties in the Air District as of 2023 (U.S. Census, 2023a). The median household income across the whole Air District is estimated at $146,347. ERG also considered impacts by county, with the potential for outsized impacts in one county over others.

Results

ERG divided the incremental fee costs by the number of households and then compared to the median household income across the Air District to estimate impacts. The cost per household is only $1.32, with fees representing less than 0.001 percent of household income.

Table 9 shows the results of a similar analysis completed at the county level. No county is projected to see significant impacts from these fee changes. Facilities in Contra Costa county are expected to incur a little less than half of the incremental fee increases, resulting in the largest cost per household and impact as a percentage of household income, but these costs still represent under 0.01 percent of household income in the county. It should be noted that the impact of a particular county's expected fee increases is not necessarily contained within that county's borders. The analysis summarized in Table 9 is only meant to capture the magnitude of fee revisions by county.

Table 9. Incremental Fee Costs and Impacts to Households by County

County	Total Incremental Fees	Households	Median HH Income	Cost per Household	Fees as % of Income
Alameda County	$555,816	593,117	$134,500	$0.94	0.0007%
Contra Costa County	$1,744,927	411,662	$137,711	$4.24	0.0031%
Marin County	$68,190	103,201	$156,608	$0.66	0.0004%
Napa County	$52,773	49,663	$117,403	$1.06	0.0009%
San Francisco County	$59,275	362,650	$142,125	$0.16	0.0001%
San Mateo County	$213,986	264,424	$169,888	$0.81	0.0005%
Santa Clara County	$433,618	654,467	$173,778	$0.66	0.0004%
Solano County	$430,552	155,800	$112,178	$2.76	0.0025%
Sonoma County	$116,198	190,498	$112,941	$0.61	0.0005%
Total [a]	**$3,675,335**	**2,785,482**	**$146,347**	**$1.32**	**0.0009%**

[a] The total incremental fees shown in this table do not account for all fees in the dataset the Air District provided because some facilities did not have adequate location data to map to a specific county within the Air District.

Uncertainty

Given the results from the impact analysis outlined above, ERG developed a set of comparative estimates to show how much median household income or the incremental fee estimates would have to differ to represent impacts of just 0.1 percent to household income. Median household income across the whole district would have to be less than $1,400 annually for the cost of these changes to represent 0.1 percent of household income; conversely, the incremental change fees across all facilities in the Air District would have to exceed $407 million to reach that same threshold when assuming the same median household income as presented in Table 9. ERG also uses the median household income for this analysis, which represents a more conservative estimate than what using the mean would show.

Regulatory Fee Amendments: Macroeconomic Analysis and Results

ERG conducted a regional Economic Impact Analysis (EIA) of the changes in industry revenue as a result of the proposed regulatory fee amendments. EIAs measure the economic effect of an event on the economy in a specified geographic area. ERG conducted this analysis in IMPLAN, an Input-Output (I-O) modeling software. The primary purpose of IMPLAN is to show how a change in the economy (e.g., an infusion of money, a new infrastructure project, the loss of a major business or entity) will impact all other industries in that economy within a selected geographic area based on established business relationships that

describe how money ripples through the economy between industries. Some key terms related to IMPLAN include:

- **Employment** refers to the number of individuals hired for a salary or compensation to work within a sector. IMPLAN follows job definitions from the BEA, which include full-time, part-time, and seasonal positions. IMPLAN jobs are not Full-time Equivalent (FTE) positions.
- **Labor income** represents the total value of income from employment.
- **Value added** is the increase in a product or service's market value at each stage of production.
- **Economic output** refers to the total value of all goods and services produced in an economy.
- **Direct effects** from IMPLAN show the immediate impact of a change on its own sector.
- **Indirect effects** estimate how direct impacts to one sector "spillover" to affect related industries that support that sector (e.g., direct impacts that reduce the output of oil refineries indirectly impact those suppliers that sell the pipes, valves and other equipment that support the refineries).
- **Induced effects** show how changes in labor income due to direct and indirect effects result in additional economic impacts (e.g., if oil refineries and those industries that support them lay off employees as result of increased fees, those employees have less income to spend on other products thereby reducing income to grocery stores, restaurants, and other retailers).

We used a custom IMPLAN model that encompasses the nine counties regulated by the Air District. All estimated costs are allocated within the combined region. We entered the expected fee increases resulting from the proposed amendments to Regulation 3 as decreases in business revenues to each business's corresponding industry sector. IMPLAN does not have the capability to examine the economic impacts of economic events affecting publicly administered industry sectors; all such industry sectors are excluded from our analysis. Similarly, IMPLAN lacks data for a small subset of industry sectors in the Air District, which account for less than 0.001 percent of costs to regulated businesses.[7]

Model Results

Table 10 presents the results of ERG's IMPLAN analysis and shows the direct, indirect, induced, and total impacts on employment, labor income, value added, and output as a result of changes in business revenues.

Table 10. Results of IMPLAN Analysis

	Employment	Labor Income	Value Added	Output
Direct	-5.6	-$747,073	-$1,452,526	-$3,484,575
Indirect	-2.1	-$292,802	-$512,571	-$864,868
Induced	-2.3	-$224,447	-$419,344	-$598,758
Total	-9.9	-$1,264,322	-$2,384,441	-$4,948,201

Note: Component values may not sum due to rounding

[7] Industry sectors for which data are not available include public administration, sanitary paper product manufacturing, leather and hide tanning and finishing, explosives manufacturing, and gold ore and silver ore mining. Typically, industry data are unavailable in IMPLAN because the industry sector is either very small or does not exist in a given geographic area.

As seen in Table 10, the proposed amendments would result in a decrease in value added (or GDP) of nearly $2.4 million across the region. With a regional GDP of nearly $1.2 trillion, the impact on GDP from these proposed amendments is negligible, accounting for about 0.0002 percent of GDP (BEA, 2026b). The proposed amendments are also estimated to decrease employment by about 10 jobs.[8] IMPLAN estimates that the direct economic effects of the proposed incremental fees (nearly $3.5 million[9]) will generate an additional $1.5 million in indirect and induced economic impacts.

Discussion

Our findings indicate that the proposed amendments to Regulation 3 will not result in major socioeconomic impacts for businesses, households, or the broader regional economy. Although the amendments adjust several fee schedules and reduce and remove certain outdated fees, the resulting changes in fee burden are modest relative to business revenues and household incomes. Incremental fee changes across nearly 9,700 facilities result in a total additional burden of approximately $3.7 million, representing less than 0.01 percent of total facility revenues in the Air District.

The distributional results similarly demonstrate that impacts are negligible across all industry sectors. Even in sectors with relatively higher incremental fees, like manufacturing or administrative and waste management services, fees still represent a very small fraction of a percent of revenues. No sector experiences impacts approaching the one-percent-of-revenues significance threshold. Small businesses, which make up the majority of regulated facilities, also exhibit very small effects because the absolute value of these aggregate fee revisions is very small. Although small businesses account for a disproportionate share of incremental fees relative to their share of regional revenue, fee changes still amount to only 0.002 percent of estimated small business revenues. Additional analysis of specific small business-intensive industries (e.g., auto body shops, coffee roasters, gas dispensing facilities, and dry cleaners) confirms similarly negligible impacts, including cases where the amendments reduce fees relative to current levels.

Geographic patterns in permitting and cost burden reveal that facilities with the highest aggregate fee increases are concentrated in counties with extensive industrial or fuel-dispensing operations, such as Contra Costa County. However, even in these areas, the per-household cost of incremental fees remains well under 0.01 percent of median household income. Mapping at both the county and ZIP code level suggests no disproportionate burden on any particular neighborhood or population group within the Air District.

From a regional economic perspective, the macroeconomic modeling conducted using IMPLAN shows that the proposed amendments would have only negligible effects on employment, labor income, and value added. Estimated reductions, such as fewer than ten total jobs and a projected decline of approximately $2.4 million in regional GDP, represent a negligible share of the Bay Area's nearly $1.2 trillion regional economy.

Sensitivity tests and uncertainty analysis reinforce the robustness of these findings. Revenues would need to be overestimated by multiple orders of magnitude, or fees underestimated by hundreds of millions of

[8] IMPLAN assumes fixed relationships between costs, output, and employment, so cost increases result in proportional changes in output and jobs. In this analysis, the projected impacts are spread across roughly 9,700 facilities, making impacts at any individual facility very small. The model also does not account for firms' real-world flexibility to absorb costs, reduce hours worked instead of laying off workers, and/or otherwise adjust operations, which means impacts are likely overstated. IMPLAN employment reflects total jobs supported regardless of hours or duration and may count individuals more than once if they hold multiple jobs. In the context of $3.7 million in incremental costs across thousands of facilities within a regional economy of nearly 4 million workers, the resulting impacts are best interpreted as an order of magnitude estimate and may reasonably be considered negligible.

[9] Direct effects are not equal to the total value of incremental fees to industry since certain industry sectors are necessarily excluded from the analysis due to data limitations, as described in footnote 7.

dollars to reach even 0.1 percent of revenues districtwide. Similarly, household impacts would need to rise by over two orders of magnitude to approach significance using standard socioeconomic benchmarks.

Overall, the body of evidence presented throughout this report demonstrates that the proposed amendments to Regulation 3 are unlikely to create adverse socioeconomic impacts for businesses, consumers, or the broader Bay Area economy.

References

Bureau of Labor Statistics (BLS). (2025). Quarterly Census of Employment and Wages. https://data.bls.gov/cew/apps/data_views/data_views.htm#tab=Tables

Bureau of Economic Analysis. (2026a). GDP Price Deflator. https://www.bea.gov/data/prices-inflation/gdp-price-deflator

Bureau of Economic Analysis. (2026b). Regional Data – GDP and Personal Income. https://www.bea.gov/itable/regional-gdp-and-personal-income

California Air Resources Board. (2025). California Air District Boundaries. March 2, 2026. https://gis.data.ca.gov/datasets/CaliforniaARB::california-air-district-boundaries/about

California Department of Education. "California Counties." March 2, 2026. https://gis.data.ca.gov/datasets/CDEGIS::california-counties-for-the-california-department-of-education/about

California Department of Technology. "CA Zip Code Boundaries." April 16, 2025. https://gis.data.ca.gov/datasets/California::ca-zip-code-boundaries

FindLaw. (2025) "California Code, Health and Safety Code - HSC § 41512.7". https://codes.findlaw.com/ca/health-and-safety-code/hsc-sect-41512-7/

Hinojosa, Hyacinth, Osaze, Stephanie, Tanaka, Fred, Gage, Mark. (2026). Proposed Fiscal Year 2026-2027 Budget and Fee Regulation Amendments. Bay Area Air District. https://www.baaqmd.gov/~/media/files/board-of-directors/2026/fac_presentation_031826_op-pdf.pdf?rev=55e8f217430b425db4e97a475492cd79&sc_lang=en

U.S. Census. (2014a and 2023a). American Community Survey, Selected Economic Characteristics. https://data.census.gov/table?q=Industry&g=040XX00US06_050XX00US06001,06013,06041,06055,06075,06081,06085,06095,06097&y=2023

U.S. Census. (2014b and 2023b). American Community Survey, Selected Social Characteristics in the United States. https://data.census.gov/table/ACSDP1Y2022.DP02

U.S. Census. (2014c and 2023c). County Business Patterns. https://api.census.gov/data/2014/cbp

U.S. Census. (2014d and 2023d). Decennial Census. American Community Survey, ACS 1-Year Estimates Detailed Tables: Total population. https://api.census.gov/data/2023/acs/acs1

U.S. Census. (2024). County Business Patterns: 2022. https://www.census.gov/data/datasets/2022/econ/cbp/2022-cbp.html

U.S. Census. (2025a). 2022 SUSB Annual Datasets by Establishment Industry - April 2025. https://www.census.gov/data/tables/2022/econ/susb/2022-susb-annual.html

U.S. Census. (2025b). Government Units Survey. https://www.census.gov/data/datasets/2025/econ/gus/public-use-files.html

U.S. Census. (2025c). Annual Survey of State and Local Government Finances - 2023 State & Local Government Finance Historical Datasets and Tables. https://www.census.gov/data/datasets/2023/econ/local/public-use-datasets.html

U.S. Department of Agriculture (USDA). (2024). Census of Agriculture - 2022. United States Summary and State Data. Volume 1, Geographic Area Series, Part 51 (Issued Feb 13, 2024). https://www.nass.usda.gov/Publications/AgCensus/2022/index.php

U.S. Department of Housing and Urban Development's Office of Policy Development and Research. "HUD USPS ZIP Code Crosswalk Files." February 9, 2026. https://www.huduser.gov/portal/datasets/usps_crosswalk.html.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

RESOLUTION NO. 2026-_____

A Resolution of the Board of Directors of the Bay Area Air Quality Management District Amending Regulation 3 (Fees)

WHEREAS, Sections 40702, 40726, 42311, 41512, 41512.5, and 42364 of the California Health & Safety Code authorize the Bay Area Air Quality Management District ("Air District") to impose fees to recover the reasonable regulatory costs of the Air District's programs;

WHEREAS, the Air District's Cost Recovery and Containment Policy, adopted by the Board of Directors most recently in December 2022, establishes a goal of 100 percent cost recovery for the Air District's direct and indirect costs of its fee-based programs;

WHEREAS, historically the Air District has not achieved this goal of 100 percent cost recovery for its fee-based programs, with insufficient fee revenues to cover the full direct and indirect costs of these programs;

WHEREAS, in 2026 Air District staff prepared a Cost Recovery Report that indicates that a $7.7 million cost-recovery gap continues to exist within the Air District's fee-based programs, with fee revenues for Fiscal Year ("FY") 2023-2024 to FY 2024-2025 covering only 89.9 percent of the direct and indirect program costs;

WHEREAS, the Board of Directors has determined for FY 2027 that there is a need to increase fees to adjust the fees for inflation and to reduce the misalignment between fee revenues and the costs of associated Air District regulatory programs;

WHEREAS, to address this need, Air District staff has prepared proposed amendments to the Air District's fee regulation, Regulation 3 (Fees);

WHEREAS, Air District staff has prepared a detailed staff report discussing the proposed amendments to Regulation 3, which is incorporated herein by reference;

WHEREAS, as discussed in detail in the staff report, the proposed amendments to Regulation 3 would increase Schedule G5 by 3.6 percent, Schedule E by 8.8 percent, and would increase fee schedules with a current cost recovery percentage less than 87.3 percent by 15 percent, with the current cost recovery percentage based on the previous three-year average in all cases;

WHEREAS, the proposed amendments would also make the following changes to Regulation 3:

- Increase Fee Schedules I and M by the annual Consumer Price Index for Bay Area Urban Wage Earners and Clerical Workers (CPIw);
- Increase administrative fees by CPIw;
- Reduce fees in Schedule R (Equipment Registration Fees) by 20 percent;
- Specific changes to the risk assessment fees in Schedules B (Combustion of Fuel), C (Stationary Containers for the Storage of Organic Liquids), and D (Gasoline Transfer at Gasoline Dispensing Facilities, Bulk Plants and Terminals).
- Section 3-304: Add specificity to the existing initial fee requirement for clarity.
- Subsection 311.6: Create a new Emission Reduction Credit Certificate Reissuance Fee.
- Subsection 3-405.1, revise the language relating to failure to pay invoices for renewal of Authorities to Construct (AC) to indicate that the AC will be cancelled.
- Subsections 3-405.2.1 and 3-405.2.2: Remove late fee provisions.
- Subsection 3-405.4.1: remove the 25% reinstatement fee if a Permit Renewal (Permit to Operate) invoice is not paid 30 days from the invoice due date.
- Subsection 3-405.5: remove the 25% additional late fee if a Permit Renewal invoice (Registration and Other Fees) is not paid 30 days from the invoice due date.
- Reclassify gasification/pyrolysis sources from Schedule F (General miscellaneous) to Schedule G1.

WHEREAS, although consideration of socioeconomic impacts is not legally required under Health & Safety Code section 40728.5 because the proposed amendments will not significantly affect air quality or emissions limitations, the Board of Directors has nevertheless actively considered the socioeconomic impacts of the proposed amendments and has reviewed and considered the Socioeconomic Impact Analysis prepared for the Air District by Eastern Research Group, Inc., which concludes that the proposed amendments will not have any significant adverse socioeconomic impacts;

WHEREAS, Air District staff discussed the proposed amendments to Regulation 3 at public workshops on February 26 and March 10, 2026;

WHEREAS, the Finance and Administration Committee of the Board of Directors held regularly scheduled public meetings on March 18 and April 15, 2026, at which the proposed amendments to Regulation 3 were discussed, and at which oral or written presentations could be made on the subject of the proposed amendments;

WHEREAS, the Board of Directors held a public hearing on April 29, 2026, to consider and discuss the proposed amendments to Regulation 3, and to hear comments and testimony from members of the public, in accordance with all provisions of law;

WHEREAS, on April 18, 21, and 23, 2026, as required by Health and Safety Code section 40725, Air District staff published notice in newspapers that the Board of Directors would hold a public hearing on June 3, 2026, to consider adopting the proposed amendments, and in this notice invited written public comment;

WHEREAS, Air District staff also distributed and published this notice on the Air District's website and provided it to the California Air Resources Board;

WHEREAS, Air District staff now recommends adoption of the proposed amendments to Regulation 3 and its associated fee schedules as set forth in Attachment A hereto; and

WHEREAS, this Board of Directors concurs with Air District staff's recommendations and desires to adopt the first set of proposed amendments to Regulation 3 and associated schedules as set forth in Attachment A hereto.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Bay Area Air Quality Management District does hereby adopt, pursuant to the authority granted by law, the proposed amendments to Regulation 3 (Fees) as set forth in Attachment A hereto and discussed in the staff report, with instructions to staff to correct any typographical or formatting errors before final publication of the text of the proposed amended rule as adopted.

BE IT FURTHER RESOLVED that the Board of Directors the Bay Area Air Quality Management District makes the following findings of necessity, authority, consistency, nonduplication, and reference, pursuant to Health & Safety Code Section 40727:

1. A need exists for the proposed amendments to Regulation 3 attached hereto as Attachment A in order to ensure that the Air District recovers the reasonable regulatory costs of implementing its fee-based programs and to move the Air District closer to the Cost Recovery and Containment Policy goal of 100 percent cost recovery;
2. The Air District has authority to adopt the proposed amendments to Regulation 3 attached hereto as Attachment A as provided for in sections 40702, 41512, 41512.5, 42311, 42364 and 40726 of the Health & Safety Code;
3. The proposed amendments to Regulation 3 attached hereto as Attachment A are written or displayed so that their meaning can be understood by the persons directly affected by the regulation;

4. The proposed amendments to Regulation 3 attached hereto as Attachment A are in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations;
5. The proposed amendments to Regulation 3 attached hereto as Attachment A do not impose the same requirements as any existing state or federal regulation, and they are necessary and proper to execute the power and duties granted to and imposed upon the Air District by providing revenues to the Air District to cover a portion of the costs of administering the Air District's fee-based programs;
6. The proposed amendments to Regulation 3 attached hereto as Attachment A implement, interpret, and make specific the provisions of Health & Safety Code section 40702 (adoption of regulations to execute powers and duties conferred on Air District), section 42311 (fees for permitted stationary sources), section 41512 (fees related to emissions sampling and testing), section 41512.5 (fees for emission sources not included within permit system), and section 42364 (fees for hearing board proceedings).

BE IT FURTHER RESOLVED that the effective date of the proposed amendments attached hereto shall be July 1, 2026.

The foregoing resolution was duly and regularly introduced, passed and adopted at a public meeting of the Board of Directors of the Bay Area Air Quality Management District on the Motion of Director _____, seconded by Director _____, on the ____ day of _____, 2026 by the following vote of the Board:

AYES:

NOES:

ABSTAIN:

ABSENT:

_____

Lynda Hopkins
Chair of the Board of Directors

ATTEST:

_____

Marcy Hiratzka
Clerk of the Board of Directors

Bay Area Air District

Proposed Amendments to Air District Regulation 3: Fees

Board of Directors Meeting

April 29, 2026

Fred Tanaka, Senior Manager, Engineering Division
Mark Gage, Principal Air Quality Engineer, Engineering Division

Recommended Action

No action is requested today – This public hearing is for considering and taking public testimony on the proposed amendments only.

The Board of Directors will consider adoption of the proposed amendments on June 3, 2026.

Presentation Outline

- Background
- Proposed Fee Regulation Amendments
- Impacts
- Budget & Fee Regulation Schedule
- Next Steps

Cost Recovery Background

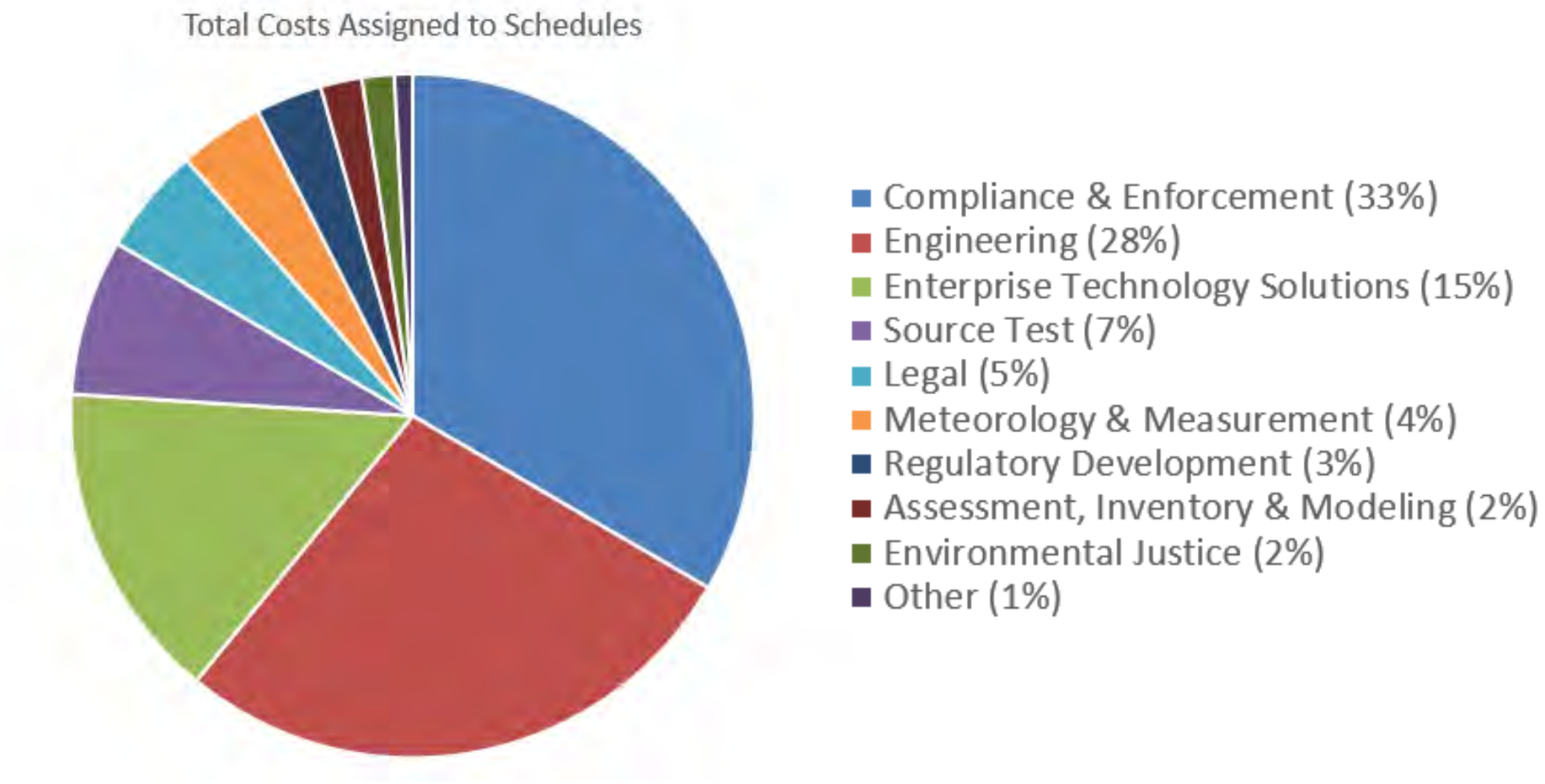
- Air District has authority to assess fees to recover the reasonable costs of its regulatory programs
- In December 2022, the Board set a goal of 100% cost recovery for fee-based activity
- Factors for cost recovery constantly change
- By law, we are limited to increasing permit fees to the true cost of the services provided, with a prohibition on increasing any existing fees for permits by more than 15% in any calendar year

Cost Recovery Background (cont.)

Covered by Regulation 3 Fees	Not Covered by Regulation 3 Fees
• Permitting programs • Notification programs (asbestos, open burn) • Compliance assistance/enforcement of permitted and registered facilities • Source Testing at permitted facilities • Rule development for regulated industries • Emissions inventory from regulated industries • Other (e.g., Regulation 11-18 Health Risk Assessments) • Indirect costs (E.g., Human resources, Finance, technology infrastructure)	• Assembly Bill (AB) 617 Community Engagement & Outreach (non-permitted issues) • Ambient Air Monitoring • Climate change work – Non-permitted sources • Communications • Mobile sources • Planning • Rule development for non-permitted sources • Strategic Incentives – “Grants” (e.g., wood-burning device replacement, Carl Moyer Program, Vehicle Buy-Back) • Indirect costs

➢ This list is not exhaustive

Cost Recovery Background (cont.)



Cost Recovery Background: Limitations

- Facilities or programs that are below cost recovery are not paying their fair share
- Reaching 100% cost recovery for some fee schedules may take several years
- Cost recovery analyzes past revenue and cost data
- Cost recovery does not account for work backlog or level of service
- Cost recovery does not account for required/future resource needs
- A fee schedule’s cost recovery rate does not reflect whether adequate resources exist
- The gap in cost recovery is filled with other revenue sources

Cost Recovery Background: Trends

Overall Cost Recovery

	FYE 2010	FYE 2017	FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
By Year	63.8%	81.2%	83.0%	84.7%	83.2%	83.8%	85.9%	92.3%	87.7%	89.7%
3-Year Average		82.2%	81.9%	83.0%	83.6%	83.5%	84.3%	87.4%	88.7%	89.9%

FYE = Fiscal Year Ending (e.g., FYE 2025 means fiscal year 2024 – 2025)

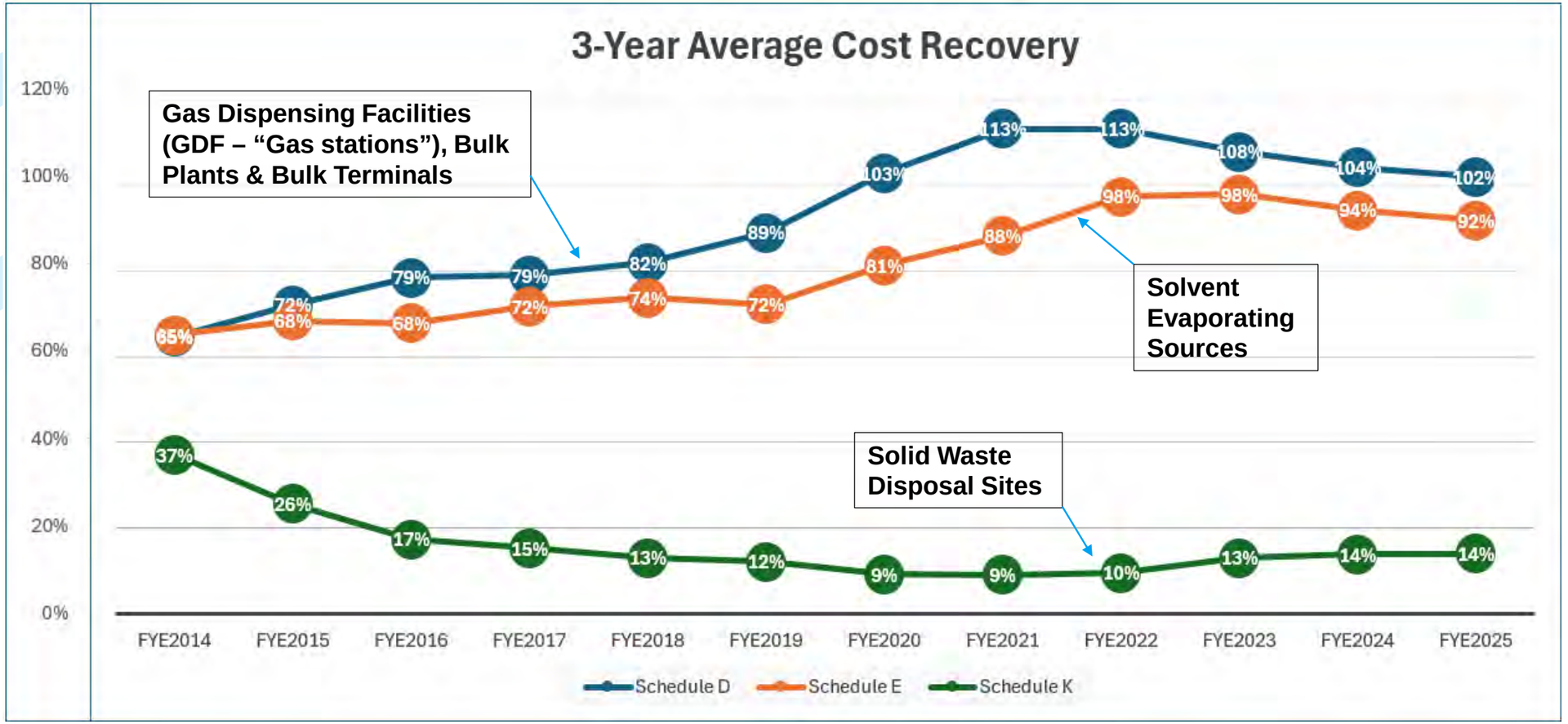
Cost Recovery Background: Trends (cont.)

FYE 2023 - 2025 Average Revenue	Number of Fee Schedules, (change from previous year)	Percentage of Fee Schedule Revenue
110% or more of costs	5 (NC)	18.6%
100 to <110% of costs	2 (+1)	34.9%
95 to < 100% of costs	2 (NC)	9.8%
75 to < 95% of costs	2 (NC)	15.0%
50 to < 75% of costs	5 (-1)	20.0%
25 to < 50% of costs	3 (NC)	0.8%
Less than 25% of costs	2 (NC)	0.9%

- Specific fee schedule cost recovery levels are published in the Cost Recovery reports
- Over 63% of fee schedule revenue is at least 95% recovered
- Less than 2% of fee schedule revenue is grossly under-recovered

NC = No change

Cost Recovery Background: Trends Example



Cost Recovery Strategies

At the December 17, 2025, Finance and Administration Committee meeting, the members were in favor of a smoother approach for schedules closer to 100% cost recovery.

Revenue from Fee Schedule (3-year average)	FYE 2025	FYE 2026	FYE 2027
110% or more of costs	-	-	-
100 to <110% of costs	CPIw	CPIw	CPIw
95 to < 100% of costs	+15%	CPIw	3.6% (CRR @ 98.70%)
85 to < 95% of costs	+15%	+15%	8.8% (CRR @ 93.55%)
75 to < 85% of costs	+15%	+15%	+15%
50 to < 75% of costs	+15%	+15%	+15%
Less than 50% of costs	+15%	+15%	+15%

CPIw = The annual Consumer Price Index of the previous year for Bay Area Urban Wage Earners and Clerical Workers

CRR = Cost recovery rate

Cost Recovery Background

Step 1

- Determine the **prior FYE** 3 Year Average cost recovery percentage by Fee Schedule:

3-Year average fee-related revenues ÷ 3-Year average fee-related expenses = **3-Year average Cost Recovery Rate (CRR)**

Step 2

- Using the **Cost Recovery Fee Percentage** (Step 1), determine a Proposed Fee Schedule's **next FYE** increase, constrained to 0% minimum, 15% maximum

100% − **CRR** + **CPIw** = **Next FYE Proposed Fee Schedules, %**

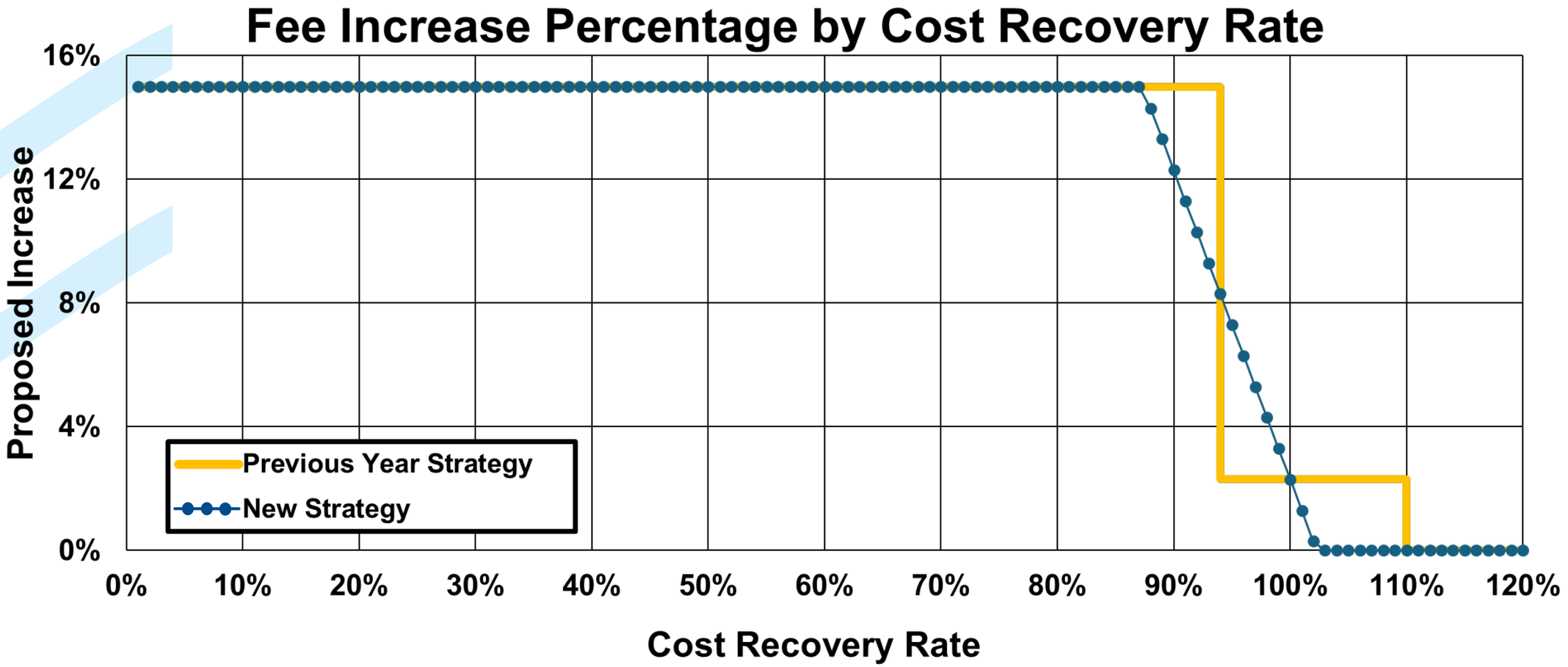
Step 3

- Determine the next **FYE** Projected Revenue for the Proposed Budget

Current FYE Projected Revenue by Fee Schedule × **Fee Schedule Increase Percent (from Step 2)** = **Next FYE Projected Revenue for Proposed Budget**

CPIw = The annual Consumer Price Index of the previous year for Bay Area Urban Wage Earners and Clerical Workers

Cost Recovery Background (cont.)



Fee Reductions

- Schedule R – Equipment Registration: Reduce fee by 20%
  - Non-permitted dry cleaning machines, small combustion, small graphic arts operations, charbroilers
  - When facilities only have registered equipment, they are typically small businesses
  - Revenue impact is approximately a $52,000 reduction

Fee Removals

Remove language

- Section 3-405.4.1.2 (Fees Not Paid, Reinstatement of Lapsed Permit to Operate)
- Section 3-405.5 (Fees Not Paid, Registration and Other Fees)

Discussion

The current language imposes a total late fee of 25% if an invoice is not paid in full after 30 days (delinquent fee). By removing these subsections, there is only one 10% late fee if the invoice is not paid in full by the invoice due date. The intent is to streamline the process of getting parties in compliance from a fee standpoint. Many facilities paying the delinquent fee were small businesses.

Proposed Fee Regulation Amendments

Proposed Change in Fees	Fee Schedules	FYE 2025 Fee Revenue %, ($)
20% decrease	R	0.4% ($266K)
0% increase	B, C, D, L, N, T, X	44.4% ($35M)
2.3% increase (CPIw)	Section 300 fees, M, I	15.0% ($1.6M)
3.6% increase	G5	1.2% ($1.7M)
8.8% increase	E	7.1% ($4.7M)
15% increase	A, F, G1, G2, G3, G4, H, K, P, S, V*, W	31.9% ($23.9M)

Weighted average proposed fee increase = *+5.7%*

*Open Burning Operation Fee and Stubble Burn Operation Fee only

M = Million

Other Proposed Changes – General

- General clean-up (e.g., remove obsolete language, typos)
- Increase administrative fees in Section 300 by CPIw, excluding:
  - Permit transfer fee (Section 3-307)
  - Upfront public notice fee (Section 3-318.1)
- Increase Schedule M by CPIw

Other Proposed Changes – General (cont.)

- Schedule B – Combustion of Fuels
  - Align calculation for the Risk Assessment Fee (RAF) consistent with other schedules.
- Schedule C – Stationary Containers for the Storage of Organic Liquids
  - Align calculation for the Risk Assessment Fee (RAF) consistent with other schedules.
- Schedule D.A – Gasoline Transfer at Gas Dispensing Facilities (GDF)
  - Increase the RAF by 15% in Schedule D.A.4.b consistent with existing GDFs for the same work.

Other Proposed Changes – New Fee

New fee

- Section 3-311.6 (Emission Reduction Credit Reissuance Fee) equal to the filing fee which is proposed to be $684

Discussion

Before the Air District can honor an Emission Reduction Credit (ERC) certificate, the owner must surrender the ERC. Last year, the Air District received several requests where the applicant did not have the certificate and was not the contact of record. Considerable effort is required to verify ownership, especially when the facility is shutdown and the contact of record is not available.

Other Proposed Changes – Reclassification

Reclassify general miscellaneous sources in Schedule F

- Move gasification/pyrolysis sources from Schedule F (General miscellaneous) to Schedule G1
- Revenue impact is an approximate $28,000 increase in Permit to Operate fees

Discussion

Source categories being charged Schedule F are reviewed against the level of effort. Schedule F (Miscellaneous – Unclassified) are charged when no other fee schedule applies. Due to the complexity and interest of these facilities, these projects often involve public workshops, legal discussion, increased enforcement, modeling, source testing and emissions verification.

Impact on Large Facilities – Permit Renewal

Refineries

Annual Permit Fee Increase/Decrease (Fiscal Year Ending)							
	2025, % Fee Change			2026, % Fee Change			2027, Projected % Fee Change
	Predicted	Actual	Actual Renewal Fees paid	Predicted	Actual	Actual Renewal Fees paid	Predicted
Chevron	8.5	9.3	$5.0 million	9.7	9.5	$5.5 million	6.3
Martinez Refining	7.9	-0.2	$5.7 million	4.4	3.2	$5.9 million	7.0
Phillips 66	8.6	-6.2	$2.8 million	3.8	-2.2	$2.8 million	8.4
Tesoro (Marathon)	9.1	16.5	$1.9 million	-1.6	8.0	$2.0 million	6.2
Valero	9.0	4.3	$3.5 million	13.7	4.6	$3.8 million	7.0

Total Permit renewal fees paid
by refineries in FYE 2026 = $20M

Impact on Small Facilities – Permit Renewal

Facility Type	Current Renewal Fee: Not OBC	Current Renewal Fee: OBC	Proposed Renewal Fee: Not OBC	Proposed Renewal Fee: OBC
Backup Engine* (Schedule B)	$563	$644	$566 0.5%	$647 0.5%
GDF "Gas Station" (Schedule Da)**	$2,860	$3,271	$2,863 0.1%	$3,270 0.1%
Auto Body Shop* (Schedule E)	$1,378	$1,576	$1,491 7.6%	$1,705 7.6%
Coffee Roaster (Schedule F)	$1,076	$1,231	$1,220 11.8%	$1,395 11.8%
Dry Cleaning Machine (Schedule R)	$259	$259	$207 -20%	$207 -20%

*Minimum fee – Permit fees are greater for larger engines or higher solvent usage sources

**Common configuration with 6 islands with 3-triple product nozzles

OBC = Overburdened Community

Fee Reduction Summary

These are the changes that provide relief, especially to small businesses.

- Proposed 20% reduction in registration fees (Schedule R)
- Proposal to eliminate delinquent permit renewal fees
  - This will remove approximately $386,000 in delinquent fees already invoiced

Efficiencies and Cost Containment Efforts

Examples:

- There was a 17% increase in the applications processed in 2025 compared with 2024
- Eliminated backlog of 147 Health Risk Assessments. Pivot from backlog reduction to improving consistency, transparency, and automation
- Savings of $4 Million per year in ongoing costs for the decommissioning of the legacy permitting system
- Saving of $600,000 per year in ongoing maintenance and operational costs for the legacy permitting system

Efficiencies and Cost Containment Efforts (cont.)

Examples:

- In October 2023, Engineering fully transitioned to the Permitting & Compliance System (PCS)
- In July 2025, functionality for Compliance & Enforcement upgraded to the current PCS platform
- In November 2025, Source Test transitioned into PCS
- Permit Efficiency Task Force and Ad Hoc Committee: Input for policy/rule improvements

Budget & Fee Regulation Schedule

Description	Date
Finance and Administration Committee briefing	December 17, 2025
Public workshop for Regulation 3 amendments	February 26, 2026
Budget Workshop	March 10, 2026
Finance and Administration Committee briefing	March 18, 2026
Finance and Administration Committee briefing	April 15, 2026
First public hearings on budget & Regulation 3 to receive testimony	April 29, 2026
Written comments on proposed amendments to Regulation 3 due	May 15, 2026
Second public hearings on budget and Regulation 3 to consider adoption	June 3, 2026
Budget and fee amendments effective, if adopted	July 1, 2026



Summary of Public Comments

Comment regarding delaying fee increases until level of service improves

- Efforts are already underway to improve level of service
  - Board approved new positions in September 2025
  - Efficiencies are also addressed by reallocating resources, training, improved tools, program efficiencies, and overall cost containment
  - Improvements are part of the strategic plan and ideas are collected from the Permit Efficiency Taskforce
- Cost recovery addresses work that has already occurred with existing resources
- Delaying fee increases would extend timeframe to meet 100% cost recovery and/or drop level of service. Fees fund program activities (level of service), including inspections & enforcement, emissions testing, rule development, as well as permitting

Summary of Public Comments (cont.)

Comment regarding timekeeping: Staff should bill time to specific projects (e.g., facility, device)

- Fees fund Air District programs such as compliance verification, emissions inventory, source testing and rule development. With few exceptions, facilities/entities are not billed based on specific work
- Adding more data to the timekeeping process would reduce efficiency
- As our tools improve, we will explore the possibility to have the system provide additional automated tracking

Recommended Action

No action is requested today – This public hearing is for considering and taking public testimony on the proposed amendments only.

The Board of Directors will consider adoption of the proposed amendments on June 3, 2026.

Questions & Discussion

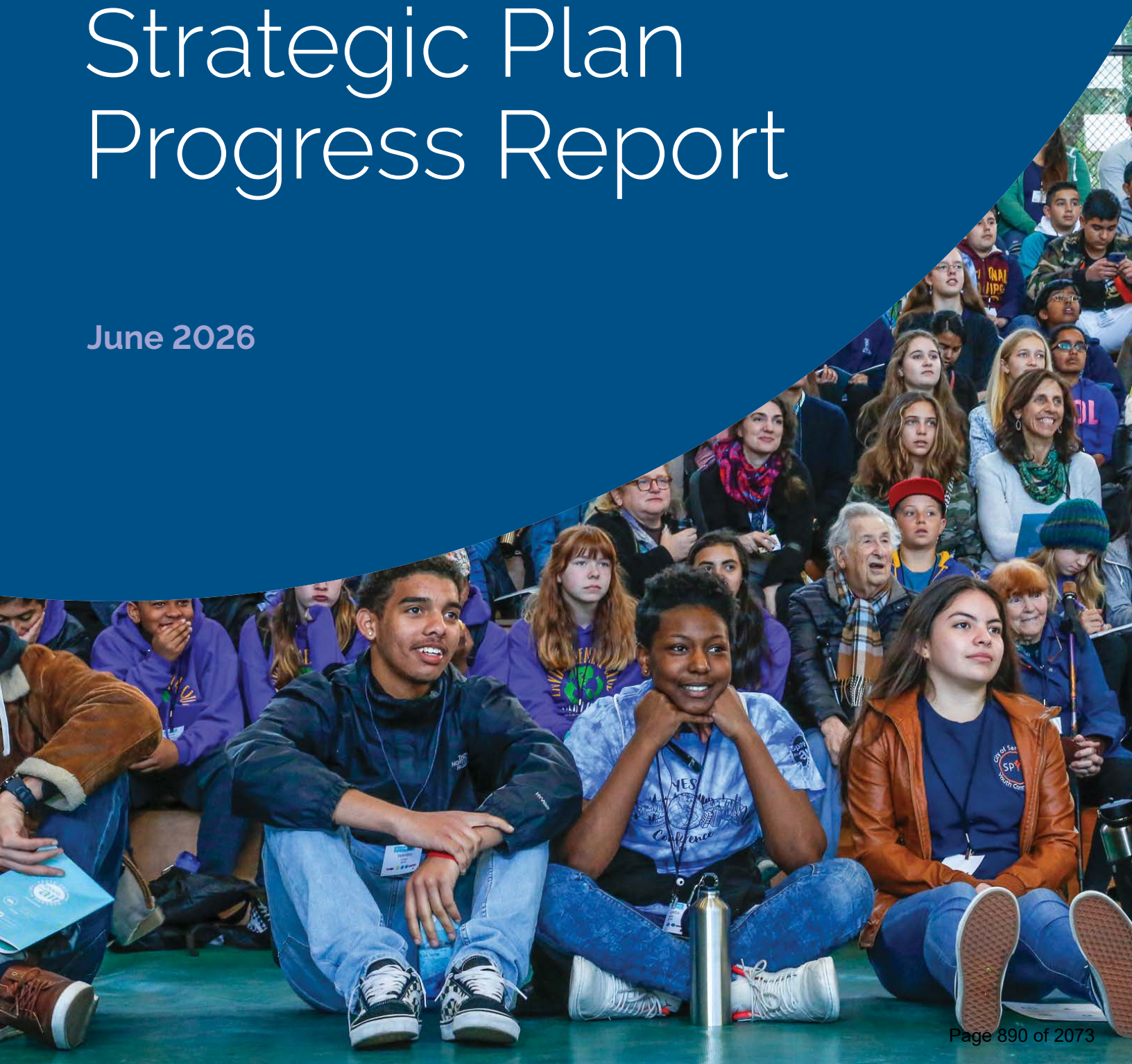
For more information:

Fred Tanaka | Senior Manager | ftanaka@baaqmd.gov

Bay Area Air District

Path to 2029:
Strategic Plan Progress Report

June 2026



Contents

Overview 04

Featured Success Stories 06
Bay Area Plans Path to State Climate Goals 06
Reinvesting in Communities 06
Community Partnerships Expand 07
Community Science in East Oakland 08
Investing in People: A New Era of Professional Growth & Connection 09
At Your Service: Reimagining the Permitting Experience 10

Goal 1: Achieve Impact 13

Strategy 1.01 Change Approach to Air Quality 13
Strategy 1.02 Stronger Regulations 14
Strategy 1.03 Minimize Flaring 16
Strategy 1.04 Reimagine Funding 17
Strategy 1.05 Enhance Violation Investigations 18
Strategy 1.06 New Enforcement Policy 19
Strategy 1.07 New Climate Solutions 20

Goal 2: Advance Environmental Justice 23

Strategy 2.01 Community Partnership 23
Strategy 2.02 Collect Community Data 25
Strategy 2.03 Make Data Accessible 26
Strategy 2.04 Community Health Data 27
Strategy 2.05 Air Quality Complaints 28
Strategy 2.06 Talk with Communities 29
Strategy 2.07 Understand Local Air Pollution 30
Strategy 2.08 Community Directed Funds 32
Strategy 2.09 Address Legal Barriers 33
Strategy 2.10 Civil Rights Laws 34
Strategy 2.11 Cumulative Health Impacts 35

Goal 3: Foster Cohesion and Inclusion 37

Strategy 3.01 A Diverse Workforce 37
Strategy 3.02 Be Welcoming and Inclusive 38
Strategy 3.03 One Air District Community 39
Strategy 3.04 Environmental Justice Expertise 41
Strategy 3.05 Recognize Employees 41
Strategy 3.06 Support Employee Success 42

Goal 4: Be Effective, Accountable, and Customer-Oriented 45

Strategy 4.01 Timely Permits 45
Strategy 4.02 Transparent Permit Process 46
Strategy 4.03 Consistent Permits 47
Strategy 4.04 Improve Air Monitoring 49
Strategy 4.05 Improve Compliance Investigations 50
Strategy 4.06 Inspire Action 50
Strategy 4.07 Customer ServiceUnderway 52
Strategy 4.08 Air Quality Incidents 53
Strategy 4.09 Land Use Impacts 54
Strategy 4.10 Ensure Success 55
Strategy 4.11 Align Resources 56
Strategy 4.12 Report Progress 57

This document is a print version of the online report, found here:
strategicplan.baaqmd.gov

Overview

Overview

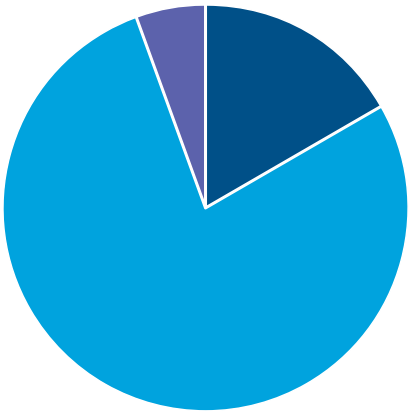
The Bay Area Air District's *2024-2029 Strategic Plan* marks a fundamental shift toward community-centered solutions, environmental justice, and organizational transparency. Since the plan's adoption, the Air District has launched over 580 initiatives designed to:

- **Achieve Impact:** We are shifting from a mostly regional approach to air quality planning to one that also prioritizes neighborhood-level pollution, while simultaneously strengthening regulations on refineries, enhancing violation investigations, and spearheading regional climate solutions to reach carbon neutrality by 2045.
- **Advance Environmental Justice:** We are partnering directly with overburdened communities to co-create solutions to local air pollution, collect community data, and reinvest over $95 million in penalty funds into local air quality projects.
- **Foster Cohesion and Inclusion:** We are building a "One Air District" culture by modernizing recruitment, relationship building, expanding mentorship, and integrating equity as a core competency across our workforce.
- **Be Effective, Accountable, and Customer-Oriented:** We are reimagining the service experience by "cutting the red tape" in permitting through real-time digital tracking. Beyond permitting, we are modernizing our air monitoring network, launching regionwide incident notification systems, and providing local governments with specialized tools to better integrate public health and air quality into land-use planning.

By integrating community expertise into technical rules and modernizing our digital systems, we are evolving into a more effective partner dedicated to protecting the health and environment of every Bay Area community.

Implementation Progress by Strategy

LEGEND	TOTAL
Early Planning	6
Underway	28
Nearly Complete	2
Completed	0



Featured Success Stories

Featured Success Stories

Over the past year, the Air District has reached several key milestones, with the most notable highlighted below.

Bay Area Plans Path to State Climate Goals

Strategy 1.07 New Climate Solutions



The Air District's Bay Area Regional Climate Action Plan (BARCAP) is a collaborative roadmap designed to help achieve statewide carbon neutrality by 2045. Through 16 measures targeting sectors like transportation, buildings, and energy, the strategy aims to reduce pollution while fostering economic growth and improving public health, particularly in frontline communities.

Developed with extensive public input, the plan requires a regional partnership involving over 30 agencies, local governments, and organizations to implement 57 specific actions. BARCAP provides a framework for businesses and residents to work together toward a sustainable, inclusive, and prosperous future. More information is available here.

Reinvesting in Communities

Strategy 2.08 Community Directed Funds

In 2024, the Air District transformed its approach to enforcement with the Community Benefits Penalty Funds Policy. This groundbreaking initiative ensures that when our air quality regulations are violated, the resulting penalties do not just sit in a general fund—they are reinvested directly into the communities most impacted by pollution.



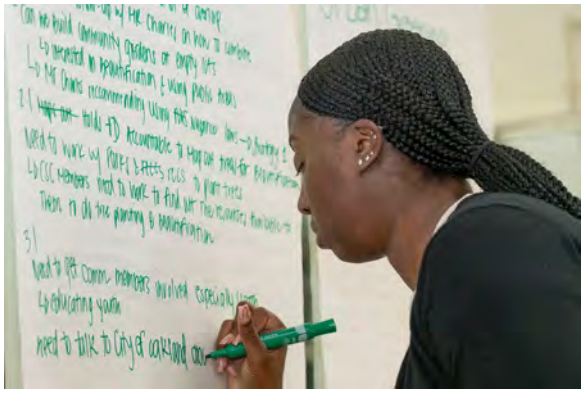
Through the Bay REPAIR (Reinvesting Penalties for Air Improvement and Resilience) program, enforcement actions have already generated over $132 million for local and regional projects. As of early 2026, the first round of grant applications is open to

distribute $95 million, focusing on communities like Benicia and Richmond. Grants are offered in three tiers:

- **Seed Grants:** $100k–$200k for community-led projects.
- **Opportunity Grants:** $500k–$5M for collaborative partnerships.
- **Catalyst Grants:** $10M–$40M for large-scale, multi-project collaborations.

Community Partnerships Expand

Strategy 2.01 Community Partnership



The Air District is deepening community partnerships to ensure residents directly shape the air quality solutions affecting their neighborhords. This strategy builds on the success of the AB 617 Program, which resulted in comprehensive emission reduction plans in West Oakland, Richmond-North Richmond-San Pablo and East Oakland, while continuing planning efforts in Bayview Hunters Point/Southeast San Francisco. By documenting and duplicating these and other collaborative models and others, we are expanding community involvement into critical areas like refinery regulations, enforcement policy, climate action planning, and accessible air monitoring data.

Our partnerships with community go beyond traditional outreach to include active working groups that advise on technical rules, policies, and data transparency. From establishing a Climate Advisory Group to co-developing particle fallout sampling programs, the Air District is integrating community knowledge across all our strategic goals. This collective approach ensures that our work is grounded in local priorities, leading to more equitable and effective air quality protection.

- **Stronger Regulations & Minimized Flaring (Strategies 1.02, 1.03):** The Refinery Technical Working Group advises on strengthening flaring rules and fenceline air monitoring.
- **New Enforcement Policy (Strategy 1.06):** A dedicated working group is building a new enforcement policy rooted in environmental justice and equity.
- **Climate Solutions (Strategy 1.07)**: The Climate Advisory Group established principles for the Bay Area Regional Climate Action Plan.

- **Community Data (Strategies 2.02, 2.03):** Community partners are doing community air monitoring and are working to make air quality data more accessible.
- **Air Quality Incidents (Strategy 4.08):** A new workgroup is developing a particle fallout sampling program in the refinery corridor to track air pollution events.

Community Science in East Oakland

Strategy 2.02 Collect Community Data



In partnership with Communities for a Better Environment and UC Berkeley, the Air District is leading a groundbreaking study to measure air quality in East Oakland with unprecedented detail.

A Two-Pronged Approach

A Neighborhood Sensor Network: In 2025, in partnership with Communities for a Better Environment and the University of California-Berkeley, we deployed 56 air sensors that measure fine particulate matter (like in woodsmoke) and 30 filtration units directly into the hands of residents. This network provides real-time data while empowering families with air purifiers and stipends to protect their homes during smoke events.

The Mobile Monitoring Van: Our high-tech "lab on wheels" spent over 32 days driving across East Oakland. By measuring pollutants every single second, the van can pinpoint "hotspots" near factories, highways, and community hubs that standard air monitoring stations might miss.

Turning Data into Action

By combining high-resolution data with local knowledge from the East Oakland Community Steering Committee, we can identify where pollution is coming from. Whether it's tracing a specific chemical or monitoring wind patterns, this data allows us to take targeted action to hold polluters accountable.

What's Next: We are currently analyzing the findings with the community. A full report and public dataset will be released in Summer 2026.

Investing in People: A New Era of Professional Growth & Connection

Strategies 3.03 & 3.06: One Air District Community and Employee Success

We are transforming how we support and develop the Air District's workforce, moving from traditional processes to a culture of continuous learning and relationship-building. By modernizing our digital tools and fostering internal connectivity, we are ensuring every employee feels informed, connected, and empowered to contribute to our shared mission.

A Seamless Start: We have reimagined the "First Day" experience to ensure every new hire feels connected to our mission immediately. Alongside a refreshed orientation and quarterly "One Air District" onboarding sessions, we have updated orientation materials to help new employees quickly grasp the organization's structure and goals.

Cultivating a "One Air District" Community: To foster a unified culture, we are broadening internal knowledge through dynamic new communication channels. This includes the launch of a refreshed staff newsletter, the "Airwaves" video news series, and a new internal directory to help colleagues learn more about one another across divisions.

Empowering Growth through Mentorship & Shadowing: Knowledge-sharing is one of our greatest assets. We successfully expanded our mentoring program to 60 active participants and are now developing a comprehensive job shadowing program. This initiative will allow employees to experience the work of their peers firsthand, broadening their understanding of organizational challenges and opportunities.

Building a Culture of Learning: We are providing the tools our staff needs to lead. Our new Managers' Learning Academy, specialized supervisor training, and Emerging Leaders Academy are all in motion. To support these efforts, we are also piloting internal collaboration hubs and creating a centralized 5-year training plan to make development accessible to everyone.



Strengthening Professional Relationships: To improve organizational culture, we've implemented "employee spotlights" at all-staff meetings and hosted multiple coffee chats and social events, including heritage celebrations. Looking ahead, a new staff ambassador program will further strengthen these cross-departmental bonds.

Performance with a Purpose: We have transformed the annual review process to align with strategic objectives, offering Individualized Development Plans to encourage personal growth. As we finalize these improvements, we are creating internal communication plans to highlight key program milestones and employee achievements, while shifting focus toward a Succession Planning Framework for the next generation of leaders.

At Your Service: Reimagining the Permitting Experience

Strategies 4.01, 4.02, 4.03, and 4.07



The Air District is modernizing its permitting process through initiatives aimed at improving efficiency, transparency, and consistency for projects in the Bay Area.

For businesses and community members alike, the permitting process at the Air District can sometimes feel like a complex maze. We are changing that narrative. By adopting a "customer-first" mindset, the Air District is transforming its regulatory framework into a service-oriented model that prioritizes speed, clear communication, and better reliability.

Speeding Up Success: Timely Decisions

We know that in the Bay Area, time is a critical resource. Under **Strategy 4.01 Timely Permits,** the Air District is actively cutting the red tape that leads to project delays. We have identified and are now addressing regulatory 'bottlenecks' by updating requirements for high-volume equipment, such as backup generators. Notably, we have cleared the backlog and successfully eliminated the logjam of health risk assessments (HRAs), significantly accelerating the permitting process for many permit applications.

Finally, we are building internal digital dashboards to track every application like a high-priority package. To ensure no project gets stuck in the queue, we are hiring more technical staff and forming dedicated "Project Teams" for complex permits. Our goal is simple: a permit process that keeps pace with the needs of the Bay Area.

Clarity at Your Fingertips: A Transparent Process

A high-quality service experience depends on the ability to track progress. Under **Strategy 4.02 Transparent Permit Process,** the Air District is modernizing its digital interface to provide exactly that. Applicants can now access real-time status updates directly from a new web portal, saving time for applicants and Air District staff. And we will continuously add new features to enhance accountability and predictability in the permitting process.

We are also redesigning our permitting website to be more intuitive and exploring AI-assisted tools to provide instant answers to status questions. For the broader community, a public-facing permit map is in development to provide a clear geographic view of local activity. By replacing technical jargon with plain language, we are ensuring that the process is accessible to everyone, not just industry experts.

A Promise of Fairness: Consistent and Reliable Results

Good service requires a predictable outcome. **Strategy 4.03 Consistent Permits** ensures that the "rules of the road" are clear, fair, and applied the same way every time. We are currently convening a permitting taskforce, comprised of various industry experts and community voices, to resolve long-standing ambiguity that could lead to confusion or other challenges.

To support this consistency, we are auditing our permitting processes and have developed preliminary guidelines for testing systematic civil rights compliance checks. We have also created a new "Consistency Coordinator" role to standardize our permit handbook and internal training, to ensure every applicant receives the same high level of professional service and that every community receives the protection they deserve.

Empowering Our People: A Customer-First Culture

Great service is only possible through a highly skilled and responsive team. Under **Strategy 4.07 Customer Service,** we are investing in professional development to ensure better outcomes for the public. By strengthening both technical knowledge and communication skills, our staff will be equipped to offer better guidance that can reduce the "back-and-forth" often associated with complex applications, effectively streamlining the process for applicants. Our commitment to customer service also ensures that highly technical air quality regulations are translated into understandable, accessible information for small business owners and community members alike.

Goal 1:
Achieve Impact

Goal 1: Achieve Impact

Goal 1 of the strategic plan, **"Achieve Impact",** focuses on improving air quality planning to provide measurable benefits for Bay Area residents. To do this, we are developing a more complete picture of local pollution by incorporating community perspectives and lived experiences into our data. We are also working to strengthen our regulations and enforcement policies to better hold industry accountable for violations. Additionally, we are collaborating with communities to redesign the distribution of electric vehicle funding and infrastructure for vulnerable populations while spearheading regional climate solutions and expanding support for our local government partners.

Strategy 1.01 Change Approach to Air Quality – Status: Early Planning

What this strategy does:

Shifts the Air District from primarily a regional approach to air quality planning to one that also addresses neighborhood-level pollution and environmental justice concerns.

Progress highlights:

- Updated air pollution models to better identify local sources.
- Refreshed air toxics inventory.
- Identified air pollution reduction concepts.

What's next: Prioritize measures that reduce inequitable exposures.

Strategy Progress

We are shifting from a more traditional regional focus on air pollution to include more local and equity-centered approach. This means not only reducing regionwide air pollution, but pollution at the neighborhood level. We do this by better understanding which sources cause the most pollution and health impacts, partnering with community to understand their concerns, and identifying the most impactful ways we can reduce pollution, both regionally and locally. This work will be mostly embodied in the Air District's new Clean Air Plan.



Understanding Sources of Air Pollution: We are improving our air pollution models to better estimate how sources like refineries, highways, gas stations and restaurants contribute to poor air quality in specific communities. We are also

updating our inventory of air toxics to understand the most accurate and up-to-date picture of air toxics emissions, as exposures to these emissions can increase the risk of cancer, cardiovascular disease, and other health impacts.

Partnering with Community: We are expanding our pipeline for community concerns to influence how we do air quality planning. We are also crafting plain-language reporting, so people can better understand exactly how local pollution could impact their health.

Identifying Impactful Measures: By mid-2026, we will finalize a set of actions or "measures" to reduce air pollution. This involves developing strategies designed to meet regional air quality standards while simultaneously addressing local air pollution. We are also developing a framework to prioritize measures that specifically reduce inequitable exposures - ensuring that the most burdened communities continue to benefit from the air pollution reduction measures we select.

Strategy 1.02 Stronger Regulations – Status: Underway

What this strategy does:

Enhances existing rules and develops new regulations to better protect public health.

Progress highlights:

- Adopted stronger wood burning rule.
- Developing metal recycling rule improvements.
- Forming new ideas for refinery monitoring.

What's next: Rule concepts for metal recycling and shredding, fugitive dust, air toxics, and refinery flaring and emissions tracking.

Strategy Progress

We are making our regulations more health protective by enhancing existing rules, developing new rules, and developing a regulatory review process. This past year we worked on tightening rules on wood burning devices, metal recycling and shredding operations, fugitive dust, health risk assessments, refinery flaring and monitoring. We are developing regulatory concepts for a new indirect source rule, which would address pollution from facilities like warehouses. Finally, a new internal Regulatory Review Program is being built



to ensure all rules are regularly updated to stay aligned with current health standards, and community and Board priorities.

Strengthening Existing Regulations: This past year we worked on tightening rules on wood burning devices, metal recycling and shredding operations, fugitive dust, health risk assessments, refinery flaring and monitoring.

- **Wood burning:** The Air District Board adopted changes to our wood burning regulation, Rule 6-3: Wood-burning Devices, on October 1, 2025. Key changes include a lower air pollution limit for when the Air District can ban wood burning, which would increase the frequency of Spare the Air alerts. Also, residents whose only source of heat is wood now must use an EPA-certified device registered with the Air District; open-hearth fireplaces no longer qualify for a sole source exemption. Emissions standards for new wood heaters were also updated to match current federal limits and incentives were made available to help homeowners switch to electric heat pumps.
- **Metal recycling and shredding:** We presented ideas for amending Rule 6-4: Metal Recycling and Shredding Operations at public workshops in June and July 2025. Concepts presented would change the regulation to include a move from self-reported "minimization plans" to a set of mandatory, enforceable best management practices, including practices that limit dust. This would improve enforceability of the rule by ensuring all sources are subject to the same level of control and nearby residents can be aware of facility requirements. We are also drafting fenceline air monitoring and notification requirements in this effort to meet the requirements of Assembly Bill 2851.
- **Fugitive dust:** We have drafted regulatory ideas and have begun public workshops to amend our rules on fugitive dust, Rule 6-1: Particulate Matter, General Requirements and Rule 6-6: Prohibition of Trackout. Rule concepts focus on shifting from self-managed approaches to mandatory, enforceable standards and, in limited cases, fenceline air monitoring. These ideas are primarily targeting, high-impact sources like construction, earthmoving, and industrial material handling.
- **Air toxics:** In October 2025, we held public workshops on draft amendments to our rule on air toxics rule, Rule 11-18: Reduction of Risk from Air Toxic Emissions at Existing Facilities. We incorporated comments and presented an update to a Board committee in November and December 2025. Staff proposed changes that would accelerate air toxic risk mitigation by shifting technical responsibility to facility operators. Key changes include requiring operator-prepared Health Risk Assessments (HRAs), mandatory, faster compliance timelines, and use of Dispute Resolution Panel for technical conflicts. These proposed changes will be considered by the Board of Directors at public hearing in June of 2026.

- **Refinery flaring:** We presented an update on refinery flaring to the Stationary Source Committee. We also convened an external working group to advise on strengthening flaring regulations and monitoring efforts, Rule 12-11: Flare Monitoring at Petroleum Refineries and Rule 12-12: Flares at Petroleum Refineries. We are also developing concepts to minimize flaring and will hold a public workshop on concepts soon.
- **Refinery fenceline air monitoring:** We are developing a rule to update and strengthen fenceline air monitoring requirements for refineries. We released a concept paper for public comment in February 2026 and continue to engage with stakeholders.

Developing New Rules: We are developing regulatory concepts for an indirect source rule, which would target facilities like warehouses. At a recent Air District Stationary Source Committee meeting, staff presented regulatory ideas and the committee discussed the general air quality impacts of indirect sources, specific issues related to warehouses, and how to prioritize actions, timelines, and resources.

Regulatory Review: We are building an internal Regulatory Review Program to ensure all rules are regularly updated to stay aligned with current health standards, and community and Board priorities.

Strategy 1.03 Minimize Flaring – Status: Underway



What this strategy does:

Reduces refinery flaring and improves transparency with affected communities.

Progress highlights:

- Convened technical working group.
- Developing flaring "101" tutorials.
- Planning public workshops in refinery communities.

What's next: Develop rule amendments and expand outreach.

Strategy Progress

We are minimizing flaring at oil refineries to lessen the impact flaring has on communities, including air pollution and odors. We are also increasing engagement and transparency around our efforts to minimize flaring.

Minimize Flaring: We are evaluating existing flaring minimization plans to strengthen Rules 12-11 and 12-12. A specialized technical working group—including community and industry

representatives—is developing rule amendments, with public workshops scheduled for early 2026.

Increase Public Engagement: A new flaring "101" guide is being developed to help neighbors understand refinery operations. Engagement plans include upcoming hybrid and in-person workshops in Martinez and Richmond.

Share Timely, Accessible Information To make incident data more accessible, the Air District is overhauling its website with easier navigation, better language access, and a prominent new banner for emergency updates. We also recently completed a paid social media campaign (ended December 2025) to encourage residents to sign up for a public notification tool that alerts them to local industrial incidents.

Strategy 1.04 Reimagine Funding – Status: Underway

What this strategy does:

Improves funding programs so they better benefit communities impacted by air pollution.

Progress highlights:

- Higher incentives and participation in Vehicle Buyback Program.
- Partnering with communities on incentive ideas.
- Reduced barriers on several incentive programs.

What's next: New incentive program to electrify marine ports and airports.

Strategy Progress

We are improving our funding programs so that they better benefit communities impacted by air pollution. To do this, we are asking community members what changes they want in our incentive programs and reducing barriers in applying for funds and increasing the variety of projects we fund.

Ask Community About Needed Changes:

Guided by community priorities, the Air District enhanced its Vehicle Buy Back program by raising the incentive to $2,000 and expanding eligibility to year-2000 models. These changes resulted in a sixfold increase in participation across the Bay Area since these changes were implemented.

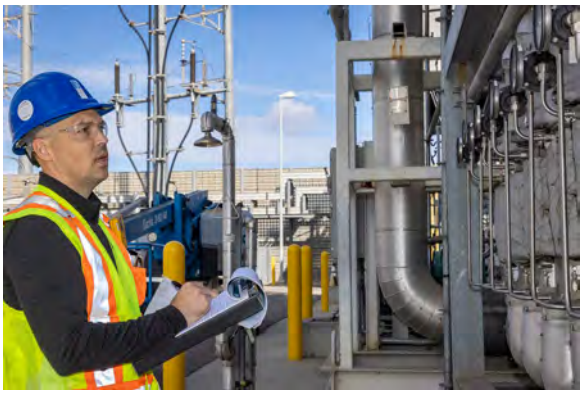


We are also developing an incentive program to accelerate electrification at marine ports and airports. To support this, we are collaborating with stakeholders at the Ports of Oakland and Richmond to assess equipment needs, infrastructure readiness, and potential barriers to transitioning to cleaner technology.

Additionally, we are actively working with communities in East Oakland and Bayview Hunters Point to identify new ideas to improve our incentive programs.

Reduce Barriers and Increase Project Variety: We have made progress in reducing funding barriers and increasing the types of projects we fund across several incentive programs:

- **Air Filtration:** Allocated $4 million for high-efficiency filters, with $3 million for schools in Richmond-San Pablo and San Francisco, and $1 million for a residential pilot program.
- **Transportation Grants:** Updated policies now provide higher grant amounts for bikeways, zero-emission vehicles, and trip-reduction projects in heavily impacted areas.
- **Mobile Source Upgrades:** Starting in 2026, new program increases award amounts and streamlines eligibility for zero-emission heavy-duty vehicle upgrades.
- **Lawn & Garden Pilot:** Launched a voucher program for electric equipment in Bayview-Hunters Point, Oakland, and Richmond, with plans to expand region-wide in late 2026.
- **EV Program Review:** Analyzing survey data and participant feedback this quarter to identify and remove barriers to our electric vehicle grant program, Clean Cars for All.



Strategy 1.05 Enhance Violation Investigations – Status: Underway

What this strategy does:

Improves violation investigation reports to strengthen legal actions and better identify and document impacts on community health.

Progress highlights:

- Improving violation investigation reports with community partners.
- Exploring ways to assess health impacts of violations.
- Creating investigation and reporting guidelines.

What's next: Share draft investigation reporting template with select community partners.

Strategy Progress

We are improving how we investigate and document violations of Air District regulations, especially in communities overburdened by air pollution. We are also exploring ways to better assess health, emission, and air quality impacts of violations.

Enhancing Investigation Procedure: We are developing guidance on violation investigation and report writing to strengthen legal actions and to prioritize investigations of violations that have the greatest impact on community health. Since October 2025, we have been developing investigation and report writing guidelines. Next steps include consulting with select community partners, followed by finalizing materials, training all inspectors, and implementing updated guidelines.

Better Quantifying Emissions and Health Impacts: An internal, cross-divisional team has created air quality violation case studies and is exploring mechanisms for assessing the health impacts of violations. This year, we will develop a plan to identify assessment approaches, best practices, and tools.

Strategy 1.06 New Enforcement Policy – Status: Underway

What this strategy does:

Develops a new enforcement policy rooted in environmental justice and informed by the people most impacted by air pollution.

Progress highlights:

- Launched dedicated community working group.
- Refined core policy concepts with community partners.
- Draft policy being readied for public input.

What's next: Share draft new enforcement policy with public for input.

Strategy Progress

In 2025, we began reassessing how we hold polluters accountable. We are developing a new enforcement policy rooted in environmental justice and informed by people most impacted by air pollution. This past year,



we successfully launched a dedicated Community Working Group to co-create the policy's initial drafts. Currently, we are refining these core concepts alongside our community partners.

Looking ahead, we will invite the broader public to review and shape the policy in Summer 2026.

Strategy 1.07 New Climate Solutions – Status: Underway

What this strategy does:

Develops new regional solutions for climate change and supports our partners in their efforts to advance climate change mitigation.

Progress highlights:

- Higher grant amounts for zero-emission projects in heavily polluted areas.
- Lead development of new regional climate action plan.
- Surveyed partners on how to improve programs to fund climate innovation.

What's next: Release targeted incentive program to electrify marine ports and airports.

Strategy Progress

We are maximizing the climate benefits of our incentive programs, have successfully led the development of a regional climate action plan, and are improving how we offer financial assistance to climate innovators through the Climate Tech Finance Program.

Maximizing Climate Benefits: To maximize the climate benefits of our incentive programs, we are working to increase electric vehicle (EV) and clean equipment adoption:

- **Expanded Outreach:** Launching text campaigns, "ride and drive" events, and mailers for the Clean Cars for All grant program. Partnering with nonprofits and analyzing survey data to identify and remove participation barriers.
- **Increased Funding:** Higher grant amounts for zero-emission projects in heavily polluted areas. Throughout 2026, we will be streamlining eligibility requirements and increasing awards for heavy-duty vehicle upgrades, specifically benefiting communities heavily impacted by air pollution.
- **Industrial Electrification:** A targeted incentive program for electric equipment at ports and airports (e.g., cargo handlers and harbor craft) is being developed.
- **Indirect Source Regulation:** Exploring new rules for "indirect sources" like warehouses to address the pollution generated by the traffic they attract.

Planning for Carbon Neutrality: The Air District led the creation of the Bay Area Regional Climate Action Plan, or BARCAP, designed to help steer the state toward carbon neutrality by 2045. The plan lays out 16 measures and 57 actions that will reduce climate pollution, improve air quality, create jobs and economic growth, and deliver better health and quality of life for those living in the Bay Area. These benefits will be especially felt in frontline communities, where people often experience greater impacts from changes in climate and air pollution.



Financing Climate Innovation: We are assessing our Climate Tech Finance Program for possible program improvements. We are drafting an impact assessment report incorporating feedback from 107 survey responses and 11 partner interviews. The final report will include program recommendations based on stakeholder insights.

Goal 2: Advance Environmental Justice

Goal 2: Advance Environmental Justice

Goal 2 of the strategic plan, **"Advance Environmental Justice",** establishes eleven strategies to dismantle air pollution disparities by partnering directly with overburdened communities. These initiatives focus on building community capacity through training and tools for local air monitoring, ensuring a transparent complaint process, and enabling direct public engagement in enforcement activities. A key priority includes creating a community-led process for allocating polluter penalties and advocating for stronger civil rights protections. We have made measurable progress across all strategies, with several key actions well on track for completion by 2029.

Strategy 2.01 Community Partnership – Status: Underway

What this strategy does:

Empowers communities to directly participate in the solutions to the air quality problems that impact them.

Progress highlights:

- Adopted and creating new community emission reduction plans.
- Community partner database established.
- Working groups informing enforcement, flaring, data accessibility and other issues.

What's next: Community working groups continue shaping air quality solutions.

Strategy Progress

Central to the strategic plan, this strategy empowers residents to co-develop solutions for the pollution impacting their specific communities. We are continuing our existing partnerships with community and expanding partnership to additional communities on a variety of efforts that directly advance other strategies in the strategic plan.



Continued Partnerships: Community-led steering committees have continued their progress in developing plans to reduce pollution in their neighborhoods through the AB 617 Program - a community-focused state initiative that requires local air districts to partner

with residents in overburdened neighborhoods to develop emission reduction plans. These efforts are the foundation of additional partnership initiatives we are undertaking under the Community Partnership strategy.

- **Richmond-North Richmond-San Pablo:** In May 2024, the Air District Board adopted "The Path to Clean Air" Community Emissions Reduction Plan. This plan, which received final California Air Resources Board approval in November 2024, includes 140 specific actions to reduce local emissions. The Community Steering Committee recently adopted a Year 1 Implementation Plan (running through late 2025) and is now transitioning into Year 2 priorities for 2026.
- **East Oakland:** Throughout 2025, the Air District and Communities for a Better Environment collaborated on a draft community emission reduction plan. A public open house was held in November 2025 to gather community feedback on proposed strategies, with the final plan adopted by the Air District Board in April 2026.
- **Bayview Hunters Point:** As the newest AB 617 community, Bayview is currently in the planning phase. The Community Steering Committee has held over 20 meetings as of late 2025 to co-develop its own emission reduction strategies with local advocates.

Expand Partnership Models: The Air District is scaling its impact by maintaining a partner database across six counties and utilizing proven collaboration models like the AB 617 Program, community grants, the Air Filtration Program, and Environmental Justice Navigators. Below are some examples of these partnerships and the strategies they advance:

- **Refinery Technical Working Group:** Convened a Refinery Technical Working Group comprised of representatives from industry (refineries and hydrogen plants), community-based organizations, governmental agencies, labor, and community members. Group advises the Air District on strengthening flaring regulations, fence-line monitoring efforts, and public education material. The working group's efforts directly advance **Strategy 1.02 Stronger Regulations** and **Strategy 1.03 Minimize Flaring.**
- **Enforcement Policy Implementation Working Group:** Convened a working group of community members interested in enforcement issues. Group is working on initial drafts of a new enforcement policy, which supports **Strategy 1.06 New Enforcement Policy.**
- **Climate Advisory Group:** Convened an advisory group to establish goals and principles for the Bay Are Regional Climate Action Plan, directly advancing **Strategy 1.07 New Climate Solutions.**
- **Air Monitoring Support:** The Air District is partnering with community to provide support in their air monitoring efforts This work directly advances **Strategy 2.02 Collect Community Data** and **Strategy 2.07 Understand Local Air Pollution.**

- **Community Technical Working Group:** Convened a community technical working group, comprised of members from the Community Advisory Council, to work with the Air District on making permitting data more accessible on our website, directly advancing **Strategy 2.03 Make Data Accessible.**
- **Particle Fallout Sample Workgroup:** Partnering with communities through a community workgroup to work on the development of a particle fallout sampling program in the refinery corridor. This work directly advances **Strategy 4.08 Air Quality Incidents.**

Strategy 2.02 Collect Community Data – Status: Underway

What this strategy does:

Builds the capacity of community members to collect and interpret air pollution data.

Progress highlights:

- Expanded technical support for community air monitoring.
- Held training workshops in East Oakland.
- Provided support to local monitoring efforts.

What's next: Workshop for community groups doing air monitoring.

Strategy Progress

We are building the capacity of community members to collect and interpret air pollution data by providing community members with training on air quality and air monitoring, resources to access and analyze data, training on how to best use those tools, standard data collection procedures, and data access and interpretation.

Provide Community with Data Collection Tools: We expanded the scope and renewed the contract for the Bay Air Center to increase the types of training offered and technical support available for communities. We also developed informational materials that explain assistance the Bay Air Center provides.

Provide Training: Through the Bay Air Center, we provided training on air quality fundamentals, air monitoring, and data access and interpretation for five community-based groups including the Community Advisory Council, Communities for a Better Environment and the East Oakland Community Steering Committee, Hope Collaborative, Safer



Together, and the current cohort of James Cary Smith grantees. We are also coordinating additional training for Verde Elementary parents, La Clinica de la Raza, Climate Action Pathways for Schools, California Interfaith Power & Light, Monument Crisis Center, and the Community Climate Change Teams of Climate Resilient Communities.

Collect Air Pollution Data: We continue to provide technical support to community-led air monitoring projects in Vallejo, Marin City, Rodeo, Pittsburg, Richmond, Bayview Hunters Point, and East Oakland. We also advise the Statewide Mobile Monitoring Initiative, a state-funded effort to use sensor-equipped vehicles to map local air pollution across over-burdened communities. This effort is being implemented by Aclima, who is conducting air monitoring in twenty Bay Area communities.

Strategy 2.03 Make Data Accessible – Status: Underway

What this strategy does:

Gives community members better access to air quality data.

Progress highlights:

- Completed air quality data inventory.
- Convened a community technical working group.
- Assessing community data needs.



What's next: Technical working group continues to define data needs.

Strategy Progress

We are making data accessible by giving communities better access to air quality data, understanding their data needs, including access and interpretation concerns. We have completed a data inventory and are comparing this inventory to community's expressed needs, while convening a community technical working group. With community members guiding the design, we are also creating a software application for presenting facility information on mobile devices.

Data Inventories: We have completed an inventory of available permitting data, emissions, modeling, and ambient air quality monitoring data. We are now finishing a list of enforcement and complaint data, which should be ready soon.

Community Input on Data Needs: We have convened a community technical working group to help identify and inform community data needs. We are also assessing community data needs by comparing what communities have told us they need through a variety of

efforts against our data inventory to identify data gaps. This work also supports efforts under **Strategy 1.1 Change Approach to Air Quality.**

Custom Approaches for Sharing Data: We completed a routine update to our air toxics emissions data for permitted sources, which has been published in an online mapping tool. We also completed and published an updated Bay Area greenhouse gas emissions inventory. We are also developing plans for an online data sharing platform for refinery community air monitoring and other data, which we expect to share with community soon. Finally, the community technical working group led the design of a software application for facility air quality data, with the application focused on ease of use and accessibility on mobile devices. The design work is largely complete with a clickable design delivered for review and approval by the technical working group.

Strategy 2.04 Community Health Data – Status: Early Planning

What this strategy does:

Provides communities with better health information.

Progress highlights:

- Completed nationwide recruitment to hire Health Effects Officer.
- Reviewed state's pollution mapping tool, CalEnviroScreen Draft 5.0
- Assessed new air toxics risk assessment methods.

What's next: New Health Effects Officer expected to come on board by Summer 2026.

Strategy Progress

This strategy is about providing communities with better health information, so they know the potential health implications of air pollution and can better participate in decision-making. We reviewed the state's mapping tool that ranks neighborhood vulnerability and are partnering with Johns Hopkins University to expand their toxicity database for to improve the accuracy of risk assessments, with all efforts to be overseen by the incoming Health Effects Officer.



Determine Health Impacts of Projects: We have completed a review of the state's pollution mapping tool, CalEnviroScreen Draft 5.0. The tool is like a "pollution report card" for every neighborhood (census tract) in the state. It combines data on environmental

hazards—like dirty air or contaminated water—with information about the people living there, such as their health and income levels, to see which communities are most vulnerable. Our assessment determined how methodological changes and data uncertainties drive shifts in how communities rank in terms of pollution levels. We are also partnering with Johns Hopkins University to apply their Multi-Effects Toxicity Database (METDB) to real-world permitting case studies to enhance cumulative risk assessments. Concurrently, we are recruiting a new Health Effects Officer to lead these efforts.

Collect and Share Local Health Data: The new Health Effects Officer will lead this effort and is expected to join the Air District by the summer of 2026.

Strategy 2.05 Air Quality Complaints – Status: Early Planning

What this strategy does:

Improves the Air District's complaint process to ensure it is effective and transparent.

Progress highlights:

- Soliciting ideas from public to improve complaint program.
- Updating complaint reporting and integrating new data accessibility tools.
- Improving coordination across regulatory agencies.

What's next: New protocols for weekend enforcement.

Strategy Progress

We are improving the complaint and investigation processes to ensure they are effective at addressing and resolving air quality concerns. We are exploring new ways to provide complaint information to the public, improving responsiveness and enhancing transparency of complaint outcomes.

Better Complaint Information to the Public: To improve information accessibility and transparency of complaints, especially for overburdened communities, like West Oakland, East Oakland, Bayview Hunters Point, and Richmond, we are executing the following:

- **Community-Led Reporting:** Partnering with community steering committees to co-design quarterly enforcement reports and data sharing protocols.



- **Streamlined Resources:** Launching a public complaint reporting guide, FAQs, and an interagency referral directory to simplify the complaint process.
- **Enhanced Transparency:** Upgrading digital platforms with infographics and creating new tools that provide mapping and access to violations and complaint histories.
- **Improved Accessibility:** Redesigning communication channels to ensure complaint reporting tools are intuitive and accessible.

Improve Transparency of Complaint Outcomes: We launched a new complaint data web tool and are developing an automated system to send investigation reports directly to complainants. To further improve public access, we are updating complaint reporting formats and evaluating additional platforms to streamline how community members track and view complaint outcomes.

Improve Responsiveness: To enhance responsiveness, we established new protocols for weekend enforcement after successfully completing a staff availability assessment and an inspection pilot in Bayview-Hunters Point. This year, we will launch quarterly weekend enforcement in select communities and work closely with our regulatory partners to target compliance concerns.

Strategy 2.06 Talk with Communities – Status: Underway

What this strategy does:

Establishes regular communication with communities to talk about their air pollution and compliance concerns and how we are addressing them, and to share related air monitoring data.

Progress highlights:

- Convened external enforcement working group.
- Worked with enforcement working group on draft meeting policy.
- Finalizing meeting policy with enforcement working group.



What's next: Release draft Enforcement Town Hall meeting policy for public input.

Strategy Progress

We are developing a formal "Enforcement Town Hall Meeting" policy to establish regular dialogue on compliance issues. Simultaneously, we are updating our air monitoring approach based on Community Advisory Council feedback, improving internal coordination to support local air monitoring, and creating a comprehensive roadmap and resource toolkit for public use.

Meet with Communities: We have made progress in developing a formal "Enforcement Town Hall Meeting" policy to establish a regular dialogue with communities. The Enforcement Policy Implementation Working Group has reviewed an initial draft policy and provided valuable feedback, which we will incorporate before releasing a final draft for broader public input. Once finalized, these town hall meetings will serve as a primary venue for sharing enforcement updates and addressing community concerns.

Share Monitoring Information: We shared ideas for updating our approach to air monitoring with the Community Advisory Council, including updating fenceline air monitoring and expanding community air quality investigations. We are refining our air monitoring programs by incorporating the community's air quality data needs identified by the Community Advisory Council. The Air District will continue to share information about air monitoring programs and resulting data in "Enforcement Town Hall Meetings" and other community workgroups.

Strategy 2.07 Understand Local Air Pollution – Status: Underway

What this strategy does:

Uses community experience, air quality modeling, and air monitoring to develop better understanding of local air pollution.

Progress highlights:

- Discussed Bayview Hunters Point air quality assessment with community.
- Conducting mobile air monitoring in East Oakland and Bayview Hunters Point.
- Deploying new refinery community air monitoring stations.

What's next: Use community air monitoring to better understand air pollution in Bayview Hunters Point.

Strategy Progress

We are deepening our understanding of local air pollution by sharing and discussing local air pollution data with communities, conducting mobile monitoring in East Oakland, and updating refinery community air monitoring stations and fenceline requirements.

Additionally, we are conducting local air quality analysis related to trucks and updating our website describing monitoring programs.



Understand Community Concerns: We have started this effort by sharing and discussing local emissions inventory, modeling, and exposure assessment data with Bayview Hunters Point/Southeast San Francisco community members. This work also supports efforts under **Strategy 1.1 Change Approach to Air Quality.**

Community Knowledge to Inform Air Monitoring: We are leveraging community knowledge to expand our community air monitoring investigations. We have worked with community members to update refinery community air monitoring, including deploying new air monitoring stations near refineries and strengthening refinery fenceline air monitoring requirements. By refining our data-collection programs and supporting local initiatives—like the Port of Oakland's fenceline project—the Air District is ensuring regulatory programs are directly informed by data related to community-identified air quality concerns.

Modeling Local Air Quality: We have completed air quality, exposure, and cancer risk modeling in Bayview Hunters Point. We also updated the risk screening tools for permitted facilities and rail yards and are currently modeling truck-related pollution exposure as part of the I-580 Truck Access Study.

Identify Community Monitoring Needs: We are identifying air monitoring needs in East Oakland and Bayview Hunters Point. In East Oakland, we are completing an air monitoring study with Communities for a Better Environment, and in Bayview Hunters Point we are supporting the Marie Harrison Community Foundation on their air monitoring and youth workforce development projects. Both efforts combine community wisdom with the Air District's advanced air monitoring to better understand local impacts from sources of air pollution and to collect air pollution data that is most needed.



Report on air pollution data we collect: We are updating our website describing our ambient air monitoring programs.

Strategy 2.08 Community Directed Funds – Status: Underway

What this strategy does:

Directs penalty money and other funds back to communities most impacted by air pollution violations.

Progress highlights:

- Established Community Investment Office.
- Launched program to distribute $95 million community benefit projects.
- Created People's Air Grant program.

What's next: Community projects selected for community benefits.

Strategy Progress

We are partnering with communities to direct penalty funds collected from air pollution violations back into community. To facilitate this work, we established a new Community Investments Office and created the Bay REPAIR program to direct penalty funds into projects that benefit community. Additionally, we are working with the Community Advisory Council and local community-based organizations to distribute additional funds through a People's Air Grant.

Penalty Funds: We successfully created a team to manage the distribution of penalty funds, through the Bay REPAIR (Reinvesting Penalties for Air Improvement and Resilience) program. The new Community Investments Office opened the first round of grant applications to distribute $95 million in funding, focusing on communities in Benicia, Richmond and surrounding areas. Beyond opening the fund, we have established clear usage guidelines, hosted informational applicant webinars, and secured the staff resources needed to ensure long-term success.

People's Air Grant: Through a People's Air Grant, we are distributing $3 million to support community-led air quality and public health projects in communities disproportionately impacted by air pollution. Developed in partnership with the Community Advisory Council and approved by the Board in May 2025, the program is funded through the Community Benefit Fund (distinct from enforcement, penalty, or mitigation funds). The call for applications is live, and staff are currently providing technical assistance and establishing a review panel to score applications and begin implementation.



Strategy 2.09 Address Legal Barriers – Status: Underway

What this strategy does:

Change laws that prevent the Air District from advancing environmental justice.

Progress highlights:

- New law raises penalty ceilings for air quality violations.
- Launched learning academy for state legislators.
- Held two webinars for state legislators.

What's next: Webinars for state legislators on Air District priorities.

Strategy Progress



To enhance public health and environmental justice, we successfully advanced legislation to triple penalty ceilings for air quality violations at Title V sources, such as refineries. Alongside these increased consequences for polluters, we are strengthening our legislative partnerships through a new learning academy.

New Law Raises Penalty Ceilings: To enhance public health and environmental justice, we successfully advanced legislation to triple penalty ceilings for air quality violations at Title V sources, such as refineries. This bill, AB 1465, authored by Assemblymember Buffy Wicks, updates a penalty structure that had not seen significant changes since 2001. By resetting these limits, the law provides a powerful incentive for facilities to prioritize safety and maintenance while increasing the financial consequences for those that violate air quality regulations.

Legislative Learning Academy: We are strengthening our legislative partnerships through a new learning academy designed to train legislative staff on Air District priorities and collaborative activities. This initiative ensures that legislative offices have the necessary context and tools to support clean air initiatives, especially in disadvantaged communities disproportionately impacted by pollution. Following two successful webinars held in late 2025, we are currently developing a new series for 2026 to continue this vital educational outreach.

Strategy 2.10 Civil Rights Laws - Status: Underway

What this strategy does:

Ensures Air District compliance with civil rights laws.

Progress highlights:

- Auditing permitting program to ensure alignment with civil rights laws.
- Hired a language access coordinator.
- Launching webpage dedicated to civil rights resources.

What's next: Deeper engagement with communities with language access barriers.

Strategy Progress

We are strengthening our commitment to equity by integrating civil rights protections directly into our core operations. These efforts include reviewing our enforcement and permitting process for civil rights and environmental justice impacts, expanding language access for diverse communities, and streamlining our non-discrimination procedures to ensure transparent and accountable service for all residents.

Reviewing Permitting: We are auditing our enforcement and permitting processes to ensure alignment with civil rights and environmental justice standards. We have developed preliminary "living" guidelines and are currently testing these via systematic compliance checks. Over the next year, we plan to expand outreach to academics and community groups to refine these guidelines.

Implementing Language Services Plan: To ensure meaningful access for Limited English Proficient (LEP) populations, we hired staff dedicated to overseeing the Air District's language services plan. Our next steps include establishing an internal working group and deepening community engagement to ensure LEP residents can fully participate in Air District programs and decision-making.



Advance Non-Discrimination in Operations: We are advancing non-discrimination by streamlining the reporting, investigation, and resolution of civil rights complaints and making resources available on dedicated webpages. We are training all employees in civil rights laws and their applicability to Air District functions.

Strategy 2.11 Cumulative Health Impacts – Status: Early Planning

What this strategy does:

Expands our understanding of the cumulative effects of air pollution and other health stressors on communities.

Progress highlights:

- Prioritized permitting process as the primary focus area.
- Adopted interim findings showing that combined stressors scientifically justify policy changes.
- Created assessment and action options for cumulative impacts.

What's next: Cumulative findings and recommendations to Board of Directors by early 2027.

Strategy Progress

Cumulative impacts occur when private businesses or governments make individual decisions that, when added together, can cause impacts that accumulate over time, negatively affecting people's health, well-being, and quality of life. The Air District's Advisory Council has developed a work plan to better understand and incorporate cumulative impacts into Air District decision making. The Council is expected to deliver findings and recommendations to the Board of Directors by early 2027.

Methods to Understand Cumulative Impacts: The Advisory Council has identified and analyzed several methods to understand cumulative impacts, moving beyond traditional one-pollutant-at-a-time assessments toward a more holistic approach. This includes evaluating methods to account for background pollution concentrations and summing hazard indices across multiple target organ systems to capture the combined risk of various chemicals. The Council has also explored incorporating non-chemical stressors—such as poverty, housing insecurity, and psychosocial stress—which can amplify health harms. To refine these methods, the Advisory Council studied existing models from states like New Jersey and Massachusetts and held collaborative sessions with the Community Advisory Council to ensure that qualitative community perspectives are integrated alongside quantitative data.

Consider Cumulative Impacts in Decisions: The Advisory Council has prioritized permitting for new and modified facilities as its primary focus for considering cumulative impacts in Air District decision making after community groups identified it as a top environmental justice priority. This decision centers on the Council's goal to minimize added burdens in already impacted areas by implementing "best practices" where they can have the most immediate regulatory effect. While the Council recognizes other critical areas like stationary source regulations, compliance, and incentives, it determined that the framework developed for permitting could serve as a scalable model for these additional focus areas.

Goal 3: Foster Cohesion and Inclusion

Goal 3: Foster Cohesion and Inclusion

Goal 3 of the strategic plan, **"Foster Cohesion and Inclusion",** outlines six strategies to build a more diverse and united One Air District. These initiatives prioritize creating a workforce that reflects the communities we serve while fostering a deep sense of belonging through relationship-building and enhanced internal communications. Additional strategies focus on expanding professional development and recognizing employee contributions to boost morale, retention, and overall organizational effectiveness. We have made progress on every strategy under Goal 3, with most initiatives on track for completion by 2029.

Strategy 3.01 A Diverse Workforce – Status: Underway

What this strategy does:

Ensure the Air District's workforce is diverse and reflective of the communities we serve.

Progress highlights:

- Implementing equity-focused interview tools.
- Expanding employee support networks.
- Increased mentorship participation rate by 30 percent.

What's next: Mandatory equity training for all supervisors and managers.

Strategy Progress

To foster a more equitable workplace, we are modernizing our internal policies to prioritize diversity, inclusion, and career advancement. These efforts range from dismantling structural biases in recruitment and hiring to providing tailored professional development and expanding employee support networks.
By investing in mentorship, allyship, and transparent growth pathways, we are ensuring our workforce reflects and supports the diverse communities we serve.



Modernize Recruitment and Hiring Practices: We are actively dismantling structural biases in our hiring process by implementing equi-ty-focused interview practices and expanding our mentorship programs to include temporary

employees and college interns. To diversify our workforce, we recently hired an environmental justice law fellow and launched targeted marketing to reach underrepresented candidates. Moving forward, we are developing data analysis tools to track applicant demographics and conducting surveys to create clearer pathways to permanent employment for our fellows and interns.

Tailored Professional Development Programs: To support the advancement of employees from diverse backgrounds, we successfully increased mentorship participation by 30% and launched an Emerging Leaders Academy. We also provided specialized training in resume building and interview skills to empower staff in their career growth. Our next phase includes implementing mandatory equity training for all supervisors and managers while offering employees the opportunity to create individualized professional development plans.

Strengthen Employee Support and Allyship: We are fostering a more inclusive workplace culture through comprehensive allyship workshops and newly expanded guidelines for Employee Resource Groups (ERGs). These initiatives provide staff with the tools to support one another and advocate for equity internally. We are currently focused on establishing additional identity-based ERGs and hosting networking conversations to ensure every employee has a dedicated space for connection and support.

Strategy 3.02 Be Welcoming and Inclusive – Status: Underway

What this strategy does:

Ensures everyone in the organization understands and respects the value of a diverse workforce.

Progress highlights:

- Modernizing procurement systems to diversify supplier pool.
- Established comprehensive diversity training calendar.
- Held staff workshops on diversity and mental health.



What's next: Developing new hiring best practices to ensure equity.

Strategy progress

We are embedding equity into our core operations by modernizing our procurement systems to diversify our supplier pool and drafting new guidelines to incorporate socio-economic considerations into all

Board decisions. To support a more inclusive culture, we've launched a continuous learning calendar and held several workshops on diversity and mental health.

Strategy Progress

We are embedding equity into our core operations by modernizing our procurement systems to diversify our supplier pool and drafting new guidelines to incorporate socio-economic considerations into all Board decisions. To support a more inclusive culture, we have launched a continuous learning calendar and held several workshops. Our current focus is training staff in these updated procedures and developing standardized best practices to ensure unbiased hiring and promotional decisions across the organization.

Redouble DEI Efforts Across Operations: We are embedding equity into every level of the Air District's work, from internal procedures to Board decision-making. To diversify our supplier pool, we have implemented new procurement software and are training staff in these updated purchasing processes. Additionally, we have drafted guidelines to incorporate socio-economic considerations into Board materials and are developing a formal review process to ensure these standards are applied consistently to all regulations and funding initiatives.

Annual Diversity and Unconscious Bias Training: To foster a culture of continuous learning, we established a comprehensive DEI training calendar and hosted six workshops on topics including allyship, LGBTQ inclusion, and mental health awareness. We are also developing hiring best practices for all managers. These resources will ensure that recruitment and promotional decisions across the organization are fair, objective, and free from unconscious bias.

Strategy 3.03 One Air District Community – Status: Underway

What this strategy does:

Broadens internal knowledge of Air District activities and creates opportunities for relationship building.

Progress highlights:

- Created a dynamic staff newsletter.
- Employee "spotlights" at internal all-staff meetings.
- Hosting coffee chats and social events.

What's next: Internal communication plan for highlighting key program milestones.

Strategy Progress

To foster a unified "One Air District" culture, we are enhancing internal connectivity through improved communication, knowledge sharing, and relationship-building initiatives.



By modernizing our digital tools, launching collaborative programs like job shadowing, and hosting cross-divisional social events, we are ensuring that every employee feels informed, connected, and empowered to contribute to our shared mission.

Build Employees' Knowledge of the Air District: To help employees learn about the organization, we have created a dynamic newsletter, developed an "Airwaves" video news series, updated orientation materials for new hires, and shared with all staff our quarterly progress on strategic plan implementation.

Enhance opportunities for knowledge sharing: To help employees learn from one another, we launched an internal directory that can be used for employees to learn more about each other and have trained all directory administrators. We are now working on piloting internal collaboration hubs and developing guidelines for use of the internal employee directory.

Create Opportunities for Relationship Building: To help employees get to know one another, we implemented "employee spotlights" at our Spring, Summer, Winter internal all staff meetings. To improve relationships and organizational culture we hosted multiple coffee chats and other social events, including traditional heritage celebrations. Over the next year, we will continue employee spotlights at all staff meetings, social events and coffee chats, as well as the development of a new staff ambassador program to help build relationships among employees.

Develop "Job Shadowing" Opportunities: We are working on developing a job shadowing program at the Air District, where employees can experience the work of their peers, to broaden their understanding of the challenges, opportunities, and connections to their own work.

Develop Internal Communications Program: We have updated our employee survey to assess our One Air District efforts on employee morale and satisfaction. We continue to work on best practices on how to collaborate across departments and are creating internal communication plans to highlight key program milestones and employee achievements.



Strategy 3.04 Environmental Justice Expertise – Status: Underway

What this strategy does:

Integrates environmental justice into all aspects of our work.

Progress highlights:

- Developing environmental justice training curriculum.
- Environmental justice now a core competency in performance reviews.
- Completed executive training in environmental justice.

What's next: New internal environmental justice training curriculum.

Strategy Progress

We are institutionalizing environmental justice as a foundational value by integrating it into both our educational frameworks and performance standards. By developing specialized curricula for leadership and staff while establishing environmental justice as a core competency in employee evaluations, we are ensuring that equity is not only understood but actively practiced across every level of the organization.

Environmental Justice Training: We are developing a training curriculum to increase internal knowledge of environmental justice.

Environmental Justice as Core Competency: We have added environmental justice as a core competency in our performance evaluations and have completed executive training. We also successfully worked with the employees' association on new performance evaluations to reflect environmental justice and equity. Next, we will create a plan to operationalize environmental justice core competencies across the organization and begin staff and manager training.

Strategy 3.05 Recognize Employees – Status: Early Planning

What this strategy does:

Recognizes employees' contributions to increase morale and overall organizational effectiveness.

Progress highlights:

- Modernizing employee evaluation system to celebrate excellence and collaboration.
- Performance evaluations reward collaboration, innovation, and skill development.
- Added performance factors and executive core competency definitions in performance evaluations.



What's next: Training employees in new performance factors.

Strategy Progress

To boost morale and organization effectiveness, we are modernizing our employee recognition and evaluation systems to celebrate excellence and collaboration. By implementing a dedicated incentive program and a new recognition platform, we are ensuring that staff who exemplify our core values are formally honored. Furthermore, by integrating innovation and cross-functional learning into our performance evaluations, we are creating a clear framework that recognizes professional growth and a unified "One Air District" approach.

Employee Achievement Incentive: Next year, we will begin work on a multi-faceted employee recognition and appreciation program to acknowledge excellent performance.

Recognize Employees: We are identifying options for an employee recognition platform. Next, we will begin designing the employee recognition program.

Encourage Employees who Engage in Development Opportunities: We have modified performance evaluations to include collaboration, innovation, cross-functional learning, strategic plan, and skill development performance factors. We have also added performance factors and executive core competency definitions in the performance evaluation process to improve performance evaluation process. We are now training employees in the new performance factors, ratings, and software platform.

Strategy 3.06 Support Employee Success – Status: Nearly Complete

What this strategy does:

Expands professional development opportunities to improve overall organizational effectiveness.

Progress highlights:

- Created new onboarding program.
- Launched Managers Learning Academy.
- Instituting individual development plans for employees.

What's next: New mandatory training policy will go into effect.



Strategy Progress

We are transforming how we support and develop the Air District's workforce, moving from traditional processes to a culture of continuous learning and career empowerment.

Comprehensive Onboarding: We have reimagined the "First Day" experience to ensure every new hire feels connected to our mission immediately. We launched a refreshed new hire orientation and added an all-day quarterly "One Air District" onboarding session to expand new employees' knowledge about the Air District's mission and culture. We launched satisfaction surveys to continue to improve the onboarding experience.

Expand Mentoring: Knowledge-sharing is one of our greatest assets. We successfully expanded our mentoring program to 60 active participants, fostering vital cross-departmental connections. We gathered feedback from participants through an evaluation survey and have incorporated best practices into the program's next phase.

Comprehensive Training: We are providing the tools our staff needs to lead. Our new Managers' Learning Academy and specialized supervisor training courses are already in motion. We also launched an Emerging Leaders Academy to equip employees to lead and influence from any level. To make development more accessible, we are building a centralized online training calendar and 5-year training plan, creating a culture of learning and development.

Performance Reviews: We have transformed the annual review process to align with the agency's strategic objectives and to encourage the growth and development of employees by offering Individualized Development Plans. As we finalize these improvements, our next major focus is a Succession Planning Framework to prepare the next generation of Air District leaders.

Goal 4: Be Effective, Accountable, and Customer-Oriented

Goal 4: Be Effective, Accountable, and Customer-Oriented

Goal 4 of the strategic plan, **"Be Effective, Accountable, and Customer-Oriented",** establishes eleven strategies to transform the Air District into a more transparent and efficient organization. These initiatives focus on modernizing our permitting, air monitoring, and compliance investigation processes while inspiring residents to take individual action and supporting local land-use decisions. The final three strategies prioritize organizational effectiveness, transparency, and accountability to ensure we remain a high-performing public agency. We have already made measurable progress across all strategies, with most on track for completion by 2029.

Strategy 4.01 Timely Permits – Status: Underway

What this strategy does:

Improves the timeliness of permitting decisions.

Progress highlights:

- Launched a permitting efficiency taskforce.
- Updated requirements for backup generators.
- Eliminated backlog of health risk assessments for permit applications.

What's next: Create policies to streamline permitting and build dashboards to track application flow, processing times, and internal inefficiencies.

Strategy Progress

We are updating regulations to ensure permits are completed efficiently and timely by updating permitting regulations, better tracking applications to address bottlenecks and improving internal coordination via new digital dashboards. Furthermore, the establishment of project teams for complex permits and the alignment of resources with our current permit workload ensure our technical capacity matches our goals, allowing us to reduce backlogs and provide greater transparency to the public.



Update Permitting Regulations: We are streamlining permitting by updating policies and regulations for Rule 2-1 (General Requirements) and Rule 2-5 (New Source Review) to improve consistency and efficiency. To reduce delays, we have updated backup generator requirements and are monitoring processing timelines. We are also considering regulatory changes to further streamline the authorization of backup generators.

Better Track Permit Applications, Reduce Bottlenecks, and Improve Coordination: We are developing internal and external tracking tools to improve permit transparency. Recent updates include standardized status language and applicant-focused reports for our web portal. We are also using dashboards and reports to identify and prioritize permit applications, and developing a plan to reduce late permits related to organics recovery. For risk assessment related permits, we are creating metrics and piloting streamlined reports.

Next, we will build dashboards to track application flow, processing times, and internal inefficiencies and begin incorporating customer relationship management tools into the permitting system to improve tracking, transparency, and customer service. While we are exploring bottleneck analyses, this work is paused due to contracting delays.

Establish Teams for Complex Permits: We have completed a resource needs analysis for processing complex permits, requested new positions, and prepared Air District Board requests for new staffing. We are now forming new teams, including a Backlog Team dedicated to clearing backlogged permit applications, allowing other staff to focus on moving incoming applications through the permit system expeditiously. We have also hired our first Engineering Program Manager to help facilities, as requested, create readily approvable permit applications to speed up review.

Align Resource to Permit Workload: We completed a resource needs analysis for processing all permit types. We are now reducing the number of late permits and aligning our permit resources to meet needs.

Strategy 4.02 Transparent Permit Process – Status: Underway

What this strategy does:

Makes permitting process more transparent and accountable.

Progress highlights:

- Using advanced technology for permit status reporting.
- Launched downloadable application reports and real-time permit tracking.
- Provided community with update on permitting activity.

What's next: Exploring technology tools to provide real-time application updates to the public and applicants.

Strategy Progress



To enhance the transparency of the permitting process, we are modernizing our communication strategies, digital tools, and community outreach efforts. Our focus is on providing real-time updates and more accessible information through three key areas: integrating advanced technology and AI to streamline permit status inquiries, launching user-friendly dashboards and public mapping tools for better data visualization, and simplifying technical language to foster more meaningful engagement with local communities.

Enhance Communication: Since implementing new permit status request procedures in February 2025, we are now redesigning our website and exploring AI solutions to better provide real-time application updates to the public and applicants.

Enhanced Digital Tools: We have launched downloadable application reports and real-time portal tracking for applicants. Development is now underway for a public online map of permitted facilities and emissions, scheduled for release late next year.

Community Engagement: We are simplifying technical language to make the permitting process more understandable for all stakeholders. We are now improving web accessibility, developing community-focused presentations, and seeking direct public input to refine our long-term engagement strategies on permitting issues.

Strategy 4.03 Consistent Permits – Status: Underway

What this strategy does:

Ensures our regulations and related permits are clear, consistent, and enforceable.

Progress highlights:

- Updating guidelines for routinely approvable equipment and conditions.
- Developing civil rights compliance checks for permitting process.
- Screening procedures identify permits requiring environmental analysis.

What's next: Use new AI tool to generate draft permit engineering evaluations based on standard permit conditions for routine equipment.



Strategy Progress

To improve the consistency of permitting decisions, we have hired a Permit Consistency Coordinator, who is implementing a comprehensive review of our internal standards and regulatory framework. We are focused on ensuring newly developed regulations are clear and enforceable, standardizing the process for translating those regulations into specific permit conditions, and strictly adhering to civil rights laws throughout the issuance process. Additionally, we are exploring new methods to account for cumulative environmental impacts and establishing formal criteria for when a broad environmental analysis is required for a permit decision.

Review Regulations for Enforceability: We are amending Rule 11-18 (Health Risk Assessment) to improve clarity and are currently incorporating public feedback into the final language. Similar updates are underway for particulate matter (Rules 6-1, 6-6), refinery emissions reporting (Rule 12-15), and metal shredding (Rule 6-4), with a concept paper on updates to Rule 12-15 just released.

Translating Regulations into Permit Conditions: We have launched a staff training program and hired a new "consistency coordinator" to standardize permit applications. Current priorities include updating our permit handbook and technology guidelines and establishing formal review processes for both standard and complex permit conditions.

Ensure Following Civil Rights Laws and Regulations: We have established initial guidelines to identify permits with environmental justice implications and are developing formal civil rights compliance checks. Moving forward, we will refine these criteria through community dialogue and analyze application trends.

Consider Cumulative Impacts in Permitting Process: Following a review of best practices around the country and literature, the Advisory Council adopted a work plan in October 2025 to address cumulative impacts in permitting. Draft recommendations for the Board of Directors are expected by year-end. See **Strategy 2.11 Cumulative Impacts** for more information.

Determine When to do Environmental Analysis of Permitting Decisions: We created a permit application screening procedure to identify when a permit needs an environmental analysis. We are continuing to identify best practices used at other local air districts and establishing a formal environmental review program for permitting decisions.

Strategy 4.04 Improve Air Monitoring – Status: Underway

What this strategy does:

Updates the design and operations of our air quality monitoring network.

Progress highlights:

- Implementing digital solutions to improve laboratory data management.
- Accelerating quality assurance for particulate matter and gaseous data.
- Developed recommendations for monitoring network upgrades.

What's next: Finalizing implementation plan for monitoring network upgrades.

Strategy Progress

We are enhancing the Air District's regulatory air monitoring program by focusing on modernizing infrastructure and improving oversight. We are currently upgrading data acquisition systems and laboratory digital solutions to increase operational efficiency. To ensure high data integrity, we are strengthening quality control by addressing audit findings and standardizing our data validation procedures. Finally, we have completed a comprehensive assessment of our monitoring network and are now drafting a plan to implement recommended improvements.

Update Air Monitoring Data Systems: We are executing a plan to upgrade air monitoring data acquisition systems to improve efficiency and reduce errors. Key actions include purchasing new data loggers and testing a new software platform before a network-wide rollout. Simultaneously, we are implementing digital solutions to automate laboratory data handling and reporting.

Strengthen Quality Control: We are addressing findings from the 2021 and 2024 US EPA Technical Systems Audits and completing another independent and external review of the regulatory air monitoring program to update and streamline procedures. We are also accelerating data review for particulate matter and gaseous air monitoring data while refining validation procedures to improve team efficiency and data quality.

Improve Monitoring Network: We have finalized recommendations to modify our long-term regulatory air monitoring network based on comprehensive technical assessments. We are currently drafting an implementation plan that outlines the prioritized sequence and timeline for these structural adjustments.



Strategy 4.05 Improve Compliance Investigations – Status: Underway

What this strategy does:

Improves compliance and increases the impact of our enforcement program.

Progress highlights:

- Drafted program concepts to target air quality inspections where most needed.
- Securing additional staff for targeted inspections.
- Making investigation information more accessible to the public.

What's next: New Environmental Justice Inspection group performs targeted inspections.

Strategy Progress

This strategy is about increasing the efficiency and effectiveness of our inspection and investigation resources to improve compliance and the impact of our enforcement efforts. Our focus has been on developing initial concepts for a strategic enforcement initiative to strengthen air quality oversight in overburdened communities.

Targeted Inspections: We have developed concepts for a Targeted Inspection Program that would shift from routine inspections to a priority-based model that identifies and inspects facilities with the highest potential to impact public health and air quality. Priority criteria include compliance trends, emissions and health risks, and community input. We presented these concepts to the Air District Board and community committees and are now integrating their feedback into the program.



To support implementation, we are securing additional staff for a new Environmental Justice Inspection Group that will prioritize AB 617 communities. We are also launching new webpages and accessible compliance summaries to increase transparency and public awareness.

Strategy 4.06 Inspire Action – Status: Underway

What this strategy does:

Inspires people to reduce air pollution and mitigate climate change.

Progress highlights:

- Launched rebrand of Air District.
- Extensive outreach underway for building appliances rule.
- Increased social media presence, targeting youth.



What's next: Public information campaign on appliance regulation launches.

Strategy Progress

We are launching a comprehensive communications strategy to increase awareness of new building regulations and boost regional engagement through a rebrand, a modernized website, and targeted social media campaigns. These efforts aim to enhance public outreach, particularly among youth, while strengthening partnerships with local media and local governments across the Bay Area.

Develop an Expanded Public Information Campaign: Our current focus is on increasing awareness of our amended building appliance regulations, Rule 9-4 and Rule 9-6. We selected a contractor to develop and implement an advertising and outreach campaign regarding the new regulations and plan to launch it this year.

Increase Social Media Presence Targeting Youth: We have successfully increased our year-over-year TikTok followers and are making strides to increase impressions and engagement on the platform. We are also working to increase youth awareness of our Spare the Air campaign via increased TikTok engagement.

Expand Local Media Communications: We have developed a local media outreach plan and expanded our local media list. We are now engaging with at least fifteen percent of this local media list.

Increase Advertising: We are increasing digital awareness of Air District activities across all digital platforms through increased engagement rates and impressions. We have seen an increase in impressions and engagement on both our Spare the Air and Air District social media pages, including Facebook, X, Instagram, Nextdoor, and LinkedIn.

Establish an Increased Presence in all Bay Area Counties: We recently rebranded as the Bay Area Air District and launched a modernized website to improve visibility, navigation, and accessibility. To further strengthen regional ties, we are surveying local governments to develop a standardized communication process and tracking system. Future website updates will focus on enhancing usability, translation capabilities, and ADA compliance.

Strategy 4.07 Customer Service – Status: Underway

What this strategy does:

Ensures people experience the highest level of service from the Air District.

Progress highlights:

- Strengthening employees' Air District knowledge via video series.
- Serving communities via Environmental Justice Navigators.
- Improving customer service with division-level ombudsmen.

What's next: Communication and conflict management training for all employees.

Strategy Progress

This strategy focuses on elevating the Air District's service standards by enhancing employee communication skills and organizational knowledge. We are fostering a "One Air District" culture through new internal media and knowledge platforms while appointing divisional ombudsmen to improve customer service. We are also developing a comprehensive training curriculum for all staff and expanding our "Environmental Justice Navigators" program to increase awareness of Air District resources and strengthen our connections with communities most impacted by air pollution.

Strengthen Internal Organizational Knowledge: To foster a "One Air District" culture, we launched the Air Waves and What do you do? video series to highlight agency and staff successes and cross-divisional roles. We are now expanding these series while developing a centralized internal communications and knowledge platform. Additionally, we are appointing divisional ombudsmen to improve our capacity to respond to community inquiries and enhance customer service.

Develop Organization-Wide Curriculum for Employees: We are developing a communications and conflict management training course with a customer service focus.

Community Liaisons: We have strengthened the capacity of the Air District to serve as community liaisons through a piloted "Environmental Justice Navigators" program. Four employees are dedicated to increasing awareness of Air District resources and strengthening relationships and partnerships with communities most impacted by air pollution. We are now expanding the program through additional hiring so that we can expand its reach across the Bay Area.



Strategy 4.08 Air Quality Incidents – Status: Early Planning

What this strategy does:

Enhances our incident response program.



Progress highlights:

- Evaluating air quality and health assessment tools for incidents.
- Launched regionwide incident notification system.
- Partnering with community on particle fallout sampling.

What's next: Easier way for public to subscribe to urgent public notifications.

Strategy Progress

This strategy modernizes incident response through improved emission detection and assessments, rapid communication, and direct community partnership. We are exploring advanced air quality and health assessment tools, while deploying a regionwide notification system for real-time updates. To ensure transparency, we have enhanced our digital platforms to provide more accessible, actionable incident information and are now establishing community-partnered particle sampling near refineries.

Improve Incident Emission Detection and Assessment: We are evaluating approaches to characterize emissions from industrial incidents, and the impacts those emissions have on air quality and health. This effort includes identifying current technical tools and limitations by developing case studies to establish more effective and efficient methods to assess impacts from incidents.

Implement Technology Solutions to Notify Communities of Incidents: We have launched a regionwide incident notification system to alert residents of significant air quality events via email, text, social media, and our website. We are now developing an opt-in registration process to allow the public to subscribe to localized or district-wide urgent updates.

Partner with Communities to Provide Enhanced Community-Led Monitoring: In partnership with the Bay Air Center, we launched a community workgroup in September 2025 to develop a particle fallout sampling program, including developing procedures for community volunteers to conduct responsive sampling during or after incidents. We also have deployed eight fixed particle sampling sites in Benicia, Clyde, Martinez, Richmond, Rodeo, and Vallejo, and are in the process of establishing sites at thirteen other locations within refinery communities.

Deliver Clear, Actionable Alerts and Transparent Incident Reporting: We have redesigned our incident response web pages for better navigation and language accessibility. To further public awareness, we executed a social media and outreach campaign through December 2025 to make incident data and investigations more transparent and accessible.

Strategy 4.09 Land Use Impacts – Status: Nearly Complete

What this strategy does:

Provides local governments with tools and resources to assess air quality impacts.

Progress highlights:

- Releasing quarterly newsletter for local governments.
- Launched new subscription list for local governments.
- Updating land use guidebook, *Planning Healthy Places.*

What's next: Release updated guidelines on how local governments can better integrate air quality into land use planning.

Strategy Progress

This strategy is about providing tools and resources to support local governments in considering environmental justice, air quality, public health and climate priorities in local land use plans, policies, projects, and permitting decisions.

Technical Resources and Best Practices: We transitioned to a new quarterly newsletter format to share critical information with local governments. We also launched an improved subscription list for local agencies to ensure critical information is shared in a timely manner.

Land Use Guidance to Prevent Incompatible Development: We are updating *Planning Healthy Places,* a guidebook for local governments. The update will include recommendations and curated case studies that demonstrate how local governments can better integrate air quality into land use planning. The guidebook will support local agencies in their efforts to prevent incompatible land uses in their land use planning and polices.



Strategy 4.10 Ensure Success – Status: Underway

What this strategy does:

Ensures we have the resources and capacity to meet expectations and honor our commitments.

Progress highlights:

- Standardized processes support strategic plan implementation.
- Created real-time dashboard that tracks implementation progress.
- Adopting continuous process improvement models.



What's next: Apply lessons learned to strategic plan implementation process.

Strategy Progress

This strategy ensures we have the capacity to honor our commitments by standardizing how we plan, track, and report progress on implementing the Air District's *2024-2025 Strategic Plan.* We are aligning staff performance with organizational goals through detailed operational plans and a real-time executive dashboard. By adopting continuous improvement models, we are optimizing our processes to ensure all initiatives remain effective and adaptable. The efforts under this strategy also advance **Strategy 4.12 Report Progress.**

Standard Processes to Ensure Implementation Success: We have established standardized processes to plan, track, and report on the implementation of the strategic plan. These systems ensure that new rules, policies, and initiatives related to the strategic plan are launched successfully and that progress is consistently monitored.

Develop Detailed Operational Plans: We have developed initial action plans for each strategic plan strategy. Each quarter, we are evaluating our implementation progress and determining if new initiatives are required to meet strategy commitments. Up next, we will be creating detailed implementation plans for each strategy that define required resources, timelines, and clear responsibilities.

Apply Standard Best Practices Across Organization: We are linking employee performance directly to strategic objectives through new training modules and instructional videos. Strategic objectives are also being integrated into individual performance reviews and monitored via a real-time executive dashboard. Finally, we are adopting organization-wide project management best practices to ensure consistent and successful implementation.

Strategy 4.11 Align Resources – Status: Underway

What this strategy does:

Aligns Air District's resources and annual budgets with strategic priorities.

Progress highlights:

- Identified funding gaps to ensure all strategic commitments are resourced.
- New software maps Air District program funds to strategic plan strategies.
- Ensuring resources directed toward reducing air pollution disparities.

What's next: Ensure resources directed toward reducing pollution disparities.

Strategy Progress

This strategy aligns Air District resources with community priorities by ensuring the *2024–2029 Strategic Plan* is fully funded and successful. We identified funding gaps to ensure all plan commitments are properly resourced and modernized our internal systems to directly link annual budget allocations to specific strategic objectives, beginning with the FYE27 budget cycle. Finally, we are developing a targeted analysis of our spending to ensure that our financial resources are intentionally directed toward reducing local air pollution disparities and achieving measurable community impact.

Strategic Plan Resourcing: We identified all non-resourced commitments in the *2024–2029 Strategic Plan* and submitted them to executive leadership for future allocation planning.

Align Budget Process with Strategic Plan: We implemented new software to map Air District program funds to specific strategic goals and strategies, completing the first iteration for the FYE27 budget.

Prioritize High-Impact Spending: We are developing a budget analysis process to ensure resources are specifically directed toward reducing local air pollution disparities.



Strategy 4.12 Report Progress – Status: Underway

What this strategy does:

Reports progress in meeting the *2024-2029 Strategic Plan* strategies.



Progress highlights:

- Developed database and software application to track plan implementation.
- Established measurable metrics for strategic commitments.
- Shared progress across all strategies with Board and public.

What's next: Assess all strategic plan implementation actions to improve implementation.

Strategy Progress

To ensure the success of the *2024–2029 Strategic Plan*, we have launched a centralized tracking system and established a formal annual review process to maintain transparency with the Board and the public. By implementing a measurable framework for all commitments, we can effectively monitor progress and identify the specific resources or adjustments needed to meet our strategic goals.

Track Strategic Plan Implementation: We have launched a custom database and software application to monitor plan implementation. Staff are trained, all current actions are logged, and a formal update schedule is in place. Through the second quarter of 2026, teams across the organization successfully updated their progress and added new actions as needed.

Annual Progress Review: We have established templates and a schedule to report annually on the *2024–2029 Strategic Plan*. Progress across all strategies has been shared with the Board, staff, stakeholders, and the public via this progress report.

Establish Performance Metrics for Strategies: We have documented objectives and key results (OKRs) for all *2024–2029 Strategic Plan* commitments. This framework pairs qualitative goals with specific, measurable results to track progress and ensure organizational alignment. Over the next year, we will be continuously adding new objectives and key results for each strategy commitment.

Identify Challenges and Resource Needs: This year, we are assessing all strategic plan implementation actions, or OKRs, to improve implementation and determine if additional resources are required to meet our goals.

For more information visit **strategicplan.baaqmd.gov**

Bay Area Air District

Bay Area Air District

Adoption of Proposed Budget for Fiscal Year 2026-2027 and Amendments to Air District Regulation 3: Fees

Board of Directors Meeting

June 3, 2026

Hyacinth Hinojosa, Deputy Executive Officer, Finance and Administration
Stephanie Osaze, Director, Finance
Fred Tanaka, Senior Manager, Engineering
Mark Gage, Principal Air Quality Engineer, Engineering

Presentation Outline

- Background
- Budget Summary
- Additional Budget Information
- Budget Resolution Action
- Proposed Amendments to Regulation 3 Fees
- Cost Recovery Trends
- Overview of Public Comments
- Fee Amendment Resolution Action

Background

On December 17, 2025, Finance and Administration Committee was provided options on the cost recovery strategy and staff was given direction.

March 18 and April 15, 2026 - Finance and Administration Committee discussed the budget & proposed fee regulation amendments and referred to the full Board of Directors (Board) for consideration.

The Board is required to conduct two public hearings for public review and testimony. The Board held the first public hearing on April 29, 2026, and provide opportunity for public comments.

At today's public hearing, the Board will consider resolutions to adopt the fee amendment and the budget.

Background (cont.)

Today's presentation focuses on new information based on discussion at the April 29, 2026 Public Hearings. The full presentations from April 29 are also part of this board package and are available to display if requested.

<u>New information</u>

- Prior Year vs. Current Budget Comparison
- Five-Year Financial Forecast (With and Without Valero Permit Renewal)
- Possible actions during an Economic Downturn
- A breakdown of fee revenue by activity type
- Additional key public comments from the Regulation 3 rule development

Budget Summary

Fiscal Year (FY) 2026-27 Proposed Budget is $480.1 million (M) and includes new investment from Community Benefit Fund:

$116M from the Community Benefit Fund to support Bay Reinvesting Penalties for Air Improvement and Resilience (Bay REPAIR) program for community-led investments for Benicia, Richmond, and surrounding communities.

Assumes a 10% vacancy rate due to a recent acceleration of hiring activity

2.5% estimated increase to support employee salaries and benefits

Continuation of $5M discretionary contributions to prefund Pension Trust

General Fund Budget Revenue Year-to-Year Comparison

General Fund Revenue by Type	FYE 2026	FYE 2027	$ Δ	% Δ
	$165.0 M	$274.2 M	$109.2 M	66%
Property Taxes	$47.6 M	$51.3 M	$3.7 M	8%
Permits/Fees	$68.7 M	$75.6 M	$6.9 M	10%
Grants	$18.5 M	$13.4 M	($5.1 M)	-28%
Other Revenue	$11.8 M	$12.0 M	$.2 M	2%
Transfer From Reserves	$18.5 M	$121.9 M	$103.3 M	558%

FYE = Fiscal Year Ending

Transfers from Reserves: increase is driven primarily by funding from the Community Benefit Fund for Bay REPAIR program.

Property Taxes: increase assumes 2% annual inflationary increase.

Permits/Fees: include Regulation 3 percent increases in proposed Fee Amendments

Grants: decrease due to adjustment in one-time federal grant funding.

Percentages may not total 100%, and totals may not equal the sum of displayed line items due to rounding.

General Fund Budget Expenditure Year-to-Year Comparison

	FYE 2026	FYE 2027	$ Δ	% Δ
General Fund Expenditure by Type	$165.0 M	$274.2 M	$109.2 M	66%
Salaries and Benefits	$110.3 M	$120.6 M	$10.3 M	9%
Services and Supplies	$45.2 M	$45.7 M	$.5 M	1%
Capital	$6.5 M	$10.7 M	$4.2 M	64%
Distributions and Transfers	$3.0 M	$97.3 M	$94.3 M	3,153%

Salaries & Benefits: Increased due to support for the Permit Backlog Reduction Plan and a 2.5% adjustment for salary and benefit growth.

Capital Expenditures: Higher investment driven largely by enhancements to permitting and enforcement computer systems.

Distributions & Transfers: Increased to support funding for the Bay REPAIR program.

Percentages may not total 100%, and totals may not equal the sum of displayed line items due to rounding.

General Fund 5 Year Forecast (Presented April 29, 2026)

General Fund Fiscal Year (FY) - Five Year Projection	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31
REVENUE	$150.9	$154.7	$163.3	$173.1	$184.7
EXPENDITURE	$174.8	$167.7	$171.0	$169.9	$172.9
Deficit/ Surplus	($23.9)	($13.0)	($7.7)	$3.2	$11.8
Use of Community Benefit Fund (9%) Reserves	$3.8	$2.8			
Use of General Fund Reserves	($20.2)	($10.2)	($7.7)	$3.2	$11.8
Remaining Reserves	$73.5	$63.3	$55.5	$58.8	$70.6
25% Minimum Reserve Policy	$40.1	$41.9	$42.8	$42.5	$43.2

- 5 Year Forecast demonstrates that, while the General Fund draws from reserves in the short-term, the Air District remains financially stable, in compliance with its reserve policy.
- Total revenue projected to grow, driven by increases in permit fee revenues, property tax growth.
- Expenditure shows dips through the forecast period, due to adjustments for one-time costs, reductions in limited-term staffing.

Updated General Fund 5 Year Forecast

(Previous presentation prematurely assumed loss of all Valero permit renewal fees)

General Fund Fiscal Year (FY) - Five Year Projection	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31
REVENUE	$154.3	$158.5	$167.2	$177.4	$189.4
EXPENDITURE	$178.2	$167.9	$171.2	$170.1	$173.2
Deficit/ Surplus	($23.9)	($9.5)	($4.0)	$7.3	$16.2
Use of Community Benefit Fund (9%) Reserves	$3.8	$2.8			
Use of General Fund Reserves	($20.2)	($6.7)	($4.0)	$7.3	$16.2
Remaining Reserves	$73.5	$66.8	$62.8	$70.1	$86.3
25% Minimum Reserve Policy	$40.9	$42.0	$42.8	$42.5	$43.3

- Assumes inclusion of $4M in fee revenue related to the Valero annual permit.
- Assumes adoption of the Proposed Regulation 3 Amendments in FY 2026-27.
- The Air District remains financially stable and in compliance with its reserve policy.

Economic Downturn – Possible Actions

Possible Actions in the event of an Economic Downturn:

- Utilize Reserves to Support General Operations
- Reduce recruitment efforts and manage Staffing Through Attrition
- Postpone Non-Essential and Discretionary Expenditures
- Defer Capital Investment
- Review and Adjust Cost Recovery Policy
- Fund Required Pension Contributions using Pension Trust

Summary of Budget Resolution Actions

- Carry forward encumbrances and appropriations
- Transfer unencumbered funds to undesignated reserves
- Define use of operating surplus
- Approve reserve designations modifications and funding amounts
- Authorize budget transfers between specified accounts
- Authorize certain disposal of assets
- Approve salary schedule and management & confidential employee benefits program
- Approve funding to the Pension Prefund Trust ($5M)
- Adopt the FY 2026-2027 Proposed Budget ($480.1M)

Bay Area Air District

2024-2029 Strategic Plan Implementation

The 2024-2029 Strategic Plan

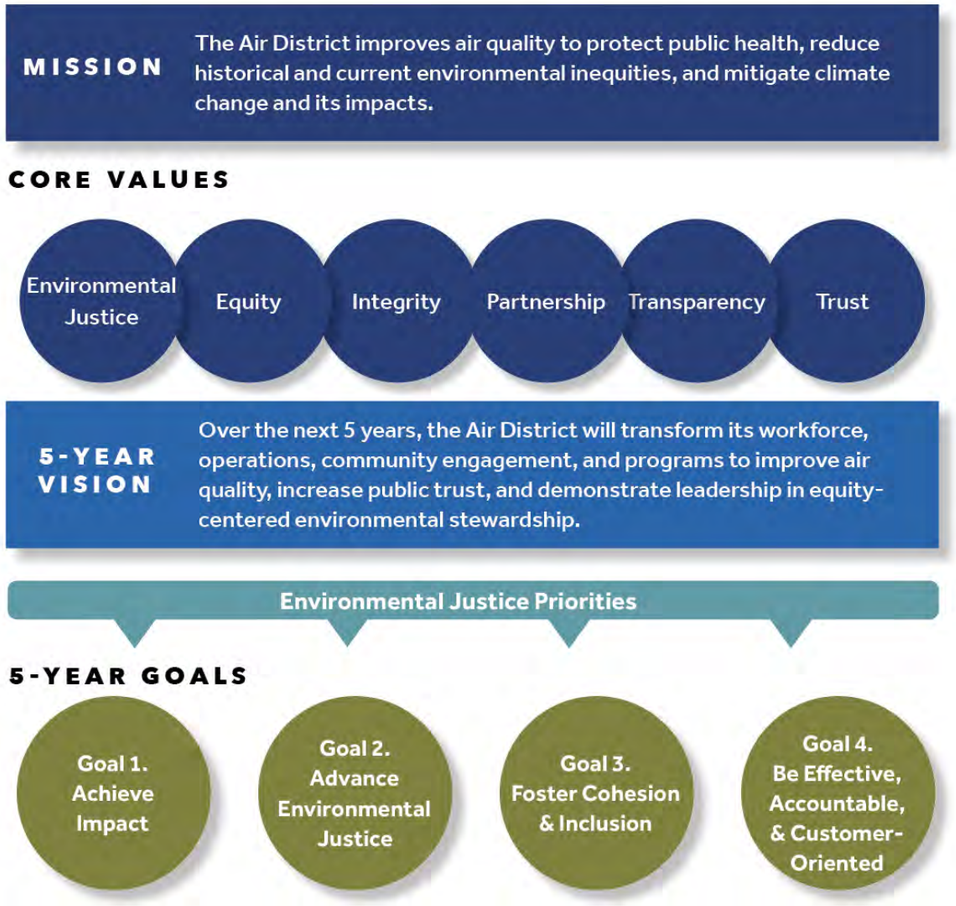
Mission-Driven Transformation: An updated mission to improve air quality, reduce historical and current environmental inequities, and mitigate climate change.

Core Values: Grounded in environmental justice, equity, integrity, partnership, transparency, and trust.

Five-Year Vision: A commitment to transform the workforce, operations, and programs to demonstrate leadership in equity-centered stewardship by 2029.

Primary Goals: Achieve measurable air quality impact, while advancing environmental justice through community partnership, fostering an inclusive organizational culture, and enhancing overall accountability and customer service.

Accountability Through Action: Implementation of tangible performance metrics and annual reporting to the Board and the public to ensure transparency in progress.



Path to 2029: Strategic Plan Progress Report

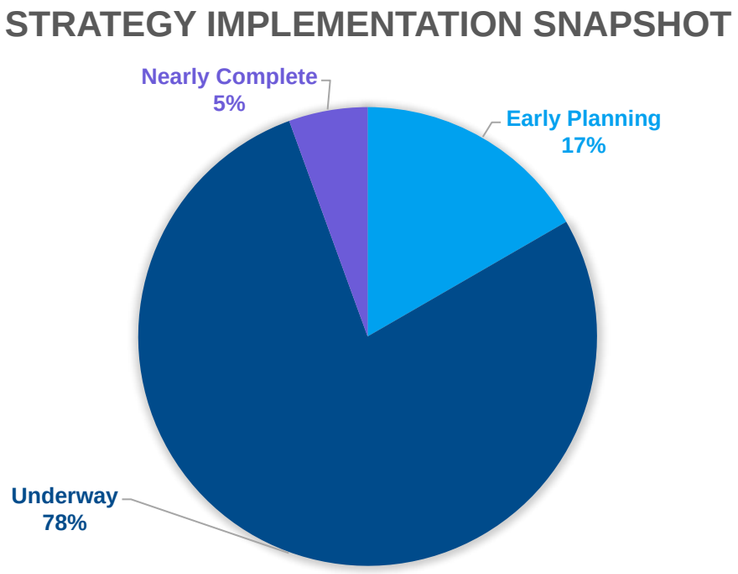
- **Accountability Framework:** Established system to track and report progress on *2024-2029 Strategic Plan*
- **Connecting Vision to Action:** Maps plan's goals directly to day-to-day staff activities, ensuring all work is measurable and transparent
- **Strategic Scale:** Over 580 specific actions identified and most initiated
- **Four Pillars of Progress:** Progress organized by plan goals
- **Feature Stories:** Highlights key milestone successes
- **A "Living Document":** Reporting informs Air District's operations, annual budget, and legislative priorities

www.strategicplan.baaqmd.gov

QR code for Bay Area Air District strategic plan website.

Implementation Snapshot

- Comprehensive tracking and reporting process developed
- Nearly 580 actions identified to advance strategies
- Efforts underway across all 36 strategies
- Two strategies nearly complete



Pie chart showing implementation progress of strategic plan strategies.

Feature Stories

- Bay Area Plans Path to State Climate Goals
- Reinvesting in Communities
- Community Partnerships Expand
- Community Science in East Oakland
- Investing in People: A New Era of Professional Growth & Connection
- At Your Service: Reimagining the Permitting Experience



Bay Area Air District

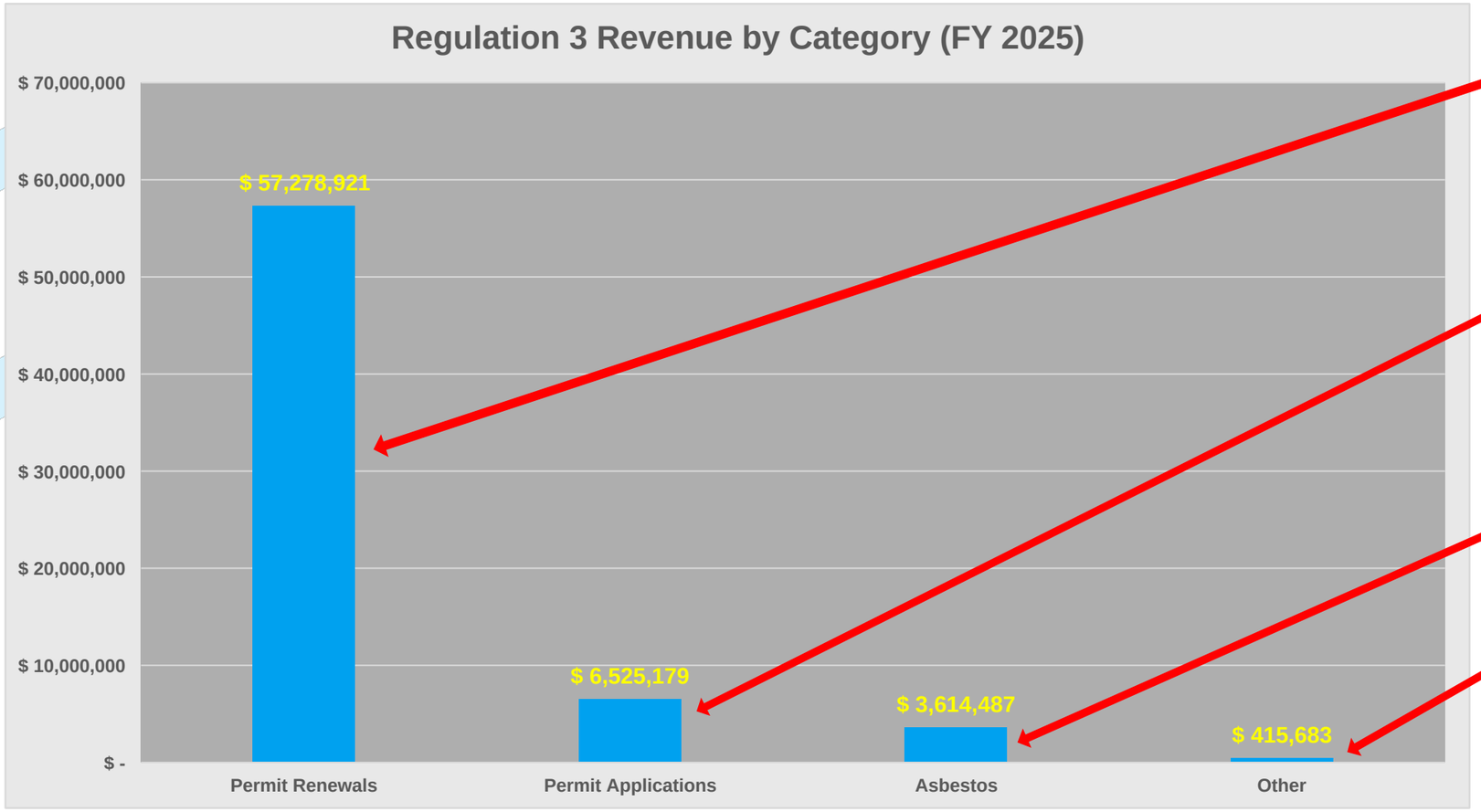
Proposed Regulation 3 Amendments

Background: Proposal Impact

Impact of Proposed Amendments

- Proposed amendments to Regulation 3, Fees, are dictated by the Board-approved Cost Recovery strategy and include other proposed amendments
- Estimated budget increase is $8.0 million compared to FY 2025 revenues
- These amendments have a weighted fee schedule increase of **5.7 percent**

Background: Revenue



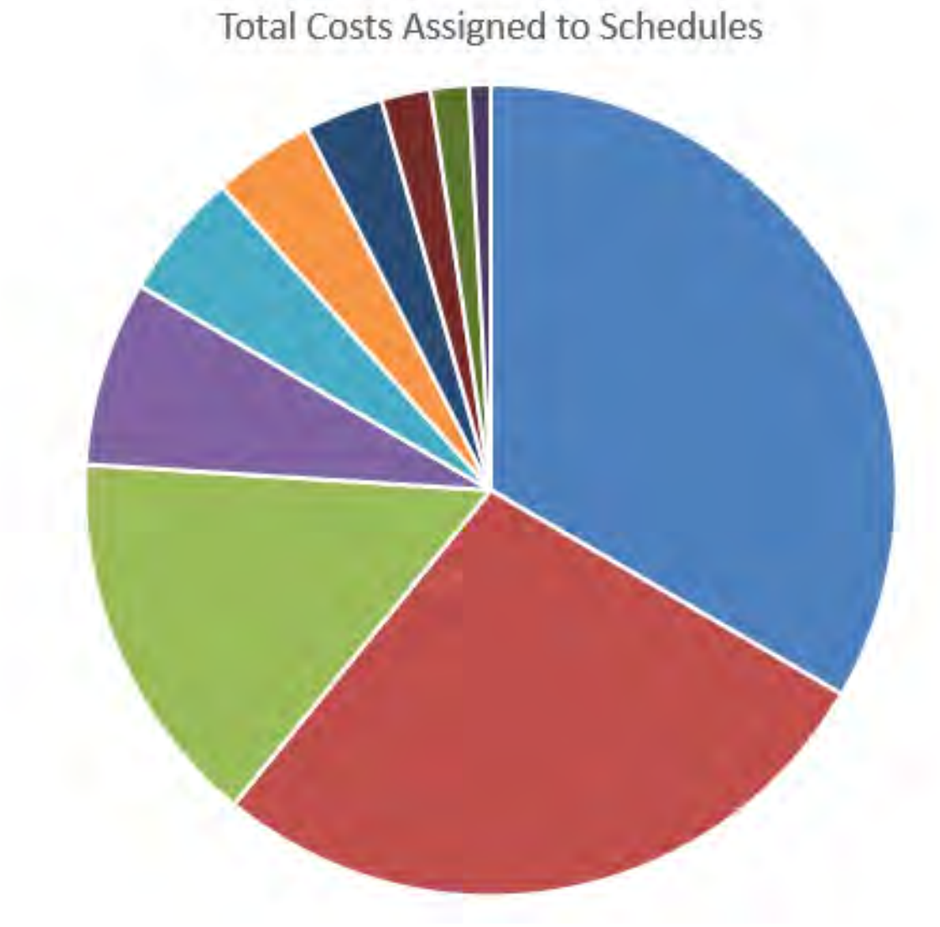
Permit Renewal: Includes Permits to Operate, Title V and Registrations

Permit Applications: Includes Standard, Title V and Registration applications

Asbestos: Includes demolition, renovation, naturally occurring

Other: Includes Open burn, Hearing Board, and emissions banking fees

Background: Costs



FY 2025 Cost by Division/Service

- Compliance & Enforcement (33%)
- Engineering (28%)
- Enterprise Technology Solutions (15%)
- Source Test (7%)
- Legal (5%)
- Meteorology & Measurement (4%)
- Regulatory Development (3%)
- Assessment, Inventory & Modeling (2%)
- Environmental Justice (2%)
- Other (1%)

Proposed Fee Amendments

Proposed Change in Fees	Fee Schedules	FY 2025 Fee Revenue %, ($)
20% decrease	R	0.4% ($266K)
0% increase	B, C, D, L, N, T, X	44.4% ($35M)
2.3% increase (CPIw)	Section 300 fees, I, M	15.0% ($1.6M)
3.6% increase	G5	1.2% ($1.7M)
8.8% increase	E	7.1% ($4.7M)
15% increase	A, F, G1, G2, G3, G4, H, K, P, S, V*, W	31.9% ($23.9M)

Weighted average proposed fee increase = *+5.7%*

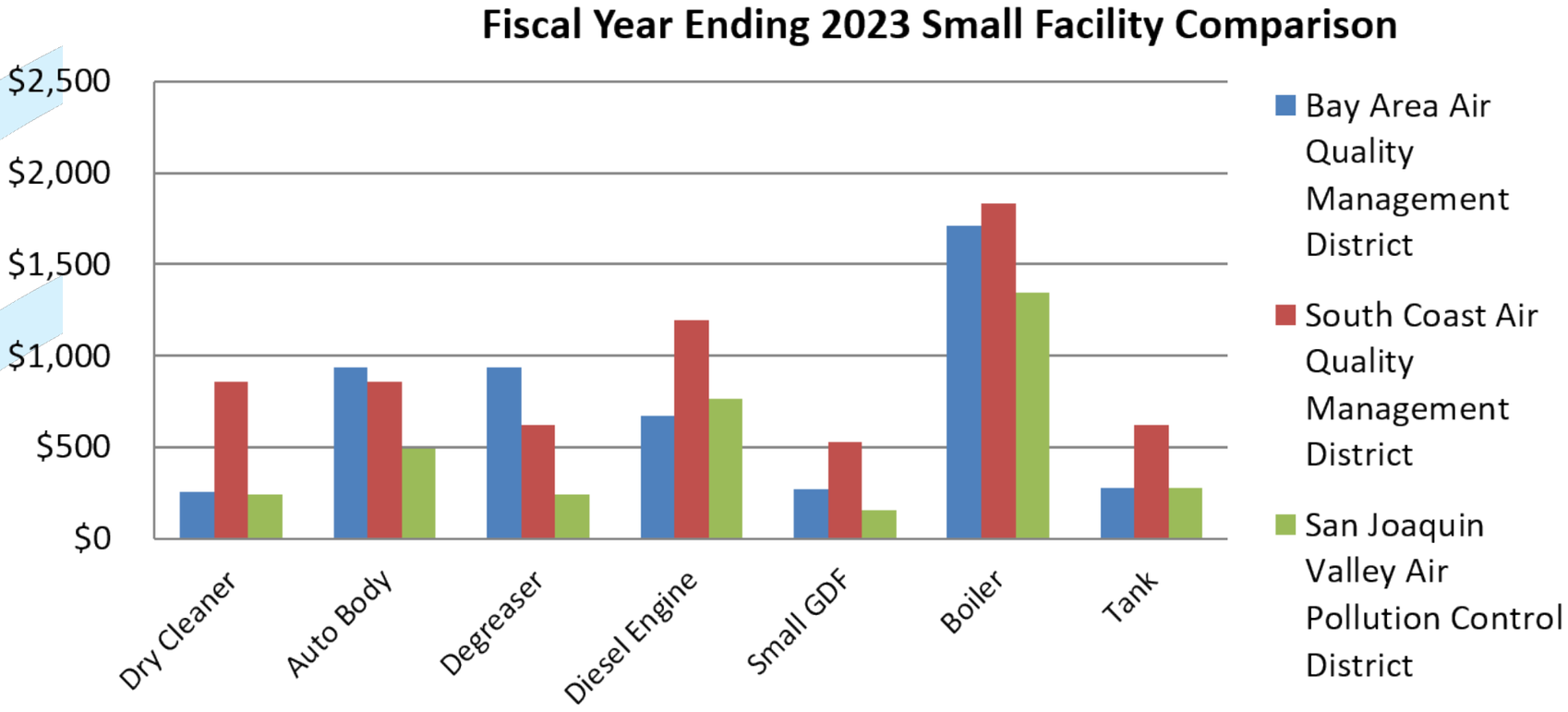
*Open Burning Operation Fee and Stubble Burn Operation Fee only

CPIw - The annual Consumer Price Index of the previous year for Bay Area Urban Wage Earners and Clerical Workers

Proposed Fee Amendments: Other

- General clean-up (e.g., remove obsolete language, typos)
- Remove the delinquent fee for permit renewals in Section 3-405.4.1.2 and Section 3-405.5
- Add a fee for Emission Reduction Credit Reissuance Fee in Section 3-311.6
- Align the Risk Assessment Fee (RAF) for Schedule B (Combustion of Fuels), Schedule C (Stationary Containers for the Storage of Organic Liquids)
- Increase the RAF for existing sources in Schedule D.A (Gasoline Transfer at Gas Dispensing Facilities)
- Reclassify gasification/pyrolysis sources from Schedule F (General miscellaneous) to Schedule G1

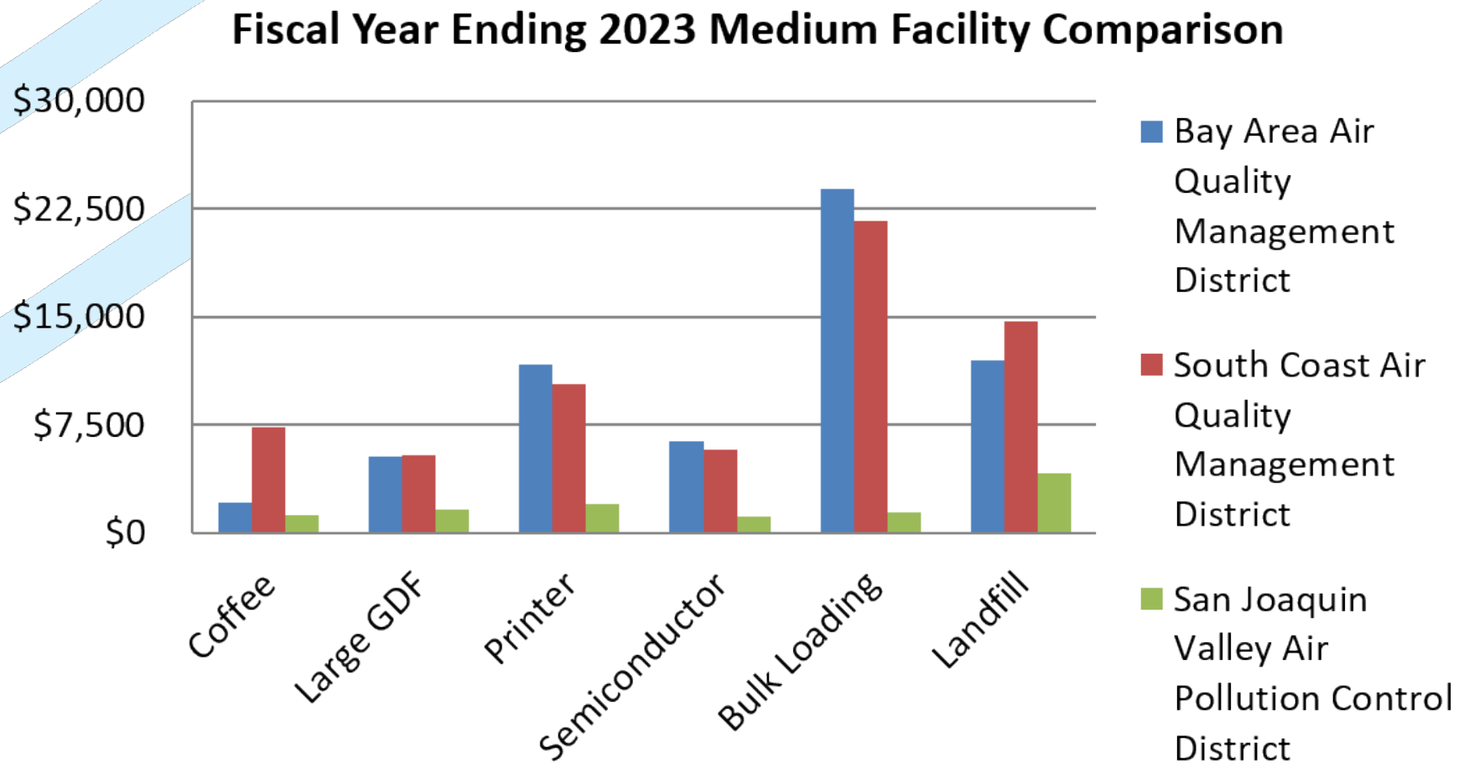
Fee Comparisons



For comparison, base or minimum fees were used.

GDF = Gasoline Dispensing Facility, "Gas station"

Fee Comparisons



Coffee: 3 sources and 2 abatement devices

Gasoline Dispensing Facility (GDF): 36 Product nozzles

Printer: 13 printers and 2 book binders

Semiconductor: 1 Fabrication operation, 2 coaters, 4 solvent stations, 1 engine, 1 filter

Bulk loading: 2 loading racks, 6 tanks,1 cleaner, 2 additive storage tanks, 2 abatement units

Landfill: with waste/cover, storage pile, gas engine, flare

Top 10 Facilities - Permit renewal fees

Facility Name	Permitted sources	Previous renewal fees	Fee change impact*, $ (%)
Martinez Refining Company LLC	286	$5,921 K	+$413 K (7.0%)
Chevron Products Company	297	$5,475 K	+$344 K (6.3%)
Valero Refining Company - California	173	$3,836 K	+$267 K (7.0%)
Phillips 66 Company – Rodeo Renewable Energy Complex	170	$2,758 K	+$230 K (8.3%)
Tesoro Refining & Marketing Company, LLC	133	$2,008 K	+$124 K (6.2%)
Delta Energy Center	9	$1,022 K	+$26 K (2.5%)
Los Medanos Energy Center	8	$746 K	+$18 K (2.3%)
Marsh Landing LLC (Marsh Landing Generating Station)	6	$700 K	+$20 K (2.9%)
Gateway Generating Station	5	$665 K	+$13 K (2.0%)
Metcalf Energy Center	7	$562 K	+$14 K (2.5%)

*Projected

Key Public Comments

Delay fee increases until level of service improves

- Efforts are already underway to improve level of service
  - Board approved new positions in September 2025
  - Efficiencies are also addressed by reallocating resources, training, improved tools, program efficiencies, and overall cost containment
  - Improvements are part of the strategic plan and ideas are collected from the Permit Efficiency Taskforce
- Cost recovery addresses work that has already occurred with existing resources.
- Delaying fee increases would extend timeframe to meet 100% cost recovery and/or drop level of service. Fees fund program activities (level of service), including inspections & enforcement, emissions testing, rule development, as well as permitting.

Key Public Comments

Fees and fee amendments: 1) Why are Schedules G-4, G-5, and W proposed for a fee increase?, 2) Why is Schedule R treated differently than other over-recovered schedules, 3) Why does the Air District continue to collect Schedule X fees?

- **Response to 1:** Cost recovery is analyzed using a 3-year average not just the most recent year. Schedules G-4, G-5 and W, averaged over 3 years, are under recovered.
- **Response to 2:** Schedule R sources and operations do not have a Permit to Operate. They are treated differently because maintaining this program requires fewer resources.
- **Response to 3:** Schedule X is collected to comply with state law on fenceline/ community monitors. These fees pay for siting, equipment and maintenance. Air District has hired staff and deployed one community fenceline/community monitor. A second monitor is planned for deployment in the next 2 months with a third in the fall of 2026.

Key Public Comments

Cost recovery and containment: 1) Another cost recovery & containment study is unnecessary, 2) Costs should be contained at current levels until it closes the cost recovery gap

- **Response to 1:**
  - Having an independent cost recovery and containment study satisfies Resolution 2 of the 2022 Board policy
  - The scope of this study will review our current methodology and other key areas such as 1) to review practices at other air districts, 2) provide options for resetting fees that are consistently under-recovered, and 3) recommend options to improve efficiency
- **Response to 2:** Staff continues to implement efficient use of existing resources such as improved tools, updating templates, rules, & documentation, training, and streamlining programs. The study will evaluate specific source types, events, and facilities that consume a disproportionate amount of staff resources and recommend/implement policies to reduce costs.

Recommended Action

Adopt Resolution to adopt the Fiscal Year 2026-27 Proposed Budget and related budget actions, effective July 1, 2026.

Adopt Resolution to adopt the Regulation 3 Amendments, effective July 1, 2026.

Questions & Discussion

For more information:

Stephanie Osaze | Director of Finance | sosaze@baaqmd.gov
Fred Tanaka | Senior Manager | ftanaka@baaqmd.gov

BAY AREA AIR DISTRICT
Memorandum

To: Chairperson Lynda Hopkins and Members of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: June 3, 2026

Re: Adoption of Proposed Amendments to Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18) and Proposed Updates to the Rule 11-18 Implementation Procedures

RECOMMENDED ACTION

Air District staff recommends that the Board of Directors adopt a resolution to:

- Amend Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18);
- Make findings of necessity, authority, clarity, consistency, non-duplication, and reference for the Rule 11-18 amendments
- Update the Rule 11-18 Implementation Procedures;
- Adopt an Addendum to the previously certified Environmental Impact Report for Rule 11-18 pursuant to the California Environmental Quality Act; and
- Adopt a Mitigation Monitoring and Reporting Program for Rule 11-18 pursuant to the California Environmental Quality Act.

BACKGROUND

Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18) was adopted by the Air District in 2017 to address facilities whose emissions of toxic air contaminants (TACs) pose an elevated risk to nearby residents and workers. The purpose of Rule 11-18 is to prioritize existing facilities with the highest health impacts across the Bay Area and require them to reduce those impacts. Rule 11-18 requires existing facilities with health risks above specified risk action level (RAL) thresholds to either reduce those health risks below the Rule's risk action thresholds or implement Best Available Retrofit Control Technology for Toxics (TBARCT) on all significant sources[1] of health risks.

Stationary Source Committee members and environmental groups have raised concerns regarding delays in Rule 11-18 implementation, including the finalization of Health Risk Assessment (HRAs) and the development, submission, and approvals of Risk Reduction Plans (RRPs). These concerns were raised at multiple Committee meetings, and community members voiced similar concerns at Assembly Bill (AB) 617 Community Steering Committee meetings. Additionally, the Richmond-North Richmond-San Pablo Path to Clean Air (PTCA) and the East Oakland Community Air Justice Plan (Right to Breathe) Community Emissions Reduction Plans contain strategies to improve Rule 11-18, including rule amendments to improve efficiency and transparency.

To address these concerns, Air District staff is developing amendments to Rule 11-18 in two phases:

- **Phase 1** (current): focused on procedural improvements and implementation efficiency;
- **Phase 2** (future): focused on evaluating and potentially increasing rule stringency.

For Phase 1, Air District staff is proposing amendments to Rule 11-18 and updates to the Rule 11-18 Implementation Procedures. These amendments aim to expedite the HRA approval step, as well as to make other changes that would improve the implementation efficiency of this Rule. These amendments focus on measures aimed at accelerating risk reduction and on improving program efficiency to implement the requirements of the Rule as soon as feasible. The proposed amendments are expected to expedite not only the overall implementation of the Rule but also the reduction of toxic emissions and health risks from affected facilities.

With some narrow exceptions, Rule 11-18 applies to all facilities whose emissions of TACs may result in an elevated risk to nearby receptors. These include a broad range of commercial, industrial, and municipal facilities, including refineries, chemical plants, wastewater treatment facilities, foundries, forges, landfill operations, hospitals, crematoria, power plants, colleges and universities, and military installations. These facilities operate diverse sources of TAC emissions, such as diesel-fueled internal combustion engines, wastewater treatment processes, combustion sources, and evaporative and fugitive emissions.[2] Applicability under Rule 11-18 is determined annually using prioritization score calculations. Currently, approximately 350 facilities are estimated to have emissions that may pose potentially elevated health risks.[3] Implementation of Rule 11-18 for these facilities will be phased in over several years.

TACs are emitted by a wide range of sources and industrial operations. Common sources of TAC emissions include:

- Combustion processes (e.g., diesel particulate matter from diesel fuel combustion);
- Industrial processes (e.g., toxic metals from metal plating or petroleum refining

operations);
- Fugitive emissions (e.g., leaks from gas station equipment and equipment leaks from joints or connections);
- Off-gassing (e.g., emissions or releases of organic compounds from materials slowly over time); and
- Natural sources (e.g., wildfires and naturally occurring asbestos).

In December 2023, Air District staff released draft updates to the Rule 11-18 Implementation Procedures and a Rule 11-18 Amendments Concept Paper for public review and comment and hosted a public workshop. Staff presented an update on the Rule 11-18 Implementation Procedures updates and the Rule 11-18 amendment concepts to the Stationary Source Committee.

Air District staff conducted additional engagement throughout the continued development of the Rule 11-18 amendments and met with Communities for a Better Environment (CBE), Bay Area Clean Water Agencies (BACWA), Chevron Richmond Refinery, California Council for Environmental and Economic Balance (CCEEB), and the Path to Clean Air Community Steering Committee for the Richmond-North Richmond-San Pablo Community.

In August 2025, Air District staff released draft amendments to Rule 11-18 and updates to the Rule 11-18 Implementation Procedures for public comment and hosted a public workshop. Staff presented updates on the draft amendments to Rule 11-18 and updates to the Rule 11-18 Implementation Procedures to the Stationary Source Committee.

In March 2026, Air District staff released proposed amendments to Rule 11-18 and proposed updates to the Rule 11-18 Implementation Procedures, Staff Report, Socioeconomic Impact Analyses, Notice of Public Hearing, and other supporting documents in for public review and comment. These materials are available on the Air District's website at: https://www.baaqmd.gov/en/Rules-and-Compliance/Rules/Regulation-11-Rule-18-Reduction-of-risk-from-air-toxic-emissions-at-existing-facilities?rule_version=2024%20Amendments.

The written public comment period for the proposed amendments and related materials was open from March 18, 2026, until April 19, 2026. Air District staff received eight written comment letters on the proposed amendment materials. Written comments were submitted by CBE and five additional community-based organizations (CBE et al.), Western States Petroleum Association (WSPA), CCEEB, Bay Area Clean Water Agencies, Chevron, Phillips 66, one member from the PTCA Community Steering Committee, and one other Bay Area resident.

Of the commenters, the two individuals expressed general support of the proposed amendments. CBE et al. expressed general opposition to the proposed amendments due to concerns that the HRAs initially prepared by the facilities would present a conflict of interest that could undermine the trustworthiness of the HRA results. The other comments received had mixed support and opposition, and covered topics including but

not limited to:

- Differences between Air District and facility-prepared HRAs;
- Differences between the legacy procedures and the new procedures to prepare HRAs;
- An additional public comment period before the final HRA report is published;
- An additional facility-only review period before the preliminary HRA report is published;
- Timelines to draft, revise, review, and approve deliverables;
- Workload planning;
- Emissions inventories, particularly finalizing after preliminary HRAs are submitted and incorporating refinery data from Rule 12-15;
- Dispute Resolution Panel (DRP) scope and constraints;
- Consistency with the WSPA settlement agreement;
- Cost of the proposed amendments; and
- Scope of the California Environmental Quality Act (CEQA) analysis.

Air District staff considered the comments submitted and prepared a summary of comments and responses document, which is included as Appendix G to the Final Staff Report. In response to comments received, Air District staff made minor administrative clarifications to the Final Staff Report and to the proposed updates to the Implementation Procedures. BAE Urban Economics also added additional references to the socio-economic analysis report in response to comments received. These clarifications are discussed in Appendix G to the Final Staff Report.

Air District staff made administrative clarifications to the proposed rule language after the proposed rule materials comment period that began on March 18, 2026. The discussion of these administrative clarifications is included in Section III to the Final Staff Report, and this proposed rule language is included in Appendix A to the Final Staff Report. These administrative clarifications were not made in response to comments received and are not expected to alter the requirements of the proposed rule amendments.

[1] Per the Rule 11-18 definition, a significant source is a source of toxic air contaminants or health risk that poses a risk equal to or greater than a significant risk threshold at any maximally exposed individual (MEI) location at which all sources at the facility, taken together, pose a health risk equal to or greater than a risk action level.

[2] Bay Area Air District, 2017. Regulation 11, Rule 18 Final Staff Report. Table 3 - Summary of Toxic Air Contaminant Emitting Facilities and Sources.https://www.baaqmd.gov/~/media/dotgov/files/rules/regulation-11-rule-18/documents/20171115_fsr_1118-pdf.pdf rev=6da6a14f5e7647c3a22743effd5844e7&sc_lang=en

[3] The list of facilities subject to Rule 11-18 is updated annually. The most up-to-date list can be accessed at the following link: https://www.baaqmd.gov/community-health/facility-risk-reduction-program/facility-risk-reduction-list

DISCUSSION

Rule Amendments

For Phase 1, Air District staff is proposing amendments to Rule 11-18 that would expedite the HRA, as well as other changes that would improve the implementation efficiency of this Rule. These proposed amendments focus on measures aimed at accelerating risk reduction and improving program efficiency to implement the requirements of the Rule as soon as feasible. These amendments are expected to expedite not only the overall implementation of the Rule but also the reduction of TAC emissions and health risks from affected facilities. The key components of the proposed amendments to Rule 11-18 include the following:

Health Risk Assessments (HRAs)

- Requiring facilities to prepare preliminary HRAs using Air District-approved modeling protocols. The protocols would apply standardized methods customized with site-specific information, allowing for greater efficiency by leveraging facility-specific knowledge and resources and enabling more preliminary HRAs to move forward simultaneously;
- Giving the Air District authority to review, correct, and approve HRA inputs and results;
- Establishing specific deadlines for facilities to respond to Air District comments and corrections;
- Formalizing the current practice of holding a public comment period on the preliminary HRA concurrent with the existing 90-day comment period for the facility; and
- Outlining what happens when additional testing or emissions data may affect the facility's HRA results and RAL status.

Risk Reduction Plans (RRPs)

- Revising the terminology and timeline associated with the Air District's review of draft RRPs prior to public comment; and
- Clarifying the circumstances under which extensions to the implementation of an RRP or risk reduction measure may be granted.

The proposed amendments would provide considerable Air District staff time and resource savings for implementing the Rule 11-18 risk reduction program, particularly in setting up the air dispersion model and entering input parameters, including toxic emissions data, source locations, stack parameters, meteorological data, terrain data, and receptor locations. The amendments also allow the Rule 11-18 risk reduction program to process more HRAs concurrently by requiring facilities to submit HRA modeling protocols and preliminary HRA results for Air District review, rather than being constrained by the modeling bandwidth of Air District staff. This shift is expected to significantly accelerate implementation timelines across the program.

Implementation Procedures

Air District staff has developed proposed updates to the Rule 11-18 Implementation Procedures. The Implementation Procedures are a set of non-binding procedural guidelines developed to support consistent and transparent application of Rule 11-18. The current Implementation Procedures were published in 2024 after a public comment period but have not been formally adopted by the Board of Directors. The proposed updates to the Implementation Procedures include additional procedures necessary to align with the proposed amendments to Rule 11-18, as well as administrative corrections and clarifications.

Additionally, the proposed updates to the Implementation Procedures would revise the requirements and procedures for the Dispute Resolution Panel (DRP) established to ensure that disputes arising between the Air District and refineries during Rule 11-18 implementation can be resolved expeditiously. The revised procedures would provide a clear process for refineries to address technical issues that remain unresolved after the public comment period, while also encouraging transparent use of the public comment process to streamline implementation. The proposed updates to the Dispute Resolution Panel procedures include the following:

- **Eligibility**: Convening the DRP would only be allowed for disputes involving HRAs or RRPs for facilities defined as refineries under Regulation 8, Rule 1.
- **Submission Content**: Requests would be required to identify specific disagreements with an Air District determination, propose specific remedies, and include supporting materials.
- **Timeliness and Prior Participation**: Only issues, remedies, or materials raised during the public comment period would be allowed to be included, unless they address post-comment period changes made to the HRA or RRP.
- **Scope of Disputes**:
    - After Air District staff responds to comments on preliminary HRAs, disputes would be limited to inventory and methodology issues.
    - After Air District staff responds to comments on draft RRPs, disputes would be limited to technological feasibility, economic burden, TBARCT determinations, or updated inventories.
- **Limits on Requests**:
    - Only one request per facility per plan (HRA/RRP) would be allowed, each covering up to three distinct issues (each with a specific disagreement and proposed remedy).
    - There would be additional requirements placed on request submissions to ensure that disputes can be resolved within a reasonable timeframe.

Socioeconomic Impacts and CEQA Requirements

A socioeconomic analysis conducted by BAE Urban Economics found that the proposed amendments to Rule 11-18 may result in compliance cost impacts for some facilities,

and that there may be significant impacts for 8 out of 24 small businesses. In order to avoid any significant socioeconomic impacts, the Air District is committing to completing the HRAs for any small business impacted by the rule. For these facilities, and any others that lack resources to conduct the HRA, the Air District may use an HRA prepared in whole or in part by the Air District pursuant to proposed amended Section 11-18-402.6. For Air District-prepared HRAs, facility costs would be expected to remain the same as currently required by the existing Rule 11-18 provisions. Therefore, these facilities would not be expected to incur any increased costs from the proposed rule amendments, and the socioeconomic impacts from the proposed rule amendments would be mitigated at these facilities.

Regarding the CEQA, the proposed amendments do not require further CEQA review because the potential environmental impacts of Rule 11-18 have previously been evaluated in a CEQA Environmental Impact Report (EIR) that was certified by the Board of Directors in 2017 in connection with adoption of Rule 11-18[1], and the proposed amendments involve only minor technical changes or additions that do not require a subsequent or supplemental EIR under CEQA section 21166 (Cal. Public Resources Code § 21166) and CEQA Guidelines section 15162 (14 Cal. Code Regs. § 15162). As documented in the Addendum to the EIR prepared by Environmental Audit, Inc., the proposed amendments to Rule 11-18 would neither increase the severity of any significant adverse impacts identified in the EIR nor result in new significant adverse impacts beyond those previously identified in the EIR. Staff recommend the adoption of this Addendum documenting that no further CEQA review is required under CEQA section 21166 and Guidelines section 15162.

Air District staff also contracted with Environmental Audit, Inc., to prepare a Mitigation Monitoring and Reporting Program for Rule 11-18 under CEQA. The Mitigation Monitoring and Reporting Program provides information regarding monitoring and enforcement of the mitigation measures imposed to address the potentially significant impacts identified in the EIR. Staff also recommend the adoption of this Mitigation Monitoring and Reporting Program.

[1] Environmental Impact Report for the Bay Area Air District for Rule 11-18 from November 2017 can be accessed at the following link: https://www.baaqmd.gov/~/media/dotgov/files/rules/regulation-11-rule-18/documents/20171115_rfeir_1118-pdf.pdf?rev=055e56fae4e0474dbbc1393e5252f22e&sc_lang=en

BUDGET CONSIDERATION/FINANCIAL IMPACT

The proposed amendments to Rule 11-18 are intended to prevent further delays and expedite implementation of Rule 11-18. Concerns regarding delays in Rule 11-18 implementation and risk reduction progress have been raised by committee members, community members and representatives, and environmental groups at multiple Air District Stationary Source Committee meetings and at AB 617 Community Steering Committee meetings. Numerous factors have contributed to these delays, including lack of sufficient staff resources to perform HRAs, increases in the number of permit applications, impacts due to the COVID-19 pandemic, extensive discussions with

facilities on technical issues, and the diversion of modeling staff resources to other projects, including high-visibility permit applications, public meetings, rulemaking efforts, and enforcement actions. With the vast majority of facilities conducting the facility-wide HRA under the proposed amendments, and the Air District focusing on the review of Rule 11-18 deliverables, the amendments would allow more efficient and effective use of Air District staff resources for Rule 11-18 implementation and would reduce the amount of staff resources that would be necessary to implement the Rule in full.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Katie Gong
Reviewed by: David Joe and Victor Douglas

ATTACHMENT(S):

1. Final Staff Report Proposed Amendments to Rule 11-18
2. APPENDIX A: Proposed Amendments to Rule 11-18 - Redlined Version
3. APPENDIX B: Proposed Updates to Rule 11-18 Implementation Procedures
4. APPENDIX C: Final Socioeconomic Impact Analysis of Proposed Amendments to Rule 11-18
5. APPENDIX D: Final Addendum to the Environmental Impact Report for Rule 11-18
6. APPENDIX E: Environmental Impact Report for Rule 11-18
7. APPENDIX F: Final Mitigation Monitoring and Reporting Program to the Environmental Impact Report for Rule 11-18
8. APPENDIX G: Response to Comments: Proposed Amendments to Rule 11-18
9. Draft Board Resolution for Proposed Amendments to Rule 11-18
10. Resolution Attachment A: Proposed Rule Amendments to Rule 11-18
11. Resolution Attachment B: Proposed Implementation Procedures Amendments for Rule 11-18
12. Resolution Attachment C: Final Addendum to the Environmental Impact Report for Rule 11-18
13. Resolution Attachment D: Mitigation Monitoring and Reporting Program for Rule 11-18
14. Proposed Amendments to Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities Presentation

Bay Area Air District

FINAL STAFF REPORT
Proposed Amendments to Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities



June 2026

Prepared By:
Andrea Anderson, PhD, Senior Air Quality Specialist
Katie Gong, Senior Air Quality Engineer
Daniel Oliver, Senior Air Quality Engineer
Alexander Sohn, PE, Principal Air Quality Engineer

(This page was intentionally left blank)

ACKNOWLEDGEMENTS

District staff members who contributed to the development of this report and proposed rule amendments:

Ariana Husain, Manager, Engineering
Carol Allen, Manager, Engineering
David Joe, Manager, Regulatory Development
Gregory Dhawan-Muren, Assistant Counsel, Legal
Kevin Oei, Supervising Air Quality Engineer, Engineering
Pam Leong, Director, Engineering
Simrun Dhoot, Supervising Air Quality Engineer, Engineering
Victor Douglas, Director, Regulatory Development

FINAL STAFF REPORT

Proposed Amendments to Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities

Table of Contents

ACKNOWLEDGEMENTS 3
Table of Contents 4
I. EXECUTIVE SUMMARY 6
A. Summary of Proposed Amendments and Updates 6
1. Rule Amendments 6
2. Implementation Procedures 7
3. Future Amendments 8
B. Public Process and Stakeholder Engagement 8
C. Economic Impacts and CEQA Requirements 9
D. Recommendation 10
II. BACKGROUND 11
A. Industry Description 11
B. Pollutants 11
C. Regulatory History 12
1. Bay Area Air District 13
2. State Regulation 15
3. Federal Regulation 16
4. Air Toxics Control Programs in Other Jurisdictions 16
III. PROPOSED AMENDMENTS TO RULE 11-18 17
A. Definitions 17
B. Standards 18
C. Administrative Requirements 19
D. Monitoring and Records 24
E. Manual of Procedures 25
IV. PROPOSED UPDATES TO RULE 11-18 IMPLEMENTATION PROCEDURES 25
A. Introduction 27
B. Purpose 27
C. Definitions 27
D. Procedures 27
E. Dispute Resolution Panel 30

F. Stakeholder Meetings 31
V. EMISSIONS AND EMISSIONS REDUCTIONS 31
VI. ECONOMIC IMPACTS 32
A. Cost-effectiveness and Incremental Cost-effectiveness 32
B. Socioeconomic Impacts 32
1. Proposed Amendments to Rule 11-18 32
2. Rule 11-18 Adopted in 2017 33
C. Air District Impacts 34
VII. REGULATORY IMPACTS 34
VIII. CEQA REQUIREMENTS 37
IX. RULE DEVELOPMENT / PUBLIC PARTICIPATION PROCESS 37
A. Concept Paper and 2024 Updates to Implementation Procedures 37
B. Draft Amendments 38
C. Other Stakeholder Engagement 39
D. Proposed Amendments 39
X. CONCLUSION / RECOMMENDATIONS 40
A. Necessity 40
B. Authority 41
C. Clarity 41
D. Consistency 41
E. Non-Duplication 41
F. Reference 41
G. Recommendations 42

APPENDIX A: Proposed Amendments to Regulation 11: Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities

APPENDIX B: Proposed Updates to Rule 11-18 Implementation Procedures

APPENDIX C: Final Socioeconomic Impact Analysis of Proposed Amendments to Rule 11-18

APPENDIX D: Final Addendum to the Environmental Impact Report for Rule 11-18

APPENDIX E: Environmental Impact Report for Rule 11-18

APPENDIX F: Mitigation Monitoring and Reporting Program for Rule 11-18

APPENDIX G: Response to Comments Summary: Proposed Amendments to Rule 11-18

I. EXECUTIVE SUMMARY

The Bay Area Air District ("Air District") staff is proposing amendments to Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18) and updates to the Rule 11-18 Implementation Procedures. These amendments aim to expedite the Health Risk Assessment (HRA) approval step, as well as to make other changes that would improve the implementation efficiency of this Rule. These amendments focus on measures aimed at accelerating risk reduction and on improving program efficiency to implement the requirements of the Rule as soon as feasible. The proposed amendments are expected to expedite not only the overall implementation of the Rule but also the reduction of toxic emissions and health risks from affected facilities.

Rule 11-18 was adopted by the Air District in 2017 to address facilities whose emissions of toxic air contaminants (TACs) pose an elevated risk to nearby residents and workers. The purpose of Rule 11-18 is to prioritize existing facilities with the highest health impacts across the Bay Area and require them to reduce those impacts. Rule 11-18 requires existing facilities with health risks above specified risk action level (RAL) thresholds to either reduce those health risks below the Rule's risk action thresholds or implement Best Available Retrofit Control Technology for Toxics (TBARCT) on all significant sources[1] of health risks.

Air District Stationary Source Committee members and environmental groups have raised concerns regarding delays in Rule 11-18 implementation, including the finalization of HRAs and the development, submission, and approvals of Risk Reduction Plans (RRPs). These concerns were raised at multiple Committee meetings, and community members voiced similar concerns at Assembly Bill (AB) 617 Community Steering Committee meetings. Additionally, the Richmond-North Richmond-San Pablo Path to Clean Air (PTCA) and the East Oakland Community Air Justice Plan (Right to Breathe) Community Emissions Reduction Plans contain strategies to improve Rule 11-18, including rule amendments to improve efficiency and transparency.

To address these concerns, Air District staff is developing amendments to Rule 11-18 in two phases:

- **Phase 1** (current): focused on procedural improvements and implementation efficiency;
- **Phase 2** (future): focused on evaluating and potentially increasing rule stringency.

This Final Staff Report provides background information, regulatory context, and a detailed description of the Phase 1 proposed amendments to Rule 11-18.

A. Summary of Proposed Amendments and Updates

1. Rule Amendments

For Phase 1, Air District staff is proposing amendments to Rule 11-18 that would expedite the HRA process, as well as other changes that would improve the implementation efficiency of this Rule and accelerate the implementation of risk reduction measures, The key components of the proposed amendments to Rule 11-18 include the following:

[1] Per the Rule 11-18 definition, a significant source is a source of toxic air contaminants or health risk that poses a risk equal to or greater than a significant risk threshold at any maximally exposed individual (MEI) location at which all sources at the facility, taken together, pose a health risk equal to or greater than a risk action level.

Health Risk Assessments (HRAs)

- Requiring facilities to prepare preliminary HRAs using Air District-approved modeling protocols. The protocols would apply standardized methods customized with site-specific information, allowing for greater efficiency by leveraging facility-specific knowledge and resources and enabling more preliminary HRAs to move forward simultaneously;
- Giving the Air District authority to review, correct, and approve HRA inputs and results;
- Establishing specific deadlines for facilities to respond to Air District comments and corrections;
- Formalizing the current practice of holding a public comment period on the preliminary HRA concurrent with the existing 90-day comment period for the facility; and
- Outlining what happens when additional testing or emissions data may affect the facility's HRA results and RAL status.

Risk Reduction Plans (RRPs)

- Revising the terminology and timeline associated with the Air District's review of draft RRPs prior to public comment; and
- Clarifying the circumstances under which extensions to the implementation of an RRP or risk reduction measure may be granted.

The proposed amendments would provide considerable Air District staff time and resource savings for implementing the Rule 11-18 risk reduction program, particularly in setting up the air dispersion model and entering input parameters, including toxic emissions data, source locations, stack parameters, meteorological data, terrain data, and receptor locations. The amendments also allow the Rule 11-18 risk reduction program to process more HRAs concurrently by requiring facilities to submit HRA modeling protocols and preliminary HRA results for Air District review, rather than being constrained by the modeling bandwidth of Air District staff. This shift is expected to significantly accelerate implementation timelines across the program.

2. Implementation Procedures

Staff has developed proposed updates to the Rule 11-18 Implementation Procedures. The Implementation Procedures are a set of non-binding procedural guidelines developed to support consistent and transparent application of Rule 11-18. The current Implementation Procedures were published in 2024 after a public comment period but have not been formally adopted by the Board of Directors. The proposed updates to the Implementation Procedures include additional procedures necessary to align with the proposed amendments to Rule 11-18, as well as administrative corrections and clarifications.

Additionally, the proposed updates to the Implementation Procedures would revise the requirements and procedures for the Dispute Resolution Panel (DRP) established to ensure that disputes arising between the Air District and refineries during Rule 11-18 implementation can be resolved expeditiously. The revised procedures would provide a clear process for refineries to address technical issues that remain unresolved after the public comment period, while also encouraging transparent use of the public comment process to streamline implementation. The proposed updates to the Dispute Resolution Panel procedures include the following:

- **Eligibility**: Convening the DRP would only be allowed for disputes involving HRAs or RRPs for facilities defined as refineries under Regulation 8, Rule 1.

- **Submission Content**: Requests would be required to identify specific disagreements with an Air District determination, propose specific remedies, and include supporting materials.
- **Timeliness and Prior Participation**: Only issues, remedies, or materials raised during the public comment period would be allowed to be included, unless they address post-comment period changes made to the HRA or RRP.
- **Scope of Disputes**:
    - After Air District staff responds to comments on preliminary HRAs, disputes would be limited to inventory and methodology issues.
    - After Air District staff responds to comments on draft RRPs, disputes would be limited to technological feasibility, economic burden, TBARCT determinations, or updated inventories.
- **Limits on Requests**:
    - Only one request per facility per plan (HRA/RRP) would be allowed, each covering up to three distinct issues (each with a specific disagreement and proposed remedy).
    - There would be additional requirements placed on request submissions to ensure that disputes can be resolved within a reasonable timeframe.

3. Future Amendments

These proposed amendments represent the first of the two phases of planned amendments to Rule 11-18. Phase 2 is anticipated to include potential increased stringency measures and additional rule improvements. This may include efforts such as reexamining RALs, additional measures to further limit or reduce health impacts on communities near Rule 11-18 facilities, or other changes to improve rule clarity, transparency and implementation of existing risk reduction requirements for reducing facility-wide health risks below RALs or installing all feasible risk reduction measures and TBARCT. The development of Phase 2 of the amendments to Rule 11-18 is planned to be initiated after the proposed Phase 1 amendments are adopted. Phase 2 has not yet been initiated, as its timing will depend on the ongoing prioritization of upcoming rulemaking projects and schedules.

B. Public Process and Stakeholder Engagement

In developing these amendments, staff reviewed similar rules from other air districts, reviewed current processes, and engaged with interested and affected stakeholders.

In December 2023, the Air District released draft updates to the Rule 11-18 Implementation Procedures and a Rule 11-18 Amendments Concept Paper for public review and comment and hosted a public workshop. Staff presented an update on the Rule 11-18 Implementation Procedures updates and the Rule 11-18 amendment concepts to the Air District Stationary Source Committee.

In August 2025, the Air District released draft amendments to Rule 11-18 and updates to the Rule 11-18 Implementation Procedures for public comment and hosted a public workshop. Staff presented updates on the draft amendments to Rule 11-18 and updates to the Rule 11-18 Implementation Procedures to the Air District Stationary Source Committee.

Staff conducted additional engagement throughout the continued development of the Rule 11-18 amendments and met with Communities for a Better Environment (CBE), Bay Area Clean Water

Agencies (BACWA), Chevron Richmond Refinery, California Council for Environmental and Economic Balance (CCEEB), and the Path to Clean Air Community Steering Committee for the Richmond-North Richmond-San Pablo Community.

Air District staff released an earlier version of this Staff Report, proposed amendments to Rule 11-18, and proposed updates to the Rule 11-18 Implementation Procedures for public review and comment on March 18, 2026. Air District staff considered the comments submitted and prepared a summary of comments and responses document, which is included as Appendix G to this Final Staff Report. In response to comments received, Air District staff made minor administrative clarifications to this Final Staff Report and to the proposed updates to the Implementation Procedures. BAE Urban Economics also added additional references to the socio-economic analysis report in response to comments received. These clarifications are discussed in Appendix G to this Final Staff Report.

Air District staff made administrative clarifications to the proposed rule language after the proposed rule materials comment period that began on March 18, 2026. The discussion of these administrative clarifications is included in Section III to this Final Staff Report, and this proposed rule language is included in Appendix A to this Final Staff Report. These administrative clarifications were not made in response to comments received and are not expected to alter the requirements of the proposed rule amendments.

C. Economic Impacts and CEQA Requirements

A socioeconomic analysis conducted by BAE Urban Economics found that the proposed amendments to Rule 11-18 may result in compliance cost impacts for some facilities. In particular it identified 8 facilities, all small businesses, that would face significant impacts. For facilities that lack resources to conduct the HRA, the Air District may use an HRA prepared in whole or in part by the Air District in accordance with proposed amended Section 11-18-402.6. For Air District-prepared HRAs, facility costs would be expected to remain the same as currently required by the existing Rule 11-18 provisions. As a result of the socioeconomic analysis results, the Air District is committing to completing the HRAs for these small businesses. Therefore, these facilities would not be expected to incur any increased costs from the proposed rule amendments, and the socioeconomic impacts from the proposed rule amendments would be mitigated at these facilities.

Staff has also reviewed the amendments and determined that they are subject to environmental review under the California Environmental Quality Act (CEQA). The Air District determined an Addendum to the Environmental Impact Report (EIR) that was certified in 2017 with adoption of Rule 11-18 by the Board of Directors[2] is the appropriate CEQA document to be prepared for evaluating potential environmental impacts of these proposed amendments. The CEQA analysis performed by Environmental Audit, Inc. found the proposed amendments to Rule 11-18 would neither increase the severity of these significant adverse impacts nor result in new significant adverse impacts beyond those previously identified in the EIR.

Air District staff also contracted with Environmental Audit, Inc., to prepare a Mitigation Monitoring and Reporting Program for Rule 11-18 under CEQA. The Mitigation Monitoring and Reporting

[2] Environmental Impact Report for the Bay Area Air District for Rule 11-18 from November 2017 can be accessed at the following link: https://www.baaqmd.gov/~/media/dotgov/files/rules/regulation-11-rule-18/documents/20171115_rfeir_1118-pdf.pdf?rev=055e56fae4e0474dbbc1393e5252f22e&sc_lang=en

Program provides information regarding monitoring and enforcement of the mitigation measures imposed to address the potentially significant impacts identified in the EIR.

D. Recommendation

Air District staff recommends that the Air District Board of Directors adopt (1) a resolution to amend Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18); (2) make findings of necessity, authority, clarity, consistency, non-duplication, and reference for the Rule 11-18 amendments; (3) update the Rule 11-18 Implementation Procedures; (4) adopt an Addendum to the previously certified Environmental Impact Report for Rule 11-18 pursuant to the California Environmental Quality Act; and (5) adopt a Mitigation Monitoring and Reporting Program for Rule 11-18 pursuant to the California Environmental Quality Act.

II. BACKGROUND

A. Industry Description

With some narrow exceptions, Rule 11-18 applies to all facilities whose emissions of toxic air contaminants (TACs or air toxics) may result in an elevated risk to nearby receptors. These include a broad range of commercial, industrial, and municipal facilities, including refineries, chemical plants, wastewater treatment facilities, foundries, forges, landfill operations, hospitals, crematoria, power plants, colleges and universities, and military installations. These facilities operate diverse sources of TAC emissions, such as diesel-fueled internal combustion engines, wastewater treatment processes, combustion sources, and evaporative and fugitive emissions.[3] Applicability under Rule 11-18 is determined annually using prioritization score calculations. Currently, approximately 350 facilities are estimated to have emissions that may pose potentially elevated health risks.[4] Implementation of Rule 11-18 for these facilities will be phased in over several years.

B. Pollutants

Rule 11-18 aims to reduce health impacts from exposure to emissions of TACs from affected facilities. California Health and Safety Code Section 39655 defines a toxic air contaminant as "an air pollutant which may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health."[5] Additionally, TACs include substances classified as federal hazardous air pollutants under Section 112 of the Clean Air Act (Section 7412 of Title 42 of United States Code).[6] The California Air Resources Board (CARB) lists over 200 TACs. For the purposes of Rule 11-18, TACs include air pollutants that are identified in Table 2-5-1 of Regulation 2: Permits, Rule 5: New Source Review of Toxic Air Contaminants. The Air District periodically updates Table 2-5-1 to include new health effect values for TACs and new TACs that are identified by the California Office of Environmental Health Hazard Assessment.

TACs are emitted by a wide range of sources and industrial operations. Common sources of TAC emissions include:

- Combustion processes (e.g., diesel particulate matter from diesel fuel combustion or power generation);
- Industrial processes (e.g., toxic metals from metal plating or petroleum refining operations);
- Fugitive emissions (e.g., leaks from gas station equipment and equipment leaks from joints or connections);
- Off-gassing (e.g., emissions or releases of organic compounds from materials slowly over time); and
- Natural sources (e.g., wildfires and naturally occurring asbestos).

[3] Bay Area Air District, 2017. Regulation 11, Rule 18 Final Staff Report. Table 3 - Summary of Toxic Air Contaminant Emitting Facilities and Sources. https://www.baaqmd.gov/~/media/dotgov/files/rules/regulation-11-rule-18/documents/20171115_fsr_1118-pdf.pdf?rev=6da6a14f5e7647c3a22743effd5844e7&sc_lang=en

[4] The list of facilities subject to Rule 11-18 is updated annually. The most up-to-date list can be accessed at the following link: https://www.baaqmd.gov/community-health/facility-risk-reduction-program/facility-risk-reduction-list

[5] The text of Section 39655 of California Health and Safety Code can be accessed at the following link: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=39655&lawCode=HSC

[6] The text for Clean Air Act Section 112 (42 U.S.C. section 7412) can be accessed at the following link: https://www.law.cornell.edu/uscode/text/42/7412

Among facilities permitted by the Air District, Figure 1 highlights the industries with the highest aggregate prioritization scores, categorized by standard industrial classification (SIC). Each SIC source category in Figure 1 includes multiple facilities. The prioritization score for a facility is a conservative, preliminary indicator of its relative potential to impact public health. It is based on the quantity of TACs emitted, the relative toxicity of those TACs, and the facility's proximity to potential receptors.

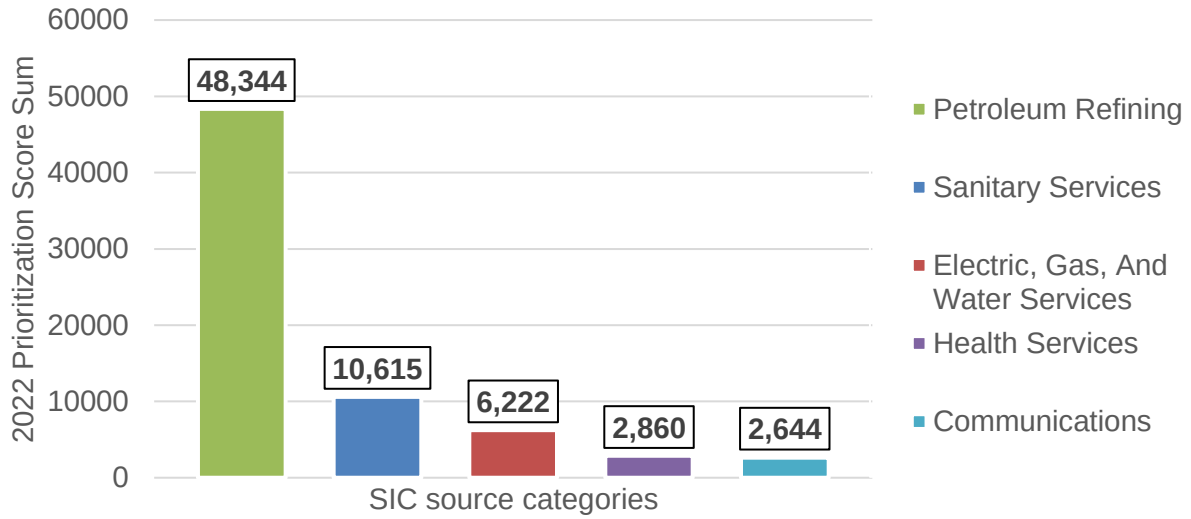


Figure 1 – 2022 Prioritization Score from Air District-Permitted Facilities, Largest SIC Source Categories.

Previous research by the Air District found that acrolein, benzene, 1,3-Butadiene, diesel particulate matter, and formaldehyde account for more than 90 percent of all toxicity-weighted toxic air contaminant emissions[7] from all sources, including area sources,[8] point sources,[9] on-road mobile sources, non-road mobile sources, and biogenic sources in the Bay Area.[10] The toxicity-weighted TAC emissions varies by facility to facility, which leads to different impacts in different communities.

C. Regulatory History

[7] Toxicity-weighted emissions are a means of comparing the relative toxicity of TAC emissions in an inventory by multiplying the mass emissions of a specific TAC by the corresponding health values related to its toxic potency.
[8] "Area sources are small-scale industrial, commercial, and residential activities that individually emit relatively small amounts of air pollutants but collectively contribute significantly to overall emissions inventories." https://ww2.arb.ca.gov/area-source-inventory-methodologies
[9] "Stationary point sources are most often individual facilities that have specific locations. These sources are typically permitted by Air Districts." https://ww2.arb.ca.gov/emission-sources
[10] Refer to pg. 2 of Bay Area Air District, 2019. Air Toxics Data Analysis and Regional Modeling in the San Francisco Bay Area to Support AB617, which can be accessed at the following link: https://www.baaqmd.gov/~/media/files/ab617-community-health/west-oakland/baaqmd_2016_toxics_modeling_report-pdf.pdf?la=vi-vn

1. Bay Area Air District

Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities

The Air District adopted Rule 11-18 in 2017 to reduce health risks from existing facilities. Rule 11-18 requires any existing facility that equals or exceeds the risk action level (RAL), as defined in Section 11-18-218 of the current Rule, to take action to reduce its risk. The RAL is defined as a cancer risk of 10 per million (10/M), an acute hazard index of 1.0, or a chronic hazard index of 1.0. Cancer risk is an estimate of the chance that an individual will develop cancer during their lifetime. A cancer risk of 10 in a million indicates that a person has an additional risk of 10 chances in a million (0.001%) of developing cancer during their lifetime as a result of the air pollution scenario being evaluated. Affected facilities must either:

1. Reduce facility-wide health risks below all RALs; or
2. If the facility-wide health risk cannot be reduced below the RAL, install Best Available Retrofit Control Technology for Toxics (TBARCT) on all significant sources, which are defined as specific air toxics sources within the facility that exceed a cancer risk of 1 in one million (1/M) or a chronic or acute hazard index of 0.2.

Rule 11-18 is currently implemented in four key steps:

1. The Air District identifies facilities that are potentially subject to Rule 11-18 Health Risk Assessment (HRA) requirements based on prioritization scores.[11]
2. The Air District updates TAC emissions inventories and assesses health impacts from TAC emissions through a facility-wide HRA.
3. The facility develops a Risk Reduction Plan (RRP) that they must get approved by the Air District if the HRA results indicate that the facility meets or exceeds any of the RALs in Rule 11-18.
4. The facility must implement the approved RRP if subject to the Rule 11-18 RRP requirements.

The first two steps are essential in identifying health risks from facilities, and both steps rely on an accurate emissions inventory to inform Air District decisions.

In the third step, the Air District compares the estimated health risk from the facility-wide HRA to the RALs contained in Rule 11-18. If any health risk from the HRA equals or exceeds any of the RALs, the facility is required to develop and have the Air District approve an RRP. The RRP must outline how the facility will implement risk reduction measures to comply with the Rule.

The final step of this process is the implementation of the approved RRP. Once the RRP is approved, the facility must submit annual reports to the Air District detailing emissions reductions achieved until the RRP is fully implemented or the facility demonstrates compliance with the RRP.

Litigation

On December 15, 2017, the Western States Petroleum Association and its members Valero Refining Company, Tesoro Refining and Marketing Company, and Phillips 66 Company, filed a

[11] Prioritization scores represent the relative potential for health impacts from a facility based on the amount of TACs emitted from a facility, the relative toxicity of the TACs emitted, and the proximity of the facility to possible receptors.

lawsuit against the Air District challenging the adoption of Rule 11-18. The petitioners ultimately dismissed their lawsuit pursuant to a settlement entered into in March 2019.[12] The settlement outlined provisions for emission factors used in the development of the TAC emissions inventory, HRA procedures and presentation of results, the Dispute Resolution Panel process, and TBARCT determination for sources of significant risk.

On October 25, 2022, Communities for a Better Environment (CBE) filed a lawsuit against the Air District challenging the adoption of the Rule 11-18 Implementation Procedures. The Air District engaged in negotiations with CBE and worked cooperatively to identify ways to improve transparency and public participation in the Air District programs as an alternative to litigation. CBE ultimately dismissed its lawsuit against the Air District pursuant to a settlement agreement entered into in September 2023.[13] To build better transparency with community members and the public, the Air District agreed to hold a public comment period regarding the 2024 revisions to the Implementation Procedures, and to provide additional information on the Air District's website regarding the status of health risk evaluation and reduction at the most impactful facilities. The Air District also agreed, among other things, to meet regularly with CBE and other community-based environmental justice organizations to discuss the implementation of this program and other issues of concern.

Regulation 2: Permits, Rule 5: New Source Review of Toxic Air Contaminants

The Air District adopted its Air Toxics New Source Review (NSR) program in 1987. In 2005, the Air District codified the procedures and policies of the Air Toxics NSR Program by adopting a new Air District rule – Regulation 2: Permits, Rule 5: New Source Review of Toxic Air Contaminants (Rule 2-5). The primary purpose of Rule 2-5 was to (1) evaluate and mitigate potential increases in public health risks resulting from new and modified sources emitting TACs; and (2) provide net health risk benefits by improving the level of control when existing sources are modified or replaced. Rule 2-5 differs from Rule 11-18 in that Rule 2-5 only applies to new or modified sources of TACs. Together, Rules 2-5 and 11-18 are intended to minimize health risks from TACs at both new and existing facilities

Rule 2-5 contains various limits and thresholds on project health risks. In general, a project may not result in a cancer risk exceeding 10/M; additionally, a project located within an Overburdened Community may not result in a cancer risk exceeding 6/M. All projects are also subject to a limit of 1.0 for chronic or acute hazard index. In addition, any new or modified source with an individual source risk that exceeds a cancer risk of 1/M, or an acute or chronic hazard index of 0.2, is required to install Best Available Control Technology for Toxics (TBACT). New or modified sources applying for an air permit must comply with the health risk requirements in this rule prior to construction. Moreover, Regulation 2: Permits, Rule 1: General Requirements contains public noticing requirements for projects located in Overburdened Communities that are subject to Rule 2-5 HRA requirements.

[12] The settlement agreement can be accessed on the Penalties and Settlements page at the following link: https://www.baaqmd.gov/~/media/files/communications-and-outreach/news-and-events/penalties-and-assessments/2023/final-executed-settlement-agreement-rule-11_18-litigation-pdf.pdf?rev=c76427b1dfd14bbb99a94aed35610046&sc_lang=en

[13] The settlement agreement can be accessed on the Penalties and Settlements page at the following link: https://www.baaqmd.gov/~/media/files/communications-and-outreach/news-and-events/penalties-and-assessments/2023/cbe-vs-baaqmd-acsc-no-22cv020451-settlement-agreement-090223-pdf.pdf?rev=2542c1b92eb447e89336e211f5e28169&sc_lang=en

2. State Regulation

California Assembly Bill (AB) 2588 Air Toxics “Hot Spots” (ATHS) Program

Rule 11-18 currently works in conjunction with CARB’s statewide Air Toxics “Hot Spots” program to address risk from existing facilities. The program is also referred to as the “AB 2588 Program,” named after the Air Toxics “Hot Spots” Information and Assessment Act of 1987 (AB 2588).[14]

The program focuses on reducing risks from stationary sources that emit TACs. It requires the development of emissions inventories, allows air districts to require risk assessments, and, for facilities that exceed risk levels set by local air districts, requires notification of exposed individuals and the implementation of risk reduction plans. Additionally, the program mandates air toxics inventory updates every four years and requires facilities to pay fees to support Air District and CARB inventory efforts.

In accordance with the California Air Toxics “Hot Spots” Information and Assessment Act of 1987, most facilities must regularly report routine and predictable air toxics emissions from stationary sources to their local air district. The Bay Area Air District utilizes these data, along with the toxicity of each TAC and the type of associated health impacts (cancer versus non-cancer), and the proximity of receptors to the facility to generate facility prioritization scores. These scores help identify facilities requiring further inventory review and determine the order in which HRAs are conducted, if necessary.

Under AB 2588, the Air District established public notification risk levels at 10/M for cancer risk and 1.0 for chronic and acute hazard indices. Facilities exceeding these thresholds must notify all exposed individuals, either through direct letters to neighbors or public notices in newspapers. For mandatory risk reduction, Air District policy sets action levels at 100/M for cancer risk and 10 for chronic and acute hazard indices. Currently, there is no facility in the Bay Area air basin for which an HRA shows an exceedance of these mandatory risk reduction levels. Under AB 2588, facilities with health risk less than 100/M for cancer risk and 10 for chronic and acute hazard indices, but greater than 10/M for cancer risk and 1.0 for chronic or acute hazard index, are not required to reduce health risk. Under existing Rule 11-18, however, these facilities are required to either reduce facility-wide health risks below all RALs; or install TBARCT on all significant sources, if the health risk for the facility cannot be reduced below the RAL.

AB 2588 also requires the Air District to prepare and publish an annual report. This report outlines the priorities and categories designated under AB 2588 for HRAs, ranks and identifies facilities based on health risk, and details progress in developing control measures to reduce TAC emissions.

Concurrently, with the establishment of AB 2588 in 1987, the Air District’s Board of Directors adopted the Air District’s Toxic Control Program. In November 1990, under Board Resolution No. 1986, the Board adopted a revised version of the program, requiring the implementation of AB 2588 and the Air District’s Toxic Program. In addition to these requirements, the resolution required the publication of an annual report that included additional elements beyond the AB 2588 reporting requirements. These additional elements include providing updates on the Air District’s

[14] The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, 1987, Connelly): https://ww2.arb.ca.gov/our-work/programs/ab-2588-air-toxics-hot-spots

Toxic Program, Air Toxics New Source Review, facility risk reduction, TAC control measures, TAC emissions inventory, air toxics ambient air monitoring, and community health protection.

California Airborne Toxic Control Measures (ATCM)

Under the Toxic Air Contaminant Identification and Control (AB 1807) Program,[15] CARB is responsible for developing and adopting airborne toxic control measures (ATCMs) to reduce emissions of TACs from specific industrial sources and sectors, such as stationary diesel engines or perchloroethylene from dry cleaning operations. The Bay Area Air District and other local air quality agencies are required to implement and enforce these ATCMs, and may adopt local rules and regulations that are equivalent to or more stringent than the ATCMs.

3. Federal Regulation

National Emission Standards for Hazardous Air Pollutants (NESHAPs), developed by U.S. EPA in accordance with Section 112 of the Clean Air Act, are also considered ATCMs in California. These regulations generally focus on larger "major source" facilities and require that emissions of HAPs be reduced by requiring sources to meet Maximum Achievable Control Technology (MACT). The focus of recent NESHAP development has shifted to rules that apply to smaller "area source" facilities. Under State law, the Air District must ensure that all permitted sources meet federal MACT Standards, or rules that are at least as stringent.

4. Air Toxics Control Programs in Other Jurisdictions

South Coast Air Quality Management District (South Coast AQMD) - Rule 1402: Control of Toxic Air Contaminants from Existing Facilities

South Coast AQMD Rule 1402 ("Control of Toxic Air Contaminants from Existing Facilities") was adopted in April 1994. The rule establishes facility-wide risk requirements for existing facilities that emit TACs and implements the State AB 2588 Air Toxics "Hot Spots" program. The rule includes requirements for TAC emissions inventories, Health Risk Assessments, public notification, and risk reduction. The rule requires facilities that exceed the Notification Risk Level (a cancer risk of 10/M or an acute or chronic hazard index of 1.0) as demonstrated by an approved Health Risk Assessment to issue a public notification. If the health risk posed by the facility exceeds the Action Risk Level (a cancer risk of 25/M, a cancer burden of 0.5, or an acute or chronic hazard index of 3.0), the facility is required to reduce its facility-wide risk. Any facility whose TAC emissions result in an exceedance of the Significant Risk Level (a cancer risk of 100/M or an acute or chronic hazard index of 5) must implement risk reduction measures to bring the health risk level below the Significant Risk Level within three years of submitting the initial risk reduction plan. Additionally, the rule includes a Voluntary Risk Reduction Program that encourages facilities to reduce their risk below the Notification Risk Level. Facilities participating in this program are not subject to the standard emissions inventory, Health Risk Assessment, and Risk Reduction Plan requirements of the rule. The rule also requires facilities to prepare the facility-wide Health Risk Assessments.

[15] The Toxic Air Contaminant Identification and Control Act (AB 1807, Tanner 1983): https://ww2.arb.ca.gov/resources/documents/ab-1807-toxics-air-contaminant-identification-and-control#:~:text=The%20Toxic%20Air%20Contaminant%20Identification,%2C%20and%202)%20risk%20management

III. PROPOSED AMENDMENTS TO RULE 11-18

The proposed amendments focus on measures aimed at accelerating risk reduction and improving program efficiency to implement the requirements of the Rule as soon as feasible. The key components of the proposed amendments include the following:

Health Risk Assessments (HRAs)

- Requiring facilities to prepare preliminary HRAs using Air District-approved modeling protocols. The protocols would apply standardized methods customized with site-specific information, allowing for greater efficiency by leveraging facility-specific knowledge and resources and enabling more preliminary HRAs to move forward simultaneously;
- Giving the Air District authority to review, correct, and approve HRA inputs and results;
- Establishing specific deadlines for facilities to respond to Air District comments and corrections;
- Formalizing the current practice of holding a public comment period on the preliminary HRA concurrent with the existing 90-day comment period for the facility; and
- Outlining what happens when additional testing or emissions data may affect the facility's HRA results and RAL status.

Risk Reduction Plans (RRPs)

- Revising the terminology and timeline associated with the Air District's review of draft RRPs prior to public comment; and
- Clarifying the circumstances under which extensions to the implementation of an RRP or risk reduction measure may be granted.

These proposed amendments are described in greater detail in the following subsections.

Administrative clarifications to the proposed rule language were made after the proposed amendments were published on March 18, 2026, after additional Air District staff review. Deletions are indicated as ~~red strikethrough~~ and additions are indicated as blue underline.

A. Definitions

Proposed amendments to this section of the Rule (Section 11-18-200) would remove obsolete requirements that are no longer applicable. The section would also be renumbered to reflect the changes associated with added and deleted definitions, and references to section numbers would be updated throughout the Rule. The abbreviations for some definitions would be formatted to maintain consistency throughout the section. Several definitions would also be updated or modified, which are described in detail below.

The following administrative clarifications were made after the proposed amendments were published on March 18, 2026, after additional Air District staff review:

- *Section 11-18-206:* "Chronic Hazard Index ~~(HI)~~, or Chronic HI:"
- *Section 11-18-207:* "Chronic Hazard Quotient ~~(HQ)~~, or Chronic HQ:"

Section 11-18-208 – Exposed Individual (EI): The proposed amendment updates this definition to clarify and explicitly state, an exposed individual is a "person who is exposed to TACs emitted from a toxic risk facility who is not an employee or contractor of the facility."

Section 11-18-212 – Health Risk Assessment, or (HRA): The proposed amendment updates this definition to reference proposed amended Section 11-18-602, replacing the reference to Regulation 2, Rule 5 Section 2-5-603. Both sections state that each HRA be prepared in accordance with the Air District's Health Risk Assessment Guidelines. The section would also be updated to include the distinction between an HRA and HRA report. These administrative clarifications in proposed amended Section 11-18-212 were made after the proposed amendments were published on March 18, 2026 after additional Air District staff review.

Section 11-18-215 – Owner/Operator: The proposed amendment removes the reference to "building, structure, installation, or source" from this definition due to redundancy. This language is redundant because these terms are already encompassed within the definition of "facility," and all provisions of Rule 11-18 apply specifically to facility owner/operators. As a result, the deleted terms do not affect the scope of applicability.

Section 11-18-216 – Prioritization Score: The proposed amendment would clarify that Appendix A contains the calculation methodology for multiple prioritization scores. A cancer prioritization score and a non-cancer prioritization score are calculated for a facility. Similar clarifications would be updated throughout the Rule.

Section 11-18-217 – Priority Community (Removed): Prior to January 1, 2020, the existing Rule allowed the application of the more stringent risk action levels (RALs) in Section 11-18-218.2 to facilities in Priority Communities. As the less stringent RALs in former Section 11-18-218.1 expired on January 1, 2020, the more stringent RALs are currently applicable to all facilities. This definition would therefore be removed as it is no longer referenced in the Rule.

Section 11-18-217 (Previously 218) – Risk Action Level: The less stringent RALs contained in former Section 11-18-218.1 would be removed because they expired as of January 1, 2020, and are no longer applicable.

Section 11-18-219 – Risk Reduction Plan (RRP): The proposed amendment would align the definition's language with language in other Rule sections specifying that health risk equal to or greater than one or more risk action levels in Section 11-18-217 would require an RRP. The proposed amendment would also change the abbreviation of Risk Reduction Plan from "Plan" to "RRP." This abbreviation would also be updated throughout the Rule.

Section 11-18-222 – Site-Specific Modeling Protocol: The proposed amendments to this section would add a definition for a document – "Site-Specific Modeling Protocol" – that facility owner/operators are required to submit to the Air District, for review, correction (if needed), and approval before facility owner/operators can prepare and submit an HRA.

Section 11-18-225 – Toxic Air Contaminant (TAC), or Air Toxic: The proposed amendment to this section would clarify that terms "TACs" and "air toxics" are equivalent.

B. Standards

The proposed amendments to this section of the Rule (Section 11-18-300) would include minor changes to the structure of this section for clarity. References to section numbers have been updated throughout.

Section 11-18-301 – Compliance with Risk Reduction Plan: The proposed amendments to this

section would include a reorganization of text for clarity and moving the RRP submittal requirements to amended Section 11-18-403 – Risk Reduction Plan Procedures.

C. Administrative Requirements

Proposed amendments to the Administrative Requirements section of the Rule (Section 11-18-400) would include revisions that would require affected facility owner/operators to prepare and submit preliminary facility-wide HRAs, as well as a 90-day public comment period for the preliminary HRA. The proposed amendments to this section would include a restructuring of the section to improve readability and clarity given the updated process. References to section numbers would be updated throughout.

Section 11-18-401 – Health Risk Assessment Procedures - Legacy (Formerly titled – Health Risk Assessment Information Requirement): The proposed amendments to Section 11-18-401 would introduce language that includes a deadline for the facilities that are subject to the current HRA procedures (henceforth referred to as "legacy" procedures). Facilities that have been notified that a site-specific modeling protocol is approved by the Air District before the adoption date of the proposed amended Rule would follow the legacy HRA procedures in this section.

The proposed amendments to this section would also incorporate procedures from Section 11-18-403 of the current Rule, including provisions for public comments on the preliminary HRA, as well as the approval process for the preliminary HRA and final HRA. These procedures would apply to the facilities that are subject to the legacy HRA procedures or that have been notified that a site-specific modeling protocol is approved before the adoption date of the amended Rule. Additionally, the proposed amendments would formalize the current practice of holding a single 90-day public and facility comment period after the preliminary HRA results are made available.

These administrative clarifications were made after the proposed amendments were published on March 18, 2026, after additional Air District staff review:

- *Section 11-18-401:* "For a facility owner/operator that has received notification ~~by~~ from the APCO that the site-specific modeling protocol has been finalized by the APCO…"
- *Section 11-18-401.3:* "The APCO shall notify the facility owner/operator ~~if~~ whether the final, APCO-approved HRA indicates a facility health risk equals or exceeds one or more of the risk action levels set forth in Section 11-18-217."

Former Section 11-18-402 – Early Application of Risk Action Levels (Removed): This entire section would be removed because it is only relevant to the expired RAL deadlines in former Section 11-18-218, which is proposed for deletion in the proposed amendments. The RALs in former Section 11-18-218.1 became obsolete on January 1, 2020, and the more stringent RALs are currently applicable to all facilities.

Section 11-18-402 – Health Risk Assessment Procedures: The proposed amendments to this section would outline the updated HRA procedures and include provisions regarding their effective date. Facilities that have not received a notification that their site-specific modeling protocol is approved as of the adoption date must follow the updated HRA procedures in this section.

Although existing Rule 11-18 is silent as to who must conduct HRAs, the Air District generally prepares the HRAs under the existing Rule 11-18 Implementation Procedures. Under the proposed amendments to Section 11-18-402, the facility owner/operator would generally be

responsible for conducting the preliminary HRA using the following steps outlined in Sections 11-18-402.1 through 402.6.

1. Notification: The Air District would notify the facility owner/operator that the facility must prepare the HRA, and the Air District would provide an Air District-approved TAC emissions inventory. The procedure to determine which facilities may require an HRA is described in Section 4.1 of the Implementation Procedures. In short, the Air District uses prioritization scores to rank facilities based on health impact potential and to determine when facilities should undergo further review. The three criteria used to calculate prioritization scores are: (1) annual toxic emissions, (2) health effects values for toxic compounds, and (3) proximity adjustment factors related to the location of receptors.

2. Site-Specific Modeling Protocol: After the facility owner/operator has been notified to prepare the HRA, they must submit a site-specific modeling protocol to the Air District within 60 days. Facility owner/operators may request additional time (up to 60 additional days) to provide the site-specific modeling protocol if they demonstrate additional time is necessary. If revisions are required, they must address all Air District comments and suggestions in a single revision and resubmit the protocol within 30 days of receiving the Air District comments.

3. Preliminary HRA Review: After Air District approval of the site-specific modeling protocol, the facility owner/operator must provide a draft preliminary HRA report based on the approved site-specific modeling protocol within 90 days, along with all additional information necessary to reproduce the draft preliminary HRA report. This additional information includes, at a minimum, the TAC emissions inventory, documentation of any changes to the emissions inventory, TAC release data, details related to the facility and its surroundings, sources of TAC emissions, air dispersion modeling, and any electronic files that are required to reproduce the HRA results. Facility owner/operators may request additional time (up to 30 additional days) to provide the draft preliminary HRA report if they demonstrate additional time is necessary.

   The Air District then reviews the draft preliminary HRA report submitted by the facility owner/operator. If any revisions to the draft preliminary HRA report are necessary, the Air District will provide a list of necessary revisions to the facility owner/operator. If revisions are required, the facility owner/operator must address all Air District comments and suggestions in a single revision and resubmit the draft preliminary HRA report within 30 days. Facility owner/operators may request additional time (up to 30 additional days) to resubmit the preliminary HRA report if they demonstrate additional time is necessary.

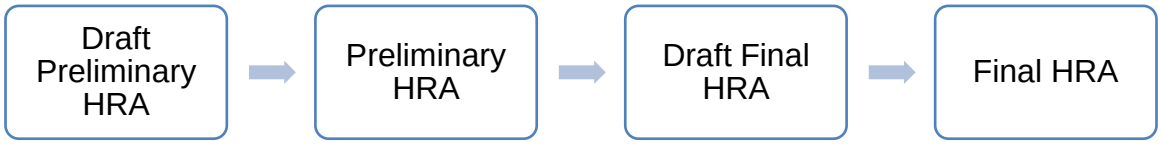
4. Public Comment: The proposed amendments to Section 11-18-402.4 include a single 90-day public and facility comment period after the preliminary HRA report is published.

5. Approval and Comparison to Risk Action Levels: The proposed amendments to Section 11-18-402.5 outline the procedures for the review, correction (if needed), and approval of the final HRA for facilities that are subject to the updated HRA procedures. After the comment period, the Air District considers any written comments received during the comment period. If revisions to the preliminary HRA report are necessary before the Air District publishes the final HRA report, the facility owner/operator must address all Air District comments and suggestions in a single revision and submit the draft final HRA report within 30 days. Facility owner/operators may request additional time (up to 30 additional days) to provide the draft final HRA report if they demonstrate additional time is necessary.

Once the final HRA report has been approved, the Air District will publish the final HRA report and notify the facility owner/operator if the final HRA indicates a facility health risk that equals or exceeds one or more of the RALs set forth in Section 11-18-217 (previously Section 11-18-218).

6. Air District-Prepared HRAs: Lastly, a proposed provision allowing the Air District not to use a facility-prepared HRA was added to Section 11-18-402.6 when it is more expedient to do so or when the facility owner/operator lacks the resources to conduct the HRA. Instead, the Air District may use an HRA and/or HRA report prepared by the Air District to determine whether the facility's health risk meets or exceeds one or more of the RALs specified in amended Section 11-18-217 (previously Section 11-18-218).

These steps introduce four terms associated with approval phases of the HRA development:



These phases distinguish between facility-submitted drafts, Air District review steps, and the points at which an HRA becomes an official determination:

- **Draft Preliminary HRA**: The initial analysis prepared and submitted by the facility, based on an Air District-approved site-specific modeling protocol. This draft is subject to Air District review and revision.
- **Preliminary HRA**: The revised analysis approved and published by the Air District for a 90-day public comment period. This document represents the Air District's preliminary determination of facility risk but remains open to further revision based on comments or new information.
- **Draft Final HRA**: A revised version of the preliminary analysis prepared by the facility after the comment period, incorporating any required changes identified by the Air District. This draft serves as the facility's submission pending final Air District approval.
- **Final HRA**: The Air District-approved analysis following all review, revisions, and public comment. This analysis is the official record of the facility's health risk determination and is used to evaluate whether the facility exceeds one or more RALs.

The proposed amendments to this section would provide considerable Air District time and resource savings for implementing the Rule 11-18 program, particularly in setting up the air dispersion model and entering input parameters, including toxic emissions data, source locations, stack parameters, meteorological data, terrain data, and receptor locations. Additionally, by requiring facility owner/operators to submit HRA modeling protocols and preliminary HRA reports for Air District review, the amendments would allow the Rule 11-18 program to process many HRAs concurrently rather than being constrained by the modeling bandwidth of Air District staff. This shift is expected to significantly accelerate implementation timelines across the program. These changes—requiring the facility owner/operator to submit HRA modeling protocols and preliminary HRA reports for Air District review and approval (or disapproval)—also align the Rule 11-18 program with common practices used in similar programs in other air districts (such as South Coast AQMD Rule 1402).

These submittals would be required to adhere to established and standardized guidelines (including the Air District Air Toxics Control Program HRA Guidelines[16] and the Air District Modeling Protocol[17]) that provide strict, prescriptive procedures that limit discretion in the analysis. Lastly, the facility submittals would still be subject to strict oversight from the Air District. Air District staff would review submittals for accuracy and errors to ensure that they meet the guidelines. The Air District would maintain the authority to approve or correct as appropriate. The Air District would continue to evaluate potential improvements to the Air District HRA review process that can be implemented to ensure that the preliminary HRAs prepared and submitted by facilities meet the applicable guidelines and requirements to accurately reflect the toxic impacts of the facilities.

The following administrative clarifications were made after the proposed amendments were published on March 18, 2026, after additional Air District staff review:

- *Section 11-18-402.3.2:* "…the APCO shall notify the facility owner/operator of the specific alterations to the draft preliminary HRA report that are required, unless the APCO elects to proceed under Section 11-18-402.3.4."
- *Section 11-18-402.3.4:* "The APCO may also, pursuant to Section 11-18-402.6, ~~take over finalization of~~ finalize the preliminary HRA and preliminary HRA report…"
- *Section 11-18-402.5.1:* "~~After the comment period, the APCO may notify the facility owner/operator that alterations to the preliminary HRA report are required.~~ If, after the public comment period, the APCO determines that alterations to the preliminary HRA report are required, the APCO shall notify the facility owner/operator of the specific alterations to the preliminary HRA report that are required, unless the APCO elects to proceed under Section 11-18-402.5.3."
- *Section 11-18-402.5.2:* "~~The facility owner/operator shall implement all alterations and submit a draft final HRA report within 30 days of receiving the notification from the APCO.~~ Upon receiving notice from the APCO that alterations to the preliminary HRA report are required, the facility owner/operator shall implement all alterations and submit a draft final HRA report within 30 days of receiving the notification from the APCO."
- *Section 11-18-402.5.3:* "The APCO may also, pursuant to Section 11-18-402.6, ~~take over finalization of~~ finalize the final HRA and final HRA report …"

Section 11-18-403 – Risk Reduction Plan Procedures (Previously Section 11-18-404, Formerly titled – Risk Reduction Plan Content Requirements and Section 11-18-405, Formerly titled – Review and Approval of Risk Reduction Plans): The proposed amendments to this section would incorporate an existing provision, previously located in Section 11-18-403, requiring facilities that have been notified that they have a health risk that equals or exceeds one or more of the RALs to submit a draft RRP within 180 days of notification. Additionally, former Section 11-18-405 Review and Approval of Risk Reduction Plans would be incorporated into Section 11-18-403 as sections 11-18-403.3 through 11-18-403.6.

The amendments would clarify that the second option for RRP certification would be an individual who is responsible for the operations of the "facility," replacing the current language of "source" to align with other similar certifications.

[16] 2021 Bay Area Air District Air Toxics Control Program HRA Guidelines can be accessed at the following link: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-2-permits/2021-amendments/documents/20211215_hraguidelines-pdf.pdf?rev=eb18ff83f96049fa84d54552b58baee3

[17] 2020 Bay Area Air District Health Risk Assessment Modeling Protocol can be accessed at the following link: https://www.baaqmd.gov/~/media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol-pdf.pdf?la=en

The amendments would revise the timeline and terminology associated with the Air District's review of draft RRPs. Specifically, references to "completeness review" have been revised to "review" to better reflect the depth and intent of the Air District's evaluation of draft RRPs prior to public comment. The amendments also would remove references to timeframes around Air District RRP review, which better aligns with other Air District review processes throughout Rule 11-18.

The amendments would also clarify that any extensions granted for compliance through application of Best Available Retrofit Control Technology for Toxics (TBARCT) will be limited to the specific source or group of sources requiring the extension for the implementation of the risk reduction measure and not the entire RRP. Any extension for facilities that can feasibly comply with the RALs would be limited to the specific risk reduction measure for which the extension is required.

The amendments in this section would resolve several terminology issues in the current Rule. The first resolves an inconsistency in terminology, where the terms "technologically feasible," "technically feasible," and "feasible" were used interchangeably. The amendments standardize usage to "technologically feasible" throughout the Rule to ensure consistency and clarity. Secondly, Section 11-18-403.2.6.1 is revised to clarify that the RRP must reduce the health risk below the RALs at *each* location of the Maximum Exposed Individual (MEI). In the original language, the requirement stated the risk must be below the action level at *any* MEI, which could be misread to allow compliance if risk was reduced at one MEI location but remained above the action level at another.

Two sections would also update expired or recodified references. Section 11-18-403.6 updates a citation to the Public Records Act which was recodified to Section 7924.510 of the Government Code (formerly Section 6245.7). Section 11-18-403.2.8 would remove references to Health and Safety Code 25570.3, which has been repealed.

Section 11-18-404 – Reconsideration of Prioritization Scores: The proposed amendments would establish a process for a facility owner/operator to request a reevaluation of the facility's prioritization scores, which determines whether an HRA may be required, after the facility owner/operator has been notified by the Air District to prepare an HRA. Within 30 days of receiving the HRA notification, the facility owner/operator may submit a request for reconsideration based on a revised TAC emissions inventory.

More information and details on the reconsideration of prioritization scores are provided in the sections of this report on proposed amendments to the Rule 11-18 Implementation Procedures (see discussion in Section IV.D. Procedures under *Section 4.1.4 Requests to Reconsider Prioritization Scores* and *Section 4.2.3 Procedures for Implementing Health Risk Assessments*).

The following administrative clarification was made after the proposed amendments were published on March 18, 2026, after additional Air District staff review:

- *Section 11-18-404.1:* "In order to request such reconsideration, the facility owner/operator shall recalculate the prioritization scores in accordance with Appendix A."

Section 11-18-405 – Additional Emissions Data: The proposed amendments to this section would include a provision that would allow facility owner/operators to request that the Air District consider additional testing or studies before finalizing emissions data for specific sources. As part of the draft preliminary HRA report submission, the facility owner/operator must include a table listing

the sources, the currently estimated emissions for each source, and details about the testing and/or studies it proposes to conduct. If the Air District agrees to consider such additional data, all updated emissions data obtained from the testing or studies must be submitted for review and approval no later than the date the facility owner/operator submits its draft RRP pursuant to proposed amended Section 11-18-403.1. If the Air District has agreed to consider additional data and the facility owner/operator submits those data, the Air District may revise the final HRA to reflect the new information and may, if warranted, rescind its notification under proposed amended Sections 11-18-401.3 or 11-18-402.5.4 that the facility's health risk equals or exceeds one or more of the RALs outlined in Section 11-18-217.

Additional provisions are being proposed for Sections 11-18-405.3 through 405.5 to clarify the procedural steps following the submission of updated emissions data.

- **If the new emissions data show the facility risk is reduced below all RALs:**
  Section 11-18-405.3 would require that if, based on the new emissions data, the Air District determines that a facility no longer exceeds a RAL and rescinds its notification, it must issue a revised preliminary HRA report for public comment and finalize a revised HRA accordingly.
- **If the new emissions data show the facility risk remains above an RAL:**
  Section 11-18-405.4 would address situations where updated data result in a revised HRA report but the facility's risk remains above an RAL. In such cases, the revised HRA report must be released alongside the draft RRP for public review, and the Air District must consider any comments on the revised HRA report before finalizing the RRP.
- **If the new emissions data have not been reviewed yet:**
  Section 11-18-405.5 would specify that if a facility owner/operator submits a draft RRP before the Air District has reviewed the new emissions data, the facility owner/operator must submit two versions of the RRP—one assuming the data are accepted and one assuming they are not—ensuring that RRP development continues without delay, while maintaining flexibility depending on the outcome of the emissions data review.

These provisions are intended to ensure that updated emissions data can be applied to RRP obligations and, where appropriate, incorporated into revised HRAs without significant delay. However, the original final HRA remains valid as a record of the facility's risk based on the information available at the time of its preparation. The availability of newer emissions data does not render the original HRA "incorrect," but rather reflects the ongoing refinement of facility-specific data. This approach preserves the integrity of the HRA process as both a record of past risk and a tool for planning future risk reduction.

Section 11-18-406 – Updated Risk Reduction Plan: The proposed amendments to this section would clarify that when a facility updates its RRP based on newly available information, the update must not significantly delay implementation of the emission reductions in the original plan. The facility's original plan remains in effect until the Air District approves the update. In addition, the amendment specifies that the Air District may disapprove an updated plan if it would not result in a greater health risk reduction than the original plan.

D. Monitoring and Records

There are no substantive amendments to Rule Section 11-18-500.

References to revised Rule 11-18 section numbers would be updated in this section.

E. Manual of Procedures

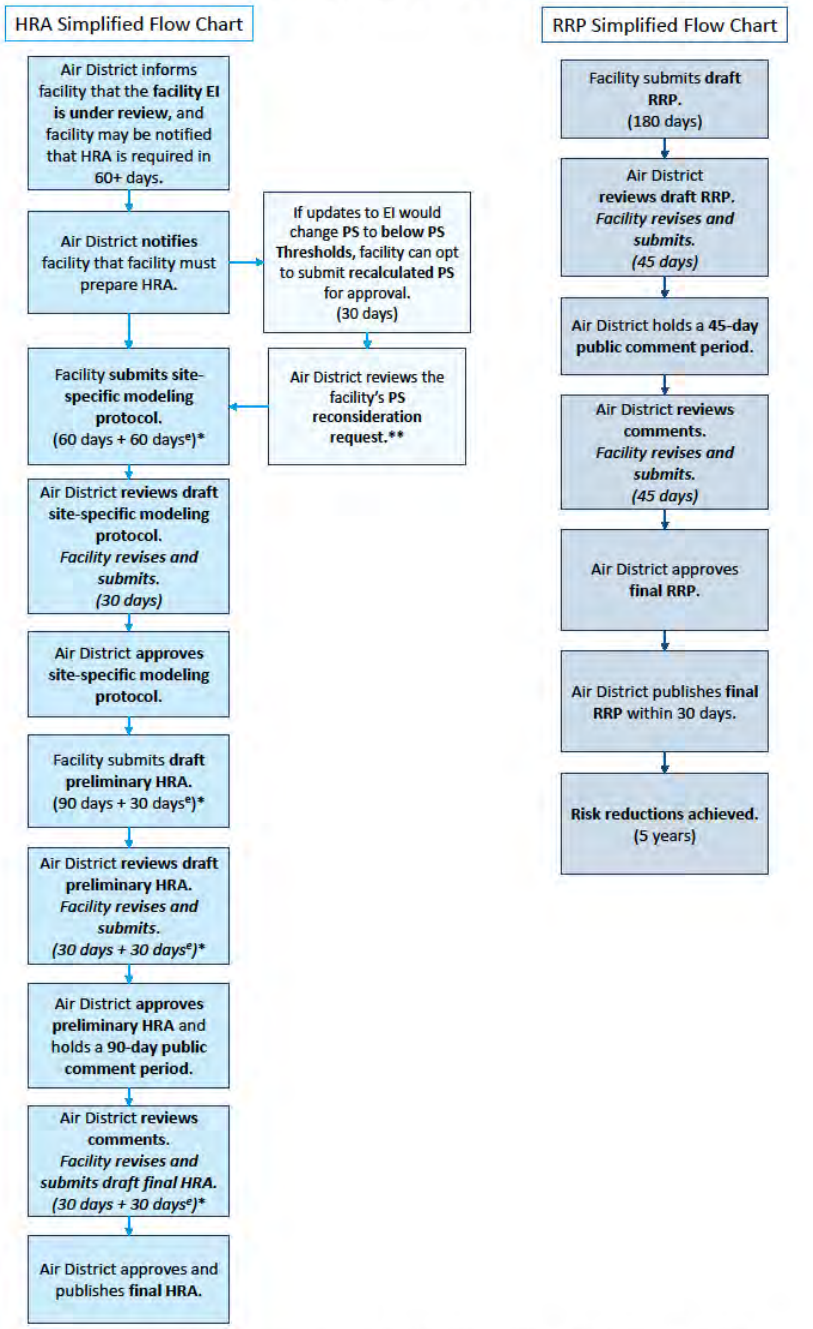
This section would be added to provide technical references for items that were formerly done by the Air District but the amendments would now require facilities to complete. This includes the HRA guidelines (Section 11-18-602) and the prioritization score calculation procedures (Section 11-18-601). While the prioritization score calculation is still initially conducted by the Air District, this procedure reference is included as proposed amendments to Section 11-18-405 would allow facility owner/operators the option to recalculate their prioritization scores using the same methodology to request reconsideration of the prioritization score.

IV. PROPOSED UPDATES TO RULE 11-18 IMPLEMENTATION PROCEDURES

The Implementation Procedures are a set of non-binding procedural guidelines developed to support consistent and transparent application of Rule 11-18. They provide additional detail on the procedural steps the Air District and affected facilities follow during key phases of rule implementation, such as Health Risk Assessment (HRA) preparation, Risk Reduction Plan development, and dispute resolution. The current Implementation Procedures were published in 2024 after a public comment period, but they have not been formally adopted by the Board of Directors.

The proposed updates to the Implementation Procedures are intended to ensure alignment with the proposed rule amendments and to further improve program clarity and efficiency. The proposed updates to the Rule 11-18 Implementation Procedures include additional procedures necessary to align with the proposed amendments to Rule 11-18, as well as administrative corrections and clarifications. Additionally, the requirements and procedures associated with the Dispute Resolution Panel (DRP) in the Implementation Procedures would be amended to ensure disputes arising between the Air District and a facility during Rule 11-18 implementation can be resolved expeditiously. These proposed updates to the Implementation Procedures have been provided as Appendix B and are described in greater detail below. References to revised Rule 11-18 section numbers and Implementation Procedures section numbers would also be updated throughout. Figure 2 includes a flowchart of the primary steps of the proposed Rule 11-18 process, including the updates to the Implementation Procedures.

Figure 2 – Rule 11-18 Milestones Flowchart



This flowchart is intended for demonstrative purposes only; the text of Rule 11-18, and not this flowchart, will govern the Air District's actions in implementing Rule 11-18. Further, this flowchart describes the Air District's anticipated procedures, and the Air District may not follow the steps outlined here precisely in every instance.

Timelines do not capture total potential timeline, as flowchart is simplified to not show Air District review timelines.

Italicized text indicates step and timeline are contingent.

*Number of days in parentheses are:

(facility deadline + maximum extension time facilities can request*).

**The timelines for the facility to submit a site-specific modeling protocol and, optionally, a prioritization score reconsideration request run concurrently.

EI: Emissions Inventory; HRA: Health Risk Assessment; PS: Prioritization Score; RRP: Risk Reduction Plan

A. Introduction

Table 1. Overview of Key Documents Available would be added to include several relevant documents to support implementation of the Air District's air toxics programs.

B. Purpose

Section 2.4 Health Risk Assessments: This section would be updated to reflect that facilities prepare the facility-wide HRA.

There are no other substantive updates to the purpose section of the Rule 11-18 Implementation Procedures.

C. Definitions

Section 3.1 Rule 11-18 Definitions (removed): This entire section would be removed due to redundancy, as this section only contained definitions directly from Section 200 of the rule language. The removal was intended to improve the readability and organization of this section.

Section 3.2 Additional Definitions and Acronyms (removed): This entire section would be removed and the definitions and acronyms under this section would be moved to Section 3 of this document. This revision is intended to improve the readability and organization of this section.

Section 3 Definitions: The proposed updates to this section include removing acronyms and definitions that would no longer be referenced in the document, clarifying the definition of High-Priority Facility, and adding a definition for Reference Exposure Limit.

D. Procedures

Proposed updates to this section of the Implementation Procedures have been made to reflect the revised requirements and procedures described in the proposed amendments to Rule 11-18. References to revised Rule 11-18 section numbers and Implementation Procedures section numbers would also be updated throughout.

Section 4.1.1 Rule 11-18 Toxic Air Contaminant Emissions Inventories: The proposed updates to this section would clarify that the toxic air contaminant (TAC) emissions inventories used in Rule 11-18 implementation are limited to the pollutants listed in Table 2-5-1 of Rule 2-5. This is consistent with the Rule 11-18 definition of TACs in Section 11-18-225. TACs in Rule 11-18 are limited to the pollutants listed in Table 2-5-1 of Rule 2-5.

Section 4.1.2 Prioritization Scores: The proposed updates to this section would align the procedures associated with the proximity adjustment factor with the procedures in the California Air Pollution Control Officers Association (CAPCOA) Air Toxics "Hot Spots" Program - Facility Prioritization Guidelines document.[18]

Section 4.1.3 Prioritization Score Thresholds: The proposed updates to this section would remove references to the less stringent risk action level (RAL) in proposed amended Section 11-18-217

[18] California Air Pollution Control Officer Association (CAPCOA) Air Toxic "Hot Spots" Program - Facility Prioritization Guideline document can be accessed at the following link: https://capcoa.org/capcoa-prioritization-guidelines

(previously Section 11-18-218.1), which expired in 2020, and to the application of the more stringent RAL in proposed amended Section 11-18-217 (previously Section 11-18-218.2). The RAL in proposed amended Section 11-18-217 would apply to all facilities subject to the Rule.

Section 4.1.4: Requests to Reconsider Prioritization Scores: The proposed updates to this section would provide additional information on the proposed provisions for requests to reconsider prioritization scores pursuant to proposed amended Section 11-18-404, including examples of reasons a facility may submit a request to reconsider prioritization scores and guidance on what facilities may include in a request.

Section 4.1.5 Toxic Air Contaminant Emissions Inventory and Toxic Air Contaminant Emissions Release Data Review and Correction Process (previously Inventory Review and Correction Process): The proposed updates to this section include additional language on how maximum hourly emissions data may be estimated for the toxic emissions inventory, as well as changes reflecting the updated HRA procedures. Additionally, the proposed updates outline provisions that would allow a facility owner/operator to request the Air District to consider additional testing or studies for specific sources before finalizing the toxic emissions inventory data.

Section 4.2 Assessing Health Impacts: The proposed updates to this section would align with the proposed changes in Section 11-18-402, which would require facility owner/operators to submit a site-specific modeling protocol for review and approval by the Air District, as well as a preliminary HRA report along with all supporting materials necessary to reproduce those results. This section would also provide examples of the type of documentation that are typically required to reproduce the results of the HRA and should be submitted with the preliminary HRA report.

Additionally, the proposed updates to this section would clarify that the Air District may prioritize HRAs for facilities located in Overburdened Communities, as defined in Regulation 2: Permits, Rule 1: General Requirements, Section 2-1-243, and in communities selected by the California Air Resources Board for additional resources under AB 617 pursuant to Health and Safety Code sections 42705.5(c)–(d) or 44391.2(c). This reflects the current practice for conducting HRAs for Rule 11-18 facilities. Lastly, the reference to applying RALs to a subset of sources within these communities has been removed consistent with the proposed rule language updates to remove the obsolete provision in current Section 11-18-218.1.

Section 4.2.1 Vendors for Health Risk Assessment Services (Removed): This section on the Air District's use of vendors for HRAs would be removed to align with the proposed amendments to Rule 11-18, as under the proposed amendments the facility owner/operator would be required to submit the preliminary HRA report for their facility. The current language in this section of the Implementation Procedures would therefore no longer be applicable and would be removed.

Section 4.2.1 (previously Section 4.2.3) Guidelines for Health Risk Assessments: The proposed update to this section would remove references to procedures associated with lists of authorized vendors and contractors.

Section 4.2.2 Modeling Protocol for Health Risk Assessments: The proposed update to this section would remove references to procedures associated with the Air District preparing site-specific modeling protocol for large facilities since these procedures would be replaced with amended Section 4.2.3.

Section 4.2.3 Procedures for Implementing Health Risk Assessments: This proposed update would replace the procedures associated with HRAs (previously in Section 4.2.4 and Section 4.2.5) with procedures consistent with the proposed amendments to Rule 11-18. Additionally, the corresponding Rule sections would be referenced in parentheses in the procedure steps, if appropriate.

The section would include an overview of Legacy Procedures in which the Air District prepares the HRA as described in proposed amended Section 11-18-401.

This section would also include Current Procedures, which would apply to facilities not subject to the Legacy Procedures. The revision of the procedures for HRAs conducted by facilities, vendors, or contractors reflect the proposed changes to Rule Section 11-18-402 and would outline the detailed steps for the review and approval process of preliminary HRA reports submitted by the facility owner/operator. The proposed amendments include a first step where the Air District informs the facility that the Air District has started reviewing the facility's TAC emission inventory; this initial communication would occur at least 60 days prior to the Air District issuing a notification pursuant to amended Rule Section 11-18-402.1. This initial communication from the Air District to the facility is intended to provide the facility with additional time to plan for the Rule 11-18 HRA process. The section would also specify the public noticing process for the preliminary HRA report, the process for revising of the preliminary HRA report after the public comment period, and the publication of the Air District-approved final HRA. In addition, the proposed updates to this section outline procedures for the review, correction (if needed), and approval of both the preliminary and final HRAs.

The proposed update to this section would specify that the response to comments for refinery HRAs would be released with a preliminary determination regarding approval or deficiencies requiring alteration of the draft final HRA, after which the refinery will have an opportunity to request to convene the Dispute Resolution Panel. For facilities subject to Legacy Procedures, this step would be after amended Section 11-18-401.2 and before amended Section 11-18-401.3. For facilities subject to Current Procedures, this step would be after proposed amended Section 11-18-402.4 and before proposed amended Section 11-18-402.5.

Section 4.2.4 Procedures for HRAs Conducted by the Air District (Removed): This entire section would be removed and is no longer applicable under the proposed rule amendments. The proposed rule amendments require that preliminary HRAs be prepared and submitted for review by facility owner/operators instead of the Air District conducting the HRAs. An overview of legacy procedures where the Air District still prepares the HRA, as described in Section 11-18-401, would be included in Section 4.2.3 of the Implementation Procedures.

Section 4.2.5 Procedures for HRAs Conducted by Vendors or Contractors (Removed): This entire section would be removed, and the procedures associated with HRAs conducted by the vendors or contractors previously in this section would be moved to Section 4.2.3 and revised (as described above).

Section 4.3 Implementing Risk Reduction Plan Requirements: The proposed amendment to this section would specify that the response to comments for refinery Risk Reduction Plans (RRPs) would be released with a preliminary determination regarding approval or deficiencies requiring alteration of the draft RRP, after which the refinery will have an opportunity to request to convene the Dispute Resolution Panel. This step would be after Section 11-18-403.4 and before Section 11-18-403.5. Additionally, the corresponding Rule sections would be referenced in parentheses in the procedure steps, if appropriate.

E. Dispute Resolution Panel

The proposed updates to this section would add additional requirements and procedures associated with implementation of a Dispute Resolution Panel (DRP) to ensure technical disputes that arise between the Air District and a facility during Rule 11-18 implementation can be addressed expeditiously, while still offering certain facilities a clear process to resolve technical issues that remain unresolved after the public comment period. The following proposed updates have been made to this section:

Timeline for the DRP: The proposed updates to this section would include that if the DRP did not pose any questions after reviewing the case, the DRP makes its recommendations to the Air District within 30 days of receipt of the case materials, consisting of the facility comments regarding the technical dispute and Air District responses to comments.

Limit the usage of DRP to refineries and matters related to refineries: The current Implementation Procedures allow a DRP to be convened for matters related to any Rule 11-18 facility, whether requested by the public or industry. To minimize delays in Rule 11-18 implementation and reduce the staff resources required to convene a DRP, the proposed update to this section would limit the use of DRPs to matters specifically related to HRAs and RRPs for refineries and requests to convene a DRP to refineries, as defined in Regulation 8: Organic Compounds, Rule 1: General Provisions, Section 8-1-211. The public and other industries would still have the opportunity to resolve disputed matters during other steps in the process (such as the comment period or Air District review and facility resubmittal process).

The Air District agreed, in its above-mentioned settlement with the Western States Petroleum Association, to afford refineries "the opportunity to be heard (in writing) by the DRP on technical disputes arising under Rule 11-18." The complexity and number of operations at refineries make estimates of emissions for these facilities particularly challenging to determine. For this reason, and to balance between refined emissions estimates and Air District resources, these facilities were identified to be in the greatest potential need of the DRP process to provide additional guidance on especially complex technical issues. The Air District anticipates that limiting DRP access to the refineries will result in time and resource savings by restricting the DRP process to only the most complex facilities, where additional expertise and support are most needed.

In addition, in its settlement with the Western States Petroleum Association, the Air District agreed that the DRP shall make its recommendations to the Air District prior to the publication of a final HRA. The implementation of this provision is included in Section 4.2.3 of the Implementation Procedures.

Additional requirements and procedures associated with convening a DRP: The proposed updates to this section would incorporate additional requirements for submitting a request to convene a DRP, as well as criteria related to the types of disputes that may be submitted for DRP review. The following requirements and procedures would be included in the DRP process:

- A DRP may only be convened for disputes related to HRAs and RRPs.
- Each DRP request must identify specific disagreements with an Air District determination and must provide specific recommended changes or remedies to resolve the disputed matter. Each DRP request must include documents or materials to support the recommended changes or remedy.

- Each DRP requestor may only raise an issue, propose a recommended change or remedy, or rely on documents or materials if: (1) the requestor raised the issue in a comment submitted during the preliminary HRA or draft RRP public comment period and relied on the documents or materials to make the comment, or (2) the issue involves a dispute regarding a change to a preliminary HRA or draft RRP after the corresponding comment period, in which case the DRP requestor may submit additional documents and materials if they are relevant to the issue and are not unduly burdensome to review.
- After the Air District responds to comments on preliminary HRAs, the types of matters that may be raised are limited to the emissions inventory and the methodology used in the HRA. Refineries may not use the DRP to challenge an Air District determination not to consider additional emissions data pursuant to Section 11-18-405.1.
- After the Air District responds to comments on draft Risk Reduction Plans, the types of matters that can be raised are limited to the technological feasibility or economic burden involved in a demonstration pursuant to Sections 11-18-403.2.6.1, 11-18-403.2.6.2, and 11-18-403.2.6.3, determination of TBARCT, and any updates to the inventory that have been made pursuant to Section 11-18-405.
- Each entity is limited to one request to convene a DRP for the HRA and one request for the RRP. In addition, each request is limited to a total of three issues.
- A request related to matters that have been previously resolved by the DRP without new substantive information will not be reconsidered.

Requests on disputed matters that cover multiple issues, are overly burdensome, or outside the scope of the DRP: The proposed updates to this section would also add language that allows the Air District to reject a specific issue in the request if a disputed matter covers multiple issues, is overly burdensome, or falls outside the appropriate scope of the DRP.

These additional requirements would be included to ensure that the DRP and Air District staff are not overburdened by broad, repetitive, or out-of-scope requests for review of Air District decisions. Furthermore, the restrictions on the number of requests per entity and the number of topics per request are intended to encourage requestors to resolve disputed matters during other steps in the process (such as the comment period or Air District review and facility resubmittal process), rather than relying solely on the DRP process.

F. Stakeholder Meetings

There are no substantive updates to the stakeholder meetings section of the Rule 11-18 Implementation Procedures.

V. EMISSIONS AND EMISSIONS REDUCTIONS

Proposed amendments to Rule 11-18 are limited to procedural aspects associated with implementation of the Rule, and the amendments are not expected to directly impact emissions for the affected facilities beyond the existing Rule 11-18 requirements. Although there are no emissions changes expected with the proposed amendments, proposed amendments may lead to an expedited implementation of risk reduction measures, which may lead to emissions reductions and health risk reductions from the Rule 11-18 facilities being realized sooner.

VI. ECONOMIC IMPACTS

This section discusses the estimated costs and economic impacts associated with the proposed amendments.

A. Cost-effectiveness and Incremental Cost-effectiveness

When a proposed rule or amendment will significantly affect air quality or emissions limitations, the Air District analyzes the cost-effectiveness of the proposed rule or amendment and of potential alternatives. Cost-effectiveness refers to an evaluation of the relative cost of compliance compared to the expected benefits of a proposed regulatory change, such as emissions reductions. These proposed amendments are limited to procedural aspects associated with implementation of an existing rule, and the amendments do not significantly impact emissions limitations in the currently adopted rule. Therefore, the cost-effectiveness of the amendments and alternatives to the amendments were not evaluated, as emissions reduction is a key input of the evaluation.

B. Socioeconomic Impacts

Section 40728.5 of the California Health and Safety Code requires an air district to assess the socioeconomic impacts of the adoption, amendment, or repeal of a rule if the proposed rule, amendments, or repeal "will significantly affect air quality or emissions limitations." The proposed amendments to Rule 11-18 are limited to procedural aspects associated with implementation of the Rule, and the amendments do not significantly impact emissions limitations in the currently adopted rule. A socioeconomic assessment therefore is not required per Health and Safety Code Section 40728.5, but an analysis was conducted to provide additional information to the Air District Board of Directors and stakeholders.

1. Proposed Amendments to Rule 11-18

Staff evaluated the potential compliance costs associated with the proposed amendments, including additional expenses incurred by the affected facilities related to HRAs conducted by third parties or vendors compared to HRAs conducted by the Air District.

Currently, the Air District performs HRAs for facilities undergoing compliance assessments under Rule 11-18; these facilities are required to pay a fee in accordance with Regulation 3: Fees, Section 3-342 ("Fee for Facility-wide Health Risk Assessment"). This section establishes a fee based on the number of hours required to conduct or review an HRA, at an hourly rate of $281. The maximum cost to a facility for the Air District to conduct a Rule 11-18 HRA is approximately $200,000 for the most complex facilities. Under the proposed rule amendments, the Air District estimates a facility could incur an additional cost up to $200,000 for the facility or a contractor to prepare the HRA instead of the Air District. The Air District estimates facilities would also incur additional fees for Air District review of Rule 11-18 HRAs, at a maximum review fee of approximately $20,000. Therefore, the Air District estimates that total compliance costs would increase by up to $220,000 for an affected facility under the proposed amendments. Assuming an interest rate of six percent and a five-year useful life period of the HRA, this results in a maximum annualized compliance cost of approximately $52,000. This annualized cost is a conservative estimate, as it is unlikely that a facility would perform a Rule 11-18 HRA every five

years, considering the timelines to develop the HRA and RRP and implement the RRP risk reduction measures.

Staff estimates the probable annualized compliance costs to industry or business from the proposed amendments could range between $10,000 and $52,000, depending on primarily the number of Air District-permitted sources at a given facility and the complexity of the HRA.

Air District staff contracted with an independent consultant, BAE Urban Economics (BAE), to develop estimates of potential socioeconomic impacts for the proposed amendments. The full report of the socioeconomic impact analysis is available in Appendix C.

BAE evaluated the 342 facilities that were on the Air District's Facility Risk Reduction Program Phase I and Phase II Facility Lists published in 2024. The analysis included 231 private-sector establishments, including 24 small businesses. BAE estimated the profits for each private-sector facility and the impact on each of these facilities. A facility would be considered impacted by the proposed amendments if the cost of the proposed amendments would exceed ten percent of the facility's profit. Based on this analysis, an estimated three percent of privately-operated facilities (8 individual facilities, all identified as small businesses), could be impacted if these facilities contracted third parties or vendors to conduct the HRAs.

As a result of this analysis, the Air District has made adjustments to implementation plans to avoid these impacts on small businesses and is committing to completing the HRAs for these small businesses. The proposed rule amendments include provisions that the Air District may use an HRA and/or report prepared in whole or in part by the Air District pursuant to proposed amended Section 11-18-402.6. For Air District-prepared HRAs, facility costs would be expected to remain the same as currently required by the existing Rule 11-18 provisions. Therefore, these facilities would not be expected to incur any increased costs from the proposed rule amendments, and the socioeconomic impacts from the proposed rule amendments would be mitigated at these facilities.

BAE also evaluated the impact of the proposed amendments on employment and the economy of the region. BAE estimates an impact of $6.3 million with a related annual loss of 21.7 jobs due to compliance costs associated with the proposed Rule 11-18 amendments. As context, the economic model used for this analysis estimates the gross annual regional product for the nine-county Bay Area at approximately $1.4 trillion; the reduction associated with the Rule 11-18 amendments is equivalent to less than 0.001 percent of this total. However, this impact would likely be lower due to the provision that the Air District may use an HRA and/or HRA report prepared in whole or in part by the Air District for facilities that lack resources to conduct the HRA pursuant to proposed amended Section 11-18-402.6. In addition, the analysis assumes that the additional expenditures associated with purchasing needed HRA services would not circulate through the local economy, although some of the needed services will likely be purchased locally, which would generate benefits for the businesses providing these services in the region.

No additional costs are expected to be incurred due to the other proposed amendment items.

2. Rule 11-18 Adopted in 2017

For the Rule 11-18 adopted in 2017, staff completed a socioeconomic analysis and contracted BAE to develop estimates of the potential socioeconomic impacts. The 2017 Rule 11-18 Final

Socioeconomic Analysis Report[19] and Final Staff Report[20] discuss different worst-case scenarios of the number of impacted facilities, including that no more than 27 percent of the privately-operated facilities should have their profits significantly impacted by Rule 11-18 adopted in 2017.

C. Air District Impacts

Concerns regarding delays in Rule 11-18 implementation and risk reduction progress have been raised by committee members, community members and representatives, and environmental groups at multiple Air District Stationary Source Committee meetings and at AB 617 Community Steering Committee meetings. Numerous factors have contributed to these delays, including lack of sufficient staff resources to perform HRAs, increases in the number of permit applications, impacts due to the COVID-19 pandemic, extensive discussions with facilities on technical issues, and the diversion of modeling staff resources to other projects, including high-visibility permit applications, public meetings, rulemaking efforts, and enforcement actions. The proposed amendments to Rule 11-18 are intended to prevent further delays and expedite implementation of Rule 11-18. With the vast majority of facilities conducting the facility-wide HRA, and the Air District focusing on the review of Rule 11-18 deliverables, the amendments would allow more efficient and effective use of Air District staff resources for Rule 11-18 implementation and would reduce the amount of staff resources that would be necessary to implement the Rule in full.

VII. REGULATORY IMPACTS

Section 40727.2 of the California Health and Safety Code generally requires an air district, in adopting, amending, or repealing an air district regulation, to identify existing federal and district air pollution control requirements for the equipment or source type affected by the proposed change in district rules. The district must then note any differences between these existing requirements and the requirements imposed by the proposed change.

However, pursuant to Section 40727.2(g), an air district need not take these steps if a district's proposed new or amended rule or regulation does not impose a new emission limit or standard, make an existing emission limit or standard more stringent, or impose new or more stringent monitoring, reporting, or recordkeeping requirements. Because these rule amendments do not impose a new emission limit or standard, make an existing emission limit or standard more stringent, or impose new or more stringent monitoring, reporting, or recordkeeping requirements, no analysis is required under Section 40727.2.

Regardless, to ensure the Board and stakeholders have all relevant information, Table 1 provides the Air District's regulatory impacts analysis of the proposed amendments to Rule 11-18. This table, combined with Table 16 in the 2017 Staff Report for Rule 11-18, summarizes the relevant regulatory overlap of the proposed rule as a whole.

Note that Rule 11-18 implicates an extremely broad array of equipment and source types, so the realm of existing federal and district air pollution control requirements having some degree of

[19] Bay Area Air District, 2017. Final Socioeconomic Impacts of Proposed Rule 11-18: Reduction of Risk from Air Toxic Emissions at Existing Facilities. https://www.baaqmd.gov/~/media/dotgov/files/rules/regulation-11-rule-18/documents/20171115_socio_1118-pdf.pdf?rev=c86f357c04de4c04859a98b84134387e&sc_lang=en

[20] Bay Area Air District, 2017. Regulation 11, Rule 18 Final Staff Report. Section V: Economic Impacts. https://www.baaqmd.gov/~/media/dotgov/files/rules/regulation-11-rule-18/documents/20171115_fsr_1118-pdf.pdf?rev=6da6a14f5e7647c3a22743effd5844e7&sc_lang=en

overlap with Rule 11-18 is effectively limitless. The table below identifies differences between existing air toxics requirements and the requirements proposed by the amendments.

Table 1
Regulatory Impacts Analysis Pursuant to H&SC Section 40727.2

Proposed Rule Amendment	Comparable State / Air District Rule or Program	Discussion
Sections 11-18-200s, Definitions: Removed some definitions, added site-specific modeling protocol definition, and added clarifications to definitions.	N/A	N/A
Section 11-18-401, Health Risk Assessment Procedures – Legacy: • Affected facilities must provide requested information necessary to complete an HRA within 60 days of Air District request. • 90-day public comment period • Approval and comparison to risk action levels	N/A	The AB 2588 Hot Spots Program process lacks similar requirements: • The affected facilities are responsible for conducting the HRAs. • The program has no equivalent provisions because the affected facilities are responsible for conducting their HRAs and notifying the public, if applicable.
Section 11-18-402: Health Risk Assessment Procedures: • Facilities provide a draft site-specific modeling protocol within 60 days of Air District notification. Air District reviews, facilities revise (if necessary), and Air District finalizes. • Facilities provide draft preliminary HRA report within 90 days of Air District approval of modeling protocol. Air District reviews, facilities revise (if necessary), and Air District finalizes. • 90-day public comment period • Approval and comparison to risk action levels • Air District can prepare HRAs if more expedient or facilities lack the resources	AB 2588 Hot Spots Program - HS&C §44360(c) Facilities prepare and submit HRAs.	The AB 2588 Hot Spots Program provision states the district may require a facility to prepare and submit an HRA but does not outline the procedures to do so.

Proposed Rule Amendment	Comparable State / Air District Rule or Program	Discussion
Section 11-18-404, Reconsideration of Prioritization Scores: Facilities can request Air District reconsider prioritization scores within 30 days of notification of requirement to prepare HRA. Air District can withdraw the HRA requirement.	AB 2588 Hot Spots Program - HS&C §§44344.4, 44344.6 Prioritization Score requirement	The Air District uses the same prioritization scores for purposes of both AB 2588 and Rule 11-18, so changes to the Rule 11-18 prioritization score will also implicate AB 2588. AB 2588 requires that prioritization scores be calculated every four years.
Section 11-18-405, Additional Emissions Data: Facility can request to consider additional future testing or studies in draft preliminary HRA report submission. Depending on if and when the Air District approves the testing, as well as how the testing affects the HRA results, the HRA may be updated and published for public comment, the RALs may affect the RRP requirements, and what needs to be prepared/submitted and when.	N/A	N/A
Section 11-18-406, Updated Risk Reduction Plan: If an updated RRP is submitted for approval, clarifications on when the updated RRP would become effective if it is approved. Clarification on why an RRP may be disapproved.	N/A	N/A
Sections 11-18-600s: Manual of Procedures: Prioritization Score Calculation Procedures and Health Risk Assessment Procedures	AB 2588 Hot Spots Program - HS&C §44360(c) Facilities prepare and submit HRAs. - HS&C §§44344.4, 44344.6 Prioritization Score requirement	AB 2588 does not dictate how the HRA must be performed or how the prioritization score must be calculated.

VIII. CEQA REQUIREMENTS

The California Environmental Quality Act (CEQA) (Public Resources Code section 21000 et seq., and the CEQA Guidelines, 14 CCR 15000 et seq.) requires a government agency that undertakes or approves a discretionary project to consider the potential impacts of that project on all environmental media.

As part of the rule development process, Air District staff evaluates potential environmental impacts as required by CEQA, Public Resources Code Section 21000 et seq., as well as the CEQA Guidelines that help implement the statutory provisions of CEQA. Air District staff determined that an addendum to the Environmental Impact Report (EIR) that was certified in 2017 with adoption of Rule 11-18 by the Board of Directors[21] is the appropriate type of CEQA document to be prepared for evaluating potential environmental impacts of these proposed amendments since the rule amendments only involve minor technical changes or additions and none of the conditions described in CEQA Section 21166 (Cal. Public Resources Code section 21166) or CEQA Guidelines section 15162 calling for the preparation of a subsequent or supplemental Environmental Impact Report is expected to occur.

Air District staff contracted with an independent consultant, Environmental Audit, Inc., to prepare the Addendum to the EIR certified in 2017. An analysis of the proposed amendments to Rule 11-18 indicates that none of the triggers for additional environmental review in CEQA Guidelines Section 15162 are met. Most notably, no new significant adverse impacts would be created for any environmental areas analyzed in the EIR, nor would the modifications make substantially more severe any existing significant adverse impacts. The Air District published the draft addendum along with the proposed rule amendment materials for public comment and review. The final addendum was updated to specify that applicable air quality mitigation measures and recordkeeping requirements listed in the Mitigation Monitoring and Reporting Program would be included in Air District permit conditions (rather than land use authority). The purpose of this change was to simplify and ensure adequate monitoring and enforcement of the mitigation measures. Appendices D and E provide the full details of the environmental analyses.

Air District staff also contracted with Environmental Audit, Inc., to prepare a Mitigation Monitoring and Reporting Program for Rule 11-18 under CEQA. The Mitigation Monitoring and Reporting Program provides information regarding monitoring and enforcement of the mitigation measures imposed to address the potentially significant impacts identified in the EIR. The potentially significant impacts identified in the EIR relate to air quality, greenhouse gases, hazards and hazardous materials, and hydrology and water quality. Appendix F provides the full details of the program.

IX. RULE DEVELOPMENT / PUBLIC PARTICIPATION PROCESS

A. Concept Paper and 2024 Updates to Implementation Procedures

In December 2023, the Air District published draft updates to the Rule 11-18 Implementation Procedures and a Rule 11-18 Amendments Concept Paper to solicit comments on these

[21] Environmental Impact Report for the Bay Area Air District for Rule 11-18 from November 2017 can be accessed at the following link: https://www.baaqmd.gov/~/media/dotgov/files/rules/regulation-11-rule-18/documents/20171115_rfeir_1118-pdf.pdf?rev=055e56fae4e0474dbbc1393e5252f22e&sc_lang=en

materials. A public workshop was held virtually on February 15, 2024, to discuss the materials and gather additional comments from the interested public. Thirty-six attendees, including representatives from the affected facilities, community-based organizations, and the public, participated in the workshop.

The Air District received 12 written comment letters and seven oral comments during the workshop on the draft updates to the Rule 11-18 Implementation Procedures and Rule 11-18 Amendments Concept Paper. Comments were submitted by the Bay Area Clean Water Agencies (BACWA), Benicia Community Air Monitoring Program (BCAMP), CCEEB, the Chevron Products Richmond Refinery, Communities for a Better Environment (CBE), Tesla, and 12 individuals. The written and oral comments on the Rule 11-18 amendment concepts addressed topics such as the combined facility review and public comment periods, Dispute Resolution Panel process, Health Risk Assessment (HRA) procedures, toxic air contaminant emissions inventories, and the requirement for facilities to conduct and submit HRAs.

In March 2024, staff presented an update on the Rule 11-18 Implementation Procedures updates and the Rule 11-18 amendment concepts to the Air District Stationary Source Committee. During the meeting, five public comments were made, raising concerns about facilities conducting and submitting HRAs, the prioritization score for high-risk (Phase 1) facilities, and the use of HRAs instead of health impact assessments. The Air District published the Rule 11-18 Final Implementation Procedures in April 2024 and continued with the rule development effort for amendments to Rule 11-18.

B. Draft Amendments

In August 2025, a draft rule package, including draft amendments to Rule 11-18, draft updates to the Rule 11-18 Implementation Procedures, and a preliminary staff report was released to the public along with a request for comments. A public workshop was held virtually on October 2, 2025, to discuss the materials and gather additional comments from the public. Fifty-seven attendees, including representatives from the affected facilities, consultants, community-based organizations, and the public, participated in the workshop. Comments and questions were received by seven commenters at the workshop.

The Air District received eight written comment letters on the draft amendment materials. Written comments were submitted by CBE, Western States Petroleum Association (WSPA), CCEEB, Bay Area Clean Water Agencies, Air Liquide, Trinity Consultants, and two members from the PTCA. The written and workshop comments received covered topics related to concerns about facilities conducting and submitting HRAs and alternatives to facility-prepared HRAs; facilities potentially needing additional technical assistance; additional comment period on the draft final HRA if there are substantial changes after the comment period on the preliminary HRA; additional detail on limits to Risk Reduction Plan (RRP) submission extensions and the requirement for interim risk reduction goals in the RRP; emissions inventory methodology suggestions; timelines to revise deliverables; workload planning; concerns with finalizing emissions inventories after preliminary HRAs are submitted; desire for clearer, documented Air District decision-making; and requests to change the Dispute Resolution Panel (DRP) scope and constraints.

In November 2025, staff presented an update to the Air District Stationary Source Committee on the rule development effort, including a summary of the draft amendments and public engagement, including seven of the written comments. During the meeting, one public comment was made by CCEEB in support of the draft amendments. In December 2025, staff presented a

summary of the written comments from CBE on the draft amendments to the Air District Stationary Source Committee. During the meeting, three public comments were made, with CBE and an individual raising concerns about facilities conducting and submitting HRAs, and the WSPA suggesting a facility-only comment period on the preliminary HRA before the public comment period.

C. Other Stakeholder Engagement

Staff conducted additional engagement throughout the continued development of the Rule 11-18 amendments. Staff met with CBE and others in accordance with the 2023 settlement agreement to provide an update on the implementation progress on Rule 11-18 and the rule development effort in February 2024, June 2024, December 2024, July 2025, and January 2026. Staff has provided updates on the Rule 11-18 amendment effort to the BACWA at quarterly BACWA-Bay Area Air District Implementation Workgroup meetings starting in February 2024. Staff also met with representatives from the Chevron Richmond Refinery in August 2024 and with CCEEB in September 2024 to discuss items related to Rule 11-18, including implementation progress, emissions inventory, Rule 11-18 Implementation Procedures, and rule amendment concepts. Staff met with CBE in January 2026 to discuss items related to Rule 11-18, including the HRA process in the draft rule amendments to Rule 11-18.

Staff also provided an informational update to the Path to Clean Air Community Steering Committee for the Richmond-North Richmond-San Pablo Community during its regular meetings in January and February 2025, providing an overview of Rule 11-18 and updates on its implementation and amendment progress.

D. Proposed Amendments

In March 2026, Air District staff published the proposed amendment materials, including proposed amendments to Rule 11-18, proposed updates to the Rule 11-18 Implementation Procedures, and the associated Staff Report, for public review and comment on these materials from March 18, 2026 through April 19, 2026.Air District staff received eight written comment letters on the proposed amendment materials. Written comments were submitted by CBE and five additional community-based organizations (CBE et al.), WSPA, CCEEB, Bay Area Clean Water Agencies, Chevron, Phillips 66, one member from the PTCA Community Steering Committee, and one other Bay Area resident.

Of the commenters, the two individuals expressed general support of the proposed amendments. CBE et al. expressed general opposition to the proposed amendments due to concerns that the HRAs initially prepared by the facilities would present a conflict of interest that could undermine the trustworthiness of the HRA results. The other comments received had mixed support and opposition, and covered topics including but not limited to:

- Differences between Air District and facility-prepared HRAs;
- Differences between the legacy procedures and the new procedures to prepare HRAs;
- An additional public comment period before the final HRA report is published;
- An additional facility-only review period before the preliminary HRA report is published;
- Timelines to draft, revise, review, and approve deliverables;
- Workload planning;
- Emissions inventories, particularly finalizing after preliminary HRAs are submitted and incorporating refinery data from Rule 12-15;

- DRP scope and constraints;
- Consistency with the WSPA settlement agreement;
- Cost of the proposed amendments; and
- Scope of the CEQA analysis.

Air District staff considered the comments submitted and prepared a summary of comments and responses document, which is included as Appendix G to this Final Staff Report. In response to comments received, Air District staff made minor administrative clarifications to this Final Staff Report and to the proposed updates to the Implementation Procedures. BAE Urban Economics also added additional references to the socio-economic analysis report in response to comments received. These clarifications are discussed in Appendix G to this Final Staff Report.

Air District staff made administrative clarifications to the proposed rule language after the proposed rule materials comment period that began on March 18, 2026. The discussion of these administrative clarifications is included in Section III to this Final Staff Report, and this proposed rule language is included in Appendix A to this Final Staff Report. These administrative clarifications were not made in response to comments received and are not expected to alter the requirements of the proposed rule amendments.

X. CONCLUSION / RECOMMENDATIONS

Pursuant to the California Health and Safety Code Section 40727, before adopting, amending, or repealing a rule the Board of Directors must make findings of necessity, authority, clarity, consistency, non-duplication, and reference. This section addresses each of these findings.

A. Necessity

As stated in California Health and Safety Code Section 40727(b)(1), "'Necessity' means that a need exists for the regulation, or for its amendment or repeal, as demonstrated by the record of the rulemaking authority."

Rule 11-18 was adopted by the Air District in 2017 to address facilities whose emissions of toxic air contaminants (TACs) pose an elevated risk to nearby residents and workers. Air District Stationary Source Committee members and environmental groups have raised concerns regarding delays in Rule 11-18 implementation, including the finalization of Health Risk Assessments (HRAs) and the development, submission, and approvals of Risk Reduction Plans (RRPs). These concerns about Rule 11-18 were raised at multiple Stationary Source Committee meetings, and community members voiced similar concerns at AB 617 Community Steering Committee meetings.

These proposed amendments focus on measures aimed at accelerating risk reduction and improving program efficiency to implement the requirements of the Rule. The proposed amendments to Rule 11-18 would expedite the HRA approval step and establish other changes that would improve implementation efficiency of this rule. They are expected to expedite not only the overall implementation of the Rule but also the reduction of air toxic emissions and health risks from affected facilities.

The proposed amendments would provide considerable Air District time and resource savings for implementing the Rule 11-18 program, particularly in setting up the air dispersion model and

entering input parameters, including toxic emissions data, source locations, stack parameters, meteorological data, terrain data, and receptor locations. The proposed amendments also allow the Rule 11-18 program to process more HRAs concurrently by requiring facilities to submit HRA modeling protocols and preliminary HRA results for Air District review, rather than being constrained by the modeling bandwidth of Air District staff. This shift is expected to significantly accelerate implementation timelines across the program.

B. Authority

The California Health and Safety Code Section 40727(b)(2) states that "'Authority' means that a provision of law or of a state or federal regulation permits or requires the regional agency to adopt, amend, or repeal the regulation."

The Air District has the authority to adopt these rule amendments under Sections 40000, 40702, and 40725 through 40728.5 of the California Health and Safety Code.

C. Clarity

The California Health and Safety Code Section 40727(b)(3) states that "'Clarity' means that the regulation is written or displayed so that its meaning can be easily understood by the persons directly affected by it."

The proposed amendments to Rule 11-18 are written so that their meaning can be easily understood by the persons directly affected by them. Further details in this report describe the proposals, delineate the affected industry, compliance options, and administrative requirements for the industries and persons subject to these rules.

D. Consistency

The California Health and Safety Code Section 40727(b)(4) states that "'Consistency' means that the regulation is in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations."

The proposed amendments to Rule 11-18 are consistent with other Air District rules and not in conflict with state or federal law.

E. Non-Duplication

The California Health and Safety Code Section 40727(b)(5) states that "'Nonduplication' means that a regulation does not impose the same requirements as an existing state or federal regulation unless a district finds that the requirements are necessary or proper to execute the powers and duties granted to, and imposed upon, a district."

The proposed amendments to Rule 11-18 are non-duplicative of other statutes, rules, or regulations.

F. Reference

The California Health and Safety Code Section 40727(b)(6) states that "'Reference' means the statute, court decision, or other provision of law that the district implements, interprets, or makes specific by adopting, amending, or repealing a regulation."

By adopting the proposed amendments to Rule 11-18, the Air District Board of Directors will be implementing, interpreting or making specific the provisions of California Health and Safety Code Sections 40000, 40702, and 40727.

G. Recommendations

The proposed amendments to Rule 11-18 have met or will meet all legal noticing requirements, have been discussed with the regulated community and other interested parties, and reflect consideration of the input and comments of many affected and interested stakeholders.

Air District staff recommends that the Air District Board of Directors adopt (1) a resolution to amend Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18); (2) make findings of necessity, authority, clarity, consistency, non-duplication, and reference for the Rule 11-18 amendments; (3) update the Rule 11-18 Implementation Procedures; (4) adopt an Addendum to the previously certified Environmental Impact Report for Rule 11-18 pursuant to the California Environmental Quality Act; and (5) adopt a Mitigation Monitoring and Reporting Program for Rule 11-18 pursuant to the California Environmental Quality Act.

Bay Area Air District

APPENDIX A

Proposed Amendments to Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities

This page has been intentionally left blank.

NOTE: Revisions to the November 2017 version of Rule 11-18 are indicated as follows: deletions are indicated as ~~red strikethrough~~ and additions are indicated as blue underline.

REGULATION 11
HAZARDOUS POLLUTANTS
RULE 18
REDUCTION OF RISK FROM AIR TOXIC EMISSIONS AT EXISTING FACILITIES

INDEX

11-18-100 GENERAL

11-18-101 Description
11-18-102 Applicability
11-18-103 Exemption, Emergency Use, Stationary Diesel Engines
11-18-104 Exemption, Retail Gasoline Dispensing Facilities

11-18-200 DEFINITIONS

11-18-201 Acute Hazard Index, or Acute HI
11-18-202 Acute Hazard Quotient, or Acute HQ
11-18-203 Airborne Toxic Control Measure~~, or~~ (ATCM)
11-18-204 Best Available Retrofit Control Technology for Toxics~~, or~~ (TBARCT)
11-18-205 Cancer Risk
11-18-206 Chronic Hazard Index, or Chronic HI
11-18-207 Chronic Hazard Quotient, or Chronic HQ
11-18-208 Exposed Individual (EI)
11-18-209 Facility
11-18-210 Gasoline Dispensing Facility (GDF)
11-18-211 Health Risk
11-18-212 Health Risk Assessment~~, or~~ (HRA)
11-18-213 Maximally Exposed Individual (MEI)
11-18-214 Maximum Achievable Control Technology~~, or~~ (MACT)
11-18-215 Owner/Operator
11-18-216 Prioritization Score
11-18-217 ~~Priority Community~~ Risk Action Level
11-18-218 ~~Risk Action Level~~ Risk Reduction Measures
11-18-219 Risk Reduction Plan~~ or Plan~~ (RRP)
11-18-220 ~~Risk Reduction Measures~~ Significant Risk Threshold
11-18-221 ~~Significant Risk Threshold~~Significant Source
11-18-222 ~~Significant Source~~Site-Specific Modeling Protocol
11-18-223 Source
11-18-224 Stationary Diesel-Fueled, Compression-Ignited Engine
11-18-225 Toxic Air Contaminant~~ or~~ (TAC), or Air Toxic
11-18-226 Toxic Risk Facility
11-18-227 Unreasonable Economic Burden

11-18-300 STANDARDS

11-18-301 Compliance with Risk Reduction Plan

11-18-400 ADMINISTRATIVE REQUIREMENTS

~~11-18-401 Health Risk Assessment Information Requirement~~
~~11-18-402 Early Application of Risk Action Levels~~
~~11-18-403 Notification of HRA Results and Submission of Plan~~
~~11-18-404 Risk Reduction Plan Content Requirements~~
~~11-18-405 Review and Approval of Risk Reduction Plans~~
11-18-401 Health Risk Assessment Procedures – Legacy
11-18-402 Health Risk Assessment Procedures
11-18-403 Risk Reduction Plan Procedures
11-18-404 Reconsideration of Prioritization Scores
11-18-405 Additional Emissions Data
11-18-406 Updated Risk Reduction Plan

11-18-500 MONITORING AND RECORDS

11-18-501 Progress Reports

11-18-600 MANUAL OF PROCEDURES

11-18-601 Prioritization Score Calculation Procedures
11-18-602 Health Risk Assessment Procedures

REGULATION 11
HAZARDOUS POLLUTANTS
RULE 18
REDUCTION OF RISK FROM AIR TOXIC EMISSIONS AT EXISTING FACILITIES

(Adopted November 15, 2017)

11-18-100 GENERAL

11-18-101 Description: The purpose of this rule is to ensure that facilities that emit toxic air contaminants do not pose an unacceptable health risk to nearby residents, workers, or students.

11-18-102 Applicability: This rule applies to any toxic risk facility that is required to report the toxic air contaminant emissions inventory of the facility to the Air District pursuant to the Air Toxics "Hot Spots" Information and Assessment Act of 1987, California Health and Safety Code, Section 44300 *et seq*.

11-18-103 Exemption, Emergency-Use, Stationary Diesel Engines: This rule shall not apply to facilities for which the only source of toxic air contaminant emissions is one or more stationary diesel-fueled, compression-ignited engines operated only for emergency-use, as defined in Regulation 9, Rule 8, Section 9-8-231, and reliability-related activities, and the facility prioritization score is less than 250.

11-18-104 Exemption, Retail Gasoline Dispensing Facilities: This rule shall not apply to retail gasoline dispensing facilities with a prioritization score less than 250.

11-18-200 DEFINITIONS

11-18-201 Acute Hazard Index, or Acute HI: Acute hazard index is the sum of the individual acute hazard quotients for toxic air contaminants identified as affecting the same target organ or organ system.

11-18-202 Acute Hazard Quotient, or Acute HQ: Acute hazard quotient is the ratio of the estimated short-term average concentration of the toxic air contaminant to its acute reference exposure level (estimated for inhalation exposure).

11-18-203 Airborne Toxic Control Measure~~, or~~ (ATCM): A recommended method and, where appropriate, a range of methods, established by the California Air Resources Board (CARB) pursuant to the Tanner Act, California Health and Safety Code Section 39650 *et seq.*, that reduces, avoids, or eliminates the emissions of a toxic air contaminant.

11-18-204 Best Available Retrofit Control Technology for Toxics~~, or~~ (TBARCT): The most stringent of the following retrofit emission controls; considering the cost of achieving health risk reductions, any non-air quality health and environmental impacts, and energy requirements; provided that under no circumstances shall the controls be less stringent than the emission control required by any applicable provision of federal, State or District laws, rules, regulations or requirements:

204.1 The most effective retrofit emission control device or technique that has been successfully utilized for the type of equipment comprising such a source; or

204.2 The most stringent emission limitation achieved by a retrofit emission control device or technique for the type of equipment comprising such a source; or

204.3 Any retrofit control device or technique or any emission limitation that the APCO has determined to be technologically feasible for the type of equipment comprising such a source; or

204.4 The most stringent retrofit emission control for a source type or category specified as MACT by ~~U.S. EPA,~~the United States Environmental Protection Agency (U.S. EPA), or specified in an ATCM by CARB.

11-18-205 Cancer Risk: An estimate of the chance that an individual may develop cancer as a result of exposure to emitted carcinogens at a given exposed individual location, and considering, where

appropriate, Age Sensitivity Factors to account for inherent increased susceptibility to carcinogens during infancy and childhood.

11-18-206 **Chronic Hazard Index, or Chronic HI:** Chronic hazard index is the sum of the individual chronic hazard quotients for toxic air contaminants identified as affecting the same target organ or organ system.

11-18-207 **Chronic Hazard Quotient, or Chronic HQ:** Chronic hazard quotient is the ratio of the estimated annual average exposure of the toxic air contaminant to its chronic reference exposure level (estimated for inhalation and non-inhalation exposures).

11-18-208 **Exposed Individual (EI):** A person who is exposed to TACs emitted from a toxic risk facility who is not an employee or contractor of the facility. Exposed individual includes a resident, student, or worker who is not an employee of or a contractor for the toxic risk facility.

11-18-209 **Facility:** Any property, real or personal, which may incorporate one or more plants all being operated or maintained by a person as part of an identifiable business on contiguous or adjacent property, and shall include, but not be limited to manufacturing plants, refineries, power generating plants, ore processing plants, construction material processing plants, automobile assembly plants, foundries and waste processing sites.

11-18-210 **Gasoline Dispensing Facility (GDF):** Any stationary operation that dispenses gasoline directly into the fuel tanks of motor vehicles. This facility shall be treated as a single source which includes all necessary equipment for the exclusive use of the facility, such as nozzles, dispensers, pumps, vapor return lines, plumbing and storage tanks.

11-18-211 **Health Risk:** The potential for adverse human health effects resulting from exposure to emissions of toxic air contaminants and ranging from relatively mild temporary conditions, such as eye or throat irritation, shortness of breath, or headaches, to permanent and serious conditions, such as birth defects, cancer or damage to lungs, nerves, liver, heart, or other organs. Measures of health risk include cancer risk, chronic hazard index, and acute hazard index.

11-18-212 **Health Risk Assessment~~, or~~ (HRA):** An analysis that estimates the potential for increased likelihood of health risk for individuals in the affected population that may be exposed to emissions of one or more toxic air contaminants, determined in accordance with Section 11-18-602~~Rule 2-5, Section 2-5-603~~. An HRA report is a document that presents the HRA and follows the HRA report template approved by the APCO.

11-18-213 **Maximally Exposed Individual (MEI):** A person that may be located at the exposed individual location where the highest exposure to toxic air contaminants emitted from a given source or project is predicted, as shown by an APCO-approved HRA. MEI locations are typically determined for maximum cancer risk, chronic hazard index and acute hazard index based on exposure to residents, workers, and students.

11-18-214 **Maximum Achievable Control Technology~~, or~~ (MACT):** An emission standard promulgated by U.S. EPA pursuant to Section 112(d) of the Clean Air Act.

11-18-215 **Owner/Operator:** Any person who owns, leases, operates, controls, or supervises a facility~~, building, structure, installation, or source which directly or indirectly results or may result in emissions of any air pollutant~~.

11-18-216 **Prioritization Score:** The relative potential for health impacts from a facility based on the amount of TACs emitted from the facility, the relative toxicity of the TACs emitted, the proximity of the facility to exposed individuals and exposure factors for different types of exposed individuals. The methodology for determining a facility's prioritization scores is located in Appendix A to this rule.

~~**11-18-217 Priority Community:** A geographic area where levels of toxic air contaminants are higher than other areas and where people may be particularly vulnerable and may bear disproportionately higher adverse health effects.~~

~~**11-18-218 Risk Action Level**~~

~~218.1 Before January 1, 2020, any of the following health risk levels:~~

~~1.1 A cancer risk of 25 per million (25/M); or~~

~~1.2 A chronic hazard index of 2.5; or~~

~~1.3 An acute hazard index of 2.5.~~

~~218.2 Effective January 1, 2020, except as provided in Section 11-18-402, any of the following health risk levels:~~

~~2.1 A cancer risk of 10 per million (10/M); or~~

~~2.2 A chronic hazard index of 1.0; or~~

~~2.3 An acute hazard index of 1.0.~~

11-18-217 Risk Action Level: Any of the following health risk levels:

217.1 A cancer risk of 10 per million (10/M); or

217.2 A chronic hazard index of 1.0; or

217.3 An acute hazard index of 1.0.

~~**11-18-220**~~**11-18-218 Risk Reduction Measures:** Practices that reduce toxic air contaminant emissions or that reduce health risks at the facility being evaluated, including changes to production processes, feedstocks, product formulations, emission point locations, emissions capture and dispersion mechanisms, and the installation of TBARCT or other control devices.

11-18-219 Risk Reduction Plan ~~or Plan~~ (RRP): A document meeting the requirements of Section ~~11-18-404~~ 11-18-403.2 that identifies, among other things, sources, quantities, and causes of emissions responsible for meeting or exceeding~~exceedance of~~ any of the risk action levels set forth in Section ~~11-18-221~~11-18-217 and details risk reduction measures that will be implemented to reduce risk.

~~**11-18-221**~~**11-18-220 Significant Risk Threshold:** Any of the following toxic health risk levels:

~~221~~220.1 A cancer risk of 1.0 per million (1.0/M); or

~~221~~220.2 A chronic hazard index of 0.20; or

~~221~~220.3 An acute hazard index of 0.20.

~~**11-18-222**~~**11-18-221 Significant Source:** A source of toxic air contaminants or health risk that poses a risk equal to or greater than a significant risk threshold at any MEI location at which all sources at the facility, taken together, pose a health risk equal to or greater than a risk action level.

11-18-222 Site-Specific Modeling Protocol: A document that describes the process for conducting a Health Risk Assessment required by Air District regulations and programs, and that identifies the steps and assumptions to be taken during the air dispersion modeling and risk assessment process for a specific site.

11-18-223 Source: Any article, machine, equipment, operation, contrivance or related groupings of such that may produce and/or emit air pollutants.

11-18-224 Stationary Diesel-Fueled, Compression-Ignited Engine: An internal combustion engine with operating characteristics significantly similar to the theoretical diesel combustion cycle that is operated, or intended to be operated, at a specific site for more than one year or is attached to a foundation at that site.

11-18-225 Toxic Air Contaminant ~~or~~ (TAC), or Air Toxic: An air pollutant that may cause or contribute to an increase in mortality or in serious illness or that may pose a present or potential hazard to human health. For the purposes of this rule, TACs consist of the substances listed in Table 2-5-1 Toxic Air Contaminant Trigger Levels in Regulation 2, Rule 5.

11-18-226 Toxic Risk Facility: Any facility that manufactures, formulates, uses, or releases any toxic air contaminant or any other substance that reacts to form a TAC.

11-18-227 Unreasonable Economic Burden: When the annualized cost of compliance (the sum of the annual operating cost and annualized capital costs) exceeds ten percent of the annual profits of a facility or one percent of the annual operational budget of a non-profit facility.

11-18-300 STANDARDS

11-18-301 Compliance with Risk Reduction Plan: The owner/operator of a toxic risk facility that poses a health risk, as determined by an APCO-approved HRA, equal to or greater than one or more of the risk action levels in effect pursuant to Section ~~11-18-218~~ 11-18-217 shall obtain and maintain APCO approval of a Risk Reduction Plan in accordance with Section 11-18-403, and shall implement the risk reduction measures on the timeline specified in the approved Risk Reduction Plan and comply with all other requirements and timelines in the approved Risk

Reduction Plan.:

~~301.1 Submit a proposed Risk Reduction Plan to the APCO in accordance with Section 11-18-403;~~

~~301.2 Obtain and maintain APCO approval of a Risk Reduction Plan in accordance with Section~~**s** ~~11-18-403, 404, and 405; and~~

~~301.3 Implement the risk reduction measures and comply with all other requirements in the approved Risk Reduction Plan~~

11-18-400 ADMINISTRATIVE REQUIREMENTS

~~**11-18-401 Health Risk Assessment Information Requirement**: Within 60 days of a request from the APCO, a facility owner/operator shall submit to the APCO any information necessary to complete an HRA of the facility. The facility owner/operator may request additional time to submit the requested information (up to an additional 60 days) provided that the facility owner/operator can demonstrate that additional time is necessary.~~

~~**11-18-402 Early Application of Risk Action Levels:** The APCO may conduct an HRA for or apply the risk action levels specified in Section 11-18-218.2 to any toxic risk facility located within a Priority Community at any time after the adoption of this rule.~~

~~**11-18-403 Notification of HRA Results and Submission of Plan:** The APCO shall provide the facility owner/operator with a copy of the preliminary HRA. The facility owner/operator shall be given 90 days to review and comment on the preliminary HRA. After taking into account any comments from a facility on preliminary HRA results and correcting factual errors, the APCO shall notify a facility owner/operator when a final APCO-approved HRA indicates a facility health risk equals or exceeds one or more of the risk action levels set forth in Section 11-18-218 and provide the facility owner/operator with a copy of the final APCO-approved HRA. Within 180 days of notification, the facility owner/operator shall submit a draft Risk Reduction Plan to the APCO that complies with Section 11-18-404. The APCO may allow additional time for the Plan submission to ensure the Plan is compatible with any applicable safety regulations.~~

11-18-401 Health Risk Assessment Procedures – Legacy: For a facility owner/operator that has received notification from the APCO that the site-specific modeling protocol has been finalized by the APCO before [date of rule adoption], the following requirements shall apply as appropriate:

401.1 Submission of Information: Within 60 days of a request from the APCO, the facility owner/operator shall submit to the APCO any information the APCO deems necessary, including, but not limited to, a TAC emissions inventory and TAC emissions release data, to complete an HRA of the facility. The facility owner/operator may request up to 60 additional days to submit the requested information provided that the facility owner/operator can establish, to the APCO's satisfaction, that such additional time is necessary.

401.2 Comment Period: The APCO shall prepare and publish a preliminary HRA report. The APCO shall notify the facility owner/operator and the public of the availability of the preliminary HRA report and hold a 90-day review and comment period.

401.3 Approval and Comparison to Risk Action Levels: After taking into account any comments on the preliminary HRA report and making any alterations to the HRA, the APCO shall approve and finalize the HRA report. The APCO shall notify the facility owner/operator whether the final, APCO-approved HRA indicates a facility health risk equals or exceeds one or more of the risk action levels set forth in Section 11-18-217. The APCO shall provide the facility owner/operator with a copy of the final, APCO-approved HRA report.

11-18-402 Health Risk Assessment Procedures: For a facility owner/operator that has not yet received notification by the APCO as of [date of rule adoption] that the site-specific modeling protocol has been finalized, the following requirements shall apply as appropriate:

402.1 Notification: The APCO shall notify a facility owner/operator that the facility owner/operator must prepare an HRA for the facility when the APCO determines that an HRA is warranted based on the facility's prioritization scores and other relevant factors. With the notification, the APCO shall provide an APCO-approved TAC emissions inventory to the facility owner/operator.

402.2 Site-Specific Modeling Protocol:

2.1 A facility owner/operator shall provide a draft site-specific modeling protocol to the APCO within 60 days of receiving a notification from the APCO pursuant to Section 11-18-402.1. The facility owner/operator may request up to 60 additional days to submit the draft site-specific modeling protocol provided that the facility owner/operator can establish, to the APCO's satisfaction, that such additional time is necessary.

2.2 After receiving the draft site-specific modeling protocol, the APCO shall either:

2.1 Notify the facility owner/operator that the site-specific modeling protocol is approved for use in the preliminary HRA, or

2.2 Notify the facility owner/operator that alterations to the site-specific modeling protocol are required and specify the required alterations.

2.3 If alterations are required, the facility owner/operator shall implement all alterations and resubmit the draft site-specific modeling protocol within 30 days of receiving the notification.

2.4 After receiving the resubmitted draft site-specific modeling protocol, the APCO shall either:

4.1 Notify the facility owner/operator that the site-specific modeling protocol is approved for use in the preliminary HRA, or

4.2 Make additional alterations to the site-specific modeling protocol. After making any alterations, the APCO shall send the facility owner/operator a final site-specific modeling protocol that is approved for use in the preliminary HRA.

402.3 Preliminary HRA Review:

3.1 The facility owner/operator shall submit a draft preliminary HRA report to the APCO within 90 days of receiving approval of a site-specific modeling protocol pursuant to Section 11-18-402.2.4.1 or 11-18-402.2.4.2. In its submission, the facility owner/operator shall provide all information necessary for reproducing the results of the HRA, including, but not limited to, TAC emissions inventory data, documentation of any changes to TAC emissions inventory data, TAC emissions release data, and any assumptions required to reproduce the results of the HRA. The facility owner/operator may request up to an additional 30 days to submit the draft preliminary HRA report provided that the facility owner/operator can establish, to the APCO's satisfaction, that such additional time is necessary.

3.2 If, after receiving the draft preliminary HRA report, the APCO determines that alterations to the draft preliminary HRA report are required, the APCO shall notify the facility owner/operator of the specific alterations to the draft preliminary HRA report that are required, unless the APCO elects to proceed under Section 11-18-402.3.4.

3.3 Upon receiving notice from the APCO that alterations to the draft preliminary HRA report are required, the facility owner/operator shall implement all alterations and resubmit the draft preliminary HRA report within 30 days of receiving the notification from the APCO. The facility owner/operator may request up to an additional 30 days to implement the alterations and resubmit the draft preliminary HRA report provided that the facility owner/operator can establish, to the APCO's satisfaction, that such additional time is necessary. In

its submission, the facility owner/operator shall provide all information necessary for reproducing the results of the HRA.

3.4 The APCO may also, pursuant to Section 11-18-402.6, finalize the preliminary HRA and preliminary HRA report and make any alterations to the preliminary HRA and preliminary HRA report, including, but not limited to, altering TAC emissions inventory data, TAC emissions release data, or assumptions and information underlying the HRA.

402.4 Public Comment: The APCO shall approve and publish a preliminary HRA report. The APCO shall notify the facility owner/operator and the public of the availability of the preliminary HRA report and hold a 90-day review and comment period. The APCO shall consider any written comments received during the comment period.

402.5 Approval and Comparison to Risk Action Levels:

5.1 If, after the public comment period, the APCO determines that alterations to the preliminary HRA report are required, the APCO shall notify the facility owner/operator of the specific alterations to the preliminary HRA report that are required, unless the APCO elects to proceed under Section 11-18-402.5.3.

5.2 Upon receiving notice from the APCO that alterations to the preliminary HRA report are required, the facility owner/operator shall implement all alterations and submit a draft final HRA report within 30 days of receiving the notification from the APCO. The facility owner/operator may request up to an additional 30 days to implement all alterations and submit the draft final HRA report provided that the facility owner/operator can establish, to the APCO's satisfaction, that such additional time is necessary. In its submission, the facility owner/operator shall provide all information necessary for reproducing the results of the HRA.

5.3 The APCO may also, pursuant to Section 11-18-402.6, finalize the final HRA and final HRA report and make any alterations to the HRA and HRA report, including, but not limited to, altering TAC emissions inventory data, TAC emissions release data, or assumptions and information underlying the HRA.

5.4 The APCO shall approve and publish a final HRA report. The APCO shall notify the facility owner/operator if the final, APCO-approved HRA for the facility indicates a facility health risk equals or exceeds one or more of the risk action levels set forth in Section 11-18-217.

402.6 APCO-Prepared HRAs: When it is more expedient to do so or when the facility owner/operator lacks the resources to conduct the HRA, the APCO may use an HRA and/or HRA report prepared in whole or in part by the APCO to determine whether a facility health risk equals or exceeds one or more of the risk action levels set forth in Section 11-18-217.

~~**11-18-404 Risk Reduction Plan Content Requirements:** A Risk Reduction Plan shall include the following:~~

11-18-403 Risk Reduction Plan Procedures:

403.1 Submission of RRP: Within 180 days of receiving a notification pursuant to Section 11-18-401.3 or 11-18-402.5.4 that a facility health risk equals or exceeds one or more of the risk action levels set forth in Section 11-18-217, the facility owner/operator shall submit a draft RRP to the APCO. The APCO may allow additional time for the RRP submission to ensure the RRP is compatible with any applicable safety regulations.

403.2 Contents: A Risk Reduction Plan shall include the following:

~~4042~~.1 The name and address of the facility.

~~4042~~.2 The North American Industry Classification System (NAICS) code for the facility.

~~4042~~.3 A description of risk from the facility including:

3.1 Summary data from the applicable APCO-approved TAC ~~air toxic~~ emissions inventory.

3.2 Summary data from the ~~health risk assessment~~HRA.

3.3 Identification of the processes and emission points that are significant sources contributing to the facility health risks and a characterization of the risk from each.

~~4042~~.4 A list of sources at which risk reduction measures will be implemented and a description of each risk reduction measure to be implemented at each source, including:

4.1 A description of the source and any existing controls that reduce risk,

4.2 A description of each risk reduction measure,

4.3 Anticipated emission reductions from the risk reduction measure,

4.4 Anticipated health risk reduction from the risk reduction measure

~~4042~~.5 A schedule for implementing each risk reduction measure, including:

5.1 Dates for filing applications for permits to construct.

5.2 Dates equipment will be installed (if applicable).

5.3 Dates process changes will be completed (if applicable).

5.4 Dates for demonstrating the effectiveness of risk reduction measures.

~~4042~~.6 A demonstration that:

6.1 The health risk from the facility will be reduced to a level below the risk action levels set forth in Section 11-18-~~218.2~~217 at ~~any~~ each MEI by no later than five years after ~~Plan~~ RRP approval through implementation of the risk reduction measures pursuant to the proposed schedule; or

~~6.2 The health risk from the facility will be reduced to a level below the risk action levels set forth in Section 11-18-218.2 at any MEI by no later than five years after Plan approval plus such time, not to exceed five additional years, as is necessary to address a technical feasibility issue or to avoid placing an unreasonable economic burden on the facility operator; or~~

6.2 All risk reduction measures that are technologically feasible to implement without placing an unreasonable economic burden on the facility owner/operator will be implemented within five years of RRP approval, and the health risk from the facility will be reduced to a level below the risk action levels set forth in Section 11-18-217 at each MEI by no later than five years after RRP approval plus such time, not to exceed five additional years, as is necessary to address a technological feasibility issue or to avoid placing an unreasonable economic burden on the facility owner/operator; or

~~6.3 The facility will comply through application of TBARCT and can show that:~~

~~3.1 The health risk from the facility cannot be reduced to a level below the risk action level because it is not feasible, and~~

~~3.2 TBARCT has been installed on all significant sources of risk, or will be installed no later than five years after Plan approval plus such time, not to exceed five additional years, as is necessary to address a technical feasibility issue or to avoid placing an unreasonable economic burden on the facility operator.~~

6.3 The health risk from the facility cannot be reduced to a level below the risk action levels set forth in Section 11-18-217 because it is not technologically feasible to do so without placing an unreasonable economic burden on the facility owner/operator, and TBARCT has been installed on all significant sources of risk, or will be installed on all such sources no later than five years after RRP approval plus an extension up to five years if granted by the APCO, as is necessary to address a technological feasibility issue or to avoid placing an unreasonable economic burden on the facility owner/operator. Such an extension shall

be limited to the source or group of sources that require the extension.

~~4042~~.7 An estimate of residual health risk following implementation of the risk reduction measures specified in the ~~Plan~~RRP.

~~4042~~.8 A certification that the ~~Plan~~ RRP meets all requirements. The person who makes this certification shall be one of the following:

8.1 An engineer who is registered as a professional engineer pursuant to Section 6762 of the Business and Professions Code; or

8.2 An individual who is responsible for the operations of the facility.~~source; or~~

~~8.3 An environmental assessor registered pursuant to Section 25570.3 of the Health and Safety Code~~.

403.3 Draft RRP Review:

3.1 The APCO shall conduct a review of the draft RRP. The APCO shall notify the facility owner/operator in writing if the APCO determines that the submitted RRP does not meet the requirements of Section 11-18-403.2 and will specify the basis for this determination.

3.2 Upon receipt of such notification, the facility owner/operator shall correct the identified deficiencies and resubmit the draft RRP within 45 days.

3.3 If the APCO determines that the facility owner/operator failed to correct any deficiency identified in the notification or that the RRP otherwise fails to comply with Section 11-18-403.2, the APCO may disapprove the RRP or may notify the facility owner/operator that the draft RRP continues to fail to meet the requirements of Section 11-18-403.2 and provide one additional opportunity to submit a draft RRP in 45 or fewer days.

403.4 Public Comment: The draft RRP, including any revisions made to correct deficiencies, will be made available to the public for 45 days (with the exception of confidential information). The APCO will consider any written comments received during this period prior to approving or disapproving the draft RRP.

403.5 Final Action:

5.1 The APCO shall approve the draft RRP if the APCO determines that the draft RRP meets the requirements of Section 11-18-403.2 and shall provide written notification to the facility owner/operator.

5.2 If the APCO determines after the public comment period that the draft RRP does not meet the requirements of Section 11-18-403.2, the APCO shall notify the facility owner/operator in writing and will specify the basis for this determination.

5.3 Upon receipt of such notification, the facility owner/operator shall correct the identified deficiencies and resubmit the draft RRP within 45 days.

5.4 If the APCO determines that the facility owner/operator failed to correct any deficiency identified in the notification or that the RRP otherwise fails to comply with Section 11-18-403.2, the APCO shall disapprove the draft RRP.

403.6 Public Inspection: Within 30 days of the approval of an RRP under Section 11-18-403.5.1, the APCO shall publish the RRP on the Air District's website, and shall notify any member of the public who submitted comments under Section 11-18-403.4, or who otherwise requested such notification of this action in writing. In making information available for public inspection, the confidentiality of trade secrets, as designated by the facility owner/operator, shall be handled in accordance with Section 7924.510 of the Government Code.

403.7 Disapproval of RRP: If the APCO disapproves an RRP pursuant to Sections 11-18-403.3.3 or 11-18-403.5.4, the disapproval shall constitute a failure to obtain APCO approval of an RRP pursuant to Section 11-18-301, unless the disapproval is of an updated RRP submitted pursuant to Section 11-18-406.

~~**11-18-405 Review and Approval of Risk Reduction Plans:** The procedure for determining whether a draft Plan submitted pursuant to Section 11-18-403 meets the applicable requirements of this rule is as follows:~~

405.1 Review: Within 20 business days of receipt of the draft Plan, the APCO will conduct a completeness review of the draft Plan. The APCO will notify the facility owner/operator in writing if the submitted Plan is lacking information necessary to make an approval determination. The facility owner/operator shall submit a complete draft Plan within 45 days of receipt of this notification. If the APCO determines that the resubmitted draft Plan is still incomplete, the APCO may disapprove the Plan or may notify the facility owner/operator that the draft Plan continues to lack necessary information and provide another opportunity to submit a complete draft Plan in 45 or fewer days.

405.2 Public Comment: The draft Plan, including any revisions made to correct deficiencies, will be made available to the public for 45 days (with exception of confidential information). The APCO will consider any written comments received during this period prior to approving or disapproving the final draft Plan.

405.3 Final Action:

3.1 The APCO will approve the draft Plan if the APCO determines that the draft Plan meets the requirements of Section 11-18-404 and will provide written notification to the facility owner/operator.

3.2 If the APCO determines that the draft Plan does not meet the requirements of Section 11-18-404, the APCO will notify the facility owner/operator in writing and will specify the basis for this determination. Upon receipt of such notification, the facility owner/operator shall correct the identified deficiencies and resubmit the draft Plan within 45 days.

3.3 If the APCO determines that the facility owner/operator failed to correct any deficiency identified in the notification, the APCO will determine that the facility owner/operator has failed to meet the requirements of Section 11-18-404, and will disapprove the draft Plan.

405.4 Public Inspection: Within 30 days of the approval of a Plan under Section 11-18-405.3, the APCO shall post the Plan on the Air District's website, and shall notify any member of the public, who submitted comments under Section 11-18-405.2, or who otherwise requested such notification of this action in writing. In making information available for public inspection, the confidentiality of trade secrets, as designated by the refinery owner/operator, shall be handled in accordance with Section 6254.7 of the Government Code.

11-18-404 Reconsideration of Prioritization Scores:

404.1 Within 30 days of receiving a notification from the APCO pursuant to Section 11-18-402.1, a facility owner/operator may request that the prioritization scores be reevaluated using a revised TAC emissions inventory. In order to request such reconsideration, the facility owner/operator shall recalculate the prioritization scores in accordance with Appendix A.

404.2 Based on the recalculated prioritization scores, the APCO may send the facility owner/operator a notification withdrawing the requirement that the facility owner/operator prepare an HRA if the APCO determines, in the APCO's sole discretion, that the potential health risk from the facility does not warrant HRA review. Unless the APCO withdraws the requirement that the facility owner/operator prepare an HRA, the deadlines for submission of a draft site-specific modeling protocol pursuant to Section 11-18-402.2 and preliminary HRA report pursuant to Section 11-18-402.3 are not altered by submission of a request pursuant to this section.

11-18-405 Additional Emissions Data:

405.1 In its draft preliminary HRA submission pursuant to Section 11-18-402.3.1, the facility owner/operator may request that the APCO consider additional, future testing or studies before finalizing emission data for specific sources. The facility owner/operator shall include a table in the draft preliminary HRA report that lists the sources, the currently estimated emissions for each source (which shall be used in the draft

preliminary HRA), and information regarding the testing and/or studies that it requests to conduct in the future. If the APCO agrees, in its sole discretion based on balancing the potential value of the testing or studies against the burden of potentially reopening the HRA, to consider such additional testing or studies, all updated emission data obtained through the testing and/or studies must be submitted for review and approval to the APCO no later than the date on which the facility owner/operator submits a draft RRP pursuant to Section 11-18-403.1.

405.2 If the APCO has agreed to consider additional testing or studies before finalizing emission data for specific sources, and if the facility owner/operator submits such data, the APCO may alter the final HRA to account for this new information and may, if warranted, rescind its notification to the facility owner/operator pursuant to Sections 11-18-401.3 or 11-18-402.5.4 that a facility health risk equals or exceeds one or more of the risk action levels set forth in Section 11-18-217.

405.3 If the APCO rescinds its notification to the facility owner/operator that a facility health risk equals or exceeds one or more of the risk action levels set forth in Section 11-18-217, the APCO shall subsequently release a revised preliminary HRA report for public comment as described in Section 11-18-402.4 and shall proceed to review and finalize a revised final HRA report and compare the HRA results in the HRA report to the risk action levels as described in Section 11-18-402.5.

405.4 If the APCO alters the final HRA but the risk in the altered HRA remains above one or more of the risk action levels set forth in Section 11-18-217, then the APCO shall base its review of the draft RRP in Section 11-18-403.3 on the altered HRA results, and will release the revised HRA report with the RRP pursuant to Section 11-18-403.4. The APCO shall consider any comments received on the altered HRA report before finalizing the altered HRA report, as described in Section 11-18-402.5.4, and RRP.

405.5 If a facility owner/operator proceeding pursuant to Section 11-18-405.1 submits a draft RRP before the APCO has reviewed and considered any additional emissions data, the draft RRP must include all the elements required in Section 11-18-403.2 both under the assumption that the request for consideration of additional emissions data will be granted and under the assumption that the request will be denied.

11-18-406 Updated Risk Reduction Plan: For an RRP ~~Plan~~ meeting the requirements of Section ~~11-18-404.6.3~~11-18-403.2.6.3, if information becomes available after the initial APCO approval regarding emissions reduction technologies that may be used by a facility owner/operator that would significantly reduce health risks to exposed persons or the feasibility of an RRP ~~Plan~~, the APCO may require or, upon request by a facility owner/operator and approval by the APCO, allow the facility owner/operator to update the RRP ~~Plan~~ to reflect the information and resubmit the RRP ~~Plan~~ to the APCO for approval pursuant to Section 11-18-403, provided the update does not significantly delay implementation of emission reductions from the timeline proposed in the facility's original RRP. The facility's original RRP will remain in effect until the APCO approves the updated RRP. The APCO may disapprove an updated RRP even if the updated RRP meets the requirements of Section 11-18-403.2 if the APCO determines the updated RRP is inconsistent with this Section or would not result in a significant reduction in health risk as compared to the original RRP.

11-18-500 MONITORING AND RECORDS

11-18-501 Progress Reports: The facility owner/operator shall report annually to the APCO progress on the emission reductions achieved by the RRP ~~Plan~~ until the RRP ~~Plan~~ is fully implemented or the facility owner/operator can demonstrate to the APCO compliance with Section 11-18-301~~.2~~. Reports shall be made no later than each anniversary of the date on which the RRP ~~Plan~~ was

approved pursuant to Section ~~11-18-405.3~~11-18-403.5.1 and shall be consistent with a format developed by the APCO.

11-18-600 MANUAL OF PROCEDURES

11-18-601 Prioritization Score Calculation Procedures: A facility owner/operator that requests reconsideration of its prioritization scores pursuant to Section 11-18-404 shall calculate any revised prioritization scores using the procedures set forth in Appendix A and the most current version of the District's Prioritization Score Procedures for Air Toxics Hot Spots Program and Regulation 11, Rule 18.

11-18-602 Health Risk Assessment Procedures: Each Health Risk Assessment shall be prepared in accordance with the District's Health Risk Assessment Guidelines.

Appendix A: Equations for Calculating Standard Prioritization Scores and Alternative Prioritization Scores for Specific Facility Types:

The standard prioritization score (PS) calculation equations are shown below:

$PS_{CANCER} = \Sigma [(E_i) \times (U_i)] \times (PAF) \times (NF_{CANCER})$

$PS_{NON\text{-}CANCER} = \Sigma [(E_i)/(REL_i)/(8760)] \times (PAF) \times (NF_{NON\text{-}CANCER})$

Where the variables for the standard prioritization score equations are:

E_i = Toxic air contaminant emissions from the facility (lbs/year) of each TAC (i)

OEHHA approved toxicity factors for each toxic air contaminant:

U_i = Unit Risk Value for each carcinogenic TAC (i), $(\mu g/m^3)^{-1}$

REL_i = Chronic Reference Exposure Level (REL) for each TAC (i), $\mu g/m^3$

PAF = Proximity Adjustment Factors (PAF) for nearest exposed individual

NF = Normalization Factors (NF) for each type of health effect (NF_{CANCER} and $NF_{NON\text{-}CANCER}$)

The alternative prioritization score (PS) calculation equations are shown below:

$PS_{CANCER} = \Sigma [(E_i) \times (U_i)] \times (PAF_{EI}) \times (EF_{EI}) \times (NF_{CANCER})$

$PS_{NON\text{-}CANCER} = \Sigma\{(E_i)/(REL_i)/(8760)\} \times (PAF_{EI}) \times (EF_{EI}) \times (NF_{NON\text{-}CANCER})$

Where the variables for the alternative prioritization score equations are:

E_i = Toxic air contaminant emissions from the facility (pounds/year) of each TAC (i)

OEHHA approved toxicity factors for each toxic air contaminant:

U_i = Unit Risk Value for each carcinogenic TAC (i), $(\mu g/m^3)^{-1}$

REL_i = Chronic Reference Exposure Level (REL) for each TAC (i), $\mu g/m^3$

PAF_{EI} = Proximity Adjustment Factor (PAF) for each type of exposed individual ($PAF_{RESIDENT}$ or PAF_{WORKER})

EF_{EI} = Exposure Factor (EF) for each type of exposed individual ($EF_{RESIDENT}$ or EF_{WORKER})

NF = Normalization Factors (NF) for each type of health effect (NF_{CANCER} and $NF_{NON\text{-}CANCER}$)

Bay Area Air District

APPENDIX B

Proposed Updates to Rule 11-18 Implementation Procedures

This page has been intentionally left blank.

Bay Area Air District

Regulation 11, Rule 18

Implementation Procedures

June 2026

Table of Contents

1. Introduction 3
1.1 Background on Air Toxics Programs 4
1.2 Public Engagement 6
2. Purpose 7
2.1 Annual Toxic Air Contaminant Emissions Inventories 7
2.2 Annual Prioritization Scores 7
2.3 Further Review of Toxic Air Contaminant Inventories 8
2.4 Health Risk Assessments 8
2.5 Risk Reduction Plans 8
3. Definitions 9
4. Procedures 9
4.1 Identify Potentially Subject Facilities 10
4.1.1 Rule 11-18 Toxic Air Contaminant Emissions Inventories 10
4.1.2 Prioritization Scores 12
4.1.3 Prioritization Score Thresholds 13
4.1.4 Requests to Reconsider Prioritization Scores 14
4.1.5 Toxic Air Contaminant Emissions Inventory and Toxic Air Contaminant Emissions Release Data Review and Correction Process 16
4.2 Assessing Health Impacts 18
4.2.1 Guidelines for Health Risk Assessments 20
4.2.2 Modeling Protocol for Health Risk Assessments 20
4.2.3 Procedures for Implementing Health Risk Assessments 20
4.3 Implementing Risk Reduction Plan Requirements 24
5. Dispute Resolution Panel 26
6. Stakeholder Meetings 28

BAY AREA AIR DISTRICT
375 BEALE STREET, SUITE 600
SAN FRANCISCO, CA 94105

Regulation 11, Rule 18 Implementation Procedures

1. Introduction

The Bay Area Air District ("Air District") adopted Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18) on November 15, 2017. Rule 11-18 is a health risk-based rule that requires existing facilities to determine their health risk and if that risk equals or exceeds one of the risk action levels, the facility must either (a) reduce health risks below the risk action levels specified in Section 11-18-217 or (b) install best available retrofit controls on all significant sources of health risk.

This document provides additional information about Rule 11-18 and explains how the Air District implements Rule 11-18.

- **Section 1** of this document provides background information about air toxics control in the Air District and explains how Rule 11-18 augments these control programs.
- **Section 2** describes the purpose of this implementation procedures document.
- **Section 3** identifies definitions that apply specifically to the Rule 11-18 program and defines acronyms that are commonly used in air toxics control programs.
- **Section 4** describes the procedures the Air District intends to use to implement Rule 11-18.
- **Section 5** outlines a dispute resolution process for disagreements between refineries and the Air District regarding Rule 11-18, and
- **Section 6** discusses how the Air District will keep the public and industry informed about rule implementation progress.

The purpose of this document is to inform the regulated community and interested public on how the Air District implements Rule 11-18. Unlike Rule 11-18 itself, this document does not have the force of law and does not bind the Air District, regulated entities, or any other person or entity. The Air District may follow different procedures from those described here if it determines that use of such procedures is warranted under the circumstances. The Air District will follow all requirements of Rule 11-18, notwithstanding anything in this document.

1.1 Background on Air Toxics Programs

The Air District has been reducing air toxics emissions from stationary sources for more than thirty years. In addition to adopting and implementing regulations targeting specific toxic air contaminants and specific source types, the Air District began evaluating health risks from stationary source facilities and new or modified projects at these facilities in the early 1990's. In 2005, the Air District adopted Regulation 2: Permits, Rule 5: New Source Review of Toxic Air Contaminants (Rule 2-5) to implement the Air District's new source review limitations for stationary sources of toxic air contaminants (TACs). The Air District amended Rule 2-5 in 2010 and 2016 to add new TACs, revise health effects values, and include updated Health Risk Assessment (HRA) guidelines. In 2021, the Air District amended Rule 2-5 to add a more stringent cancer risk limit for projects located in communities that are overburdened with air pollution and other health stressors.

Although health risks from ambient TAC emissions have declined significantly during the last thirty years, some communities in the Air District continue to have elevated and disparate risk levels. Rule 11-18 was adopted in 2017 pursuant to the Air District's authority to regulate and control TAC emissions from stationary sources.[1] In 2026, the Air District amended Rule 11-18 and updated the Rule 11-18 Implementation Procedures (this document) with aim to improve procedures and implementation efficiency. Rule 11-18 is an important part of the Air District's efforts to protect public health from toxic air pollution and reduce health impacts for disparately impacted communities. Rule 11-18 focuses on reducing health risks from existing facilities that have the highest potential for local health impacts due to stationary source emissions.

The Air District has several relevant documents to support consistent, transparent, and technically sound implementation of its air toxics programs. The table below provides an overview of each document and its role in the Rule 11-18 process.

Table 1. Overview of Key Documents Available

Document	Purpose	Example Contents
Regulation 11, Rule 18 Implementation Procedures (this document)	Procedures for Rule 11-18 implementation.	• List of facilities potentially subject to Rule 11-18 HRA and Risk Reduction Plan (RRP) requirements • Rule 11-18 HRA and RRP submission steps and review timelines • Dispute resolution panel procedures • Stakeholder meetings

[1] California Health and Safety Code § 39666.

Document	Purpose	Example Contents
Air Toxics Control Programs HRA Guidelines[2]	Analytical outline for health risk calculation and evaluation.	• Technical risk calculation methodology • Receptor assumptions • Exposure duration • Interpretation of results • Documentation requirements
HRA Modeling Protocol[3]	Technical instructions for conducting dispersion modeling used in HRAs.	• Technical modeling inputs and setup (e.g., meteorological data, terrain, stack parameters) • Receptor grid spacing • Modeling domain • Output file formats
Prioritization Score Procedures for Air Toxics Hot Spots Program and Regulation 11, Rule 18[4]	Procedures for calculating prioritization scores.	• Prioritization score steps • Standard prioritization score calculation equations • Alternative prioritization score calculation equations for specific facility types
TAC Emission Factor Guidelines[5]	Procedures for identifying representative TAC emission factors for a specific source.	• Overriding principles • Pollutant demonstration • Source-specific TAC emission factors • Default TAC emission factors
TAC Emission Factor Guidelines, Appendix A: Default TAC Emission Factors for Specific Source Categories[6]	Default TAC emission factors for specific source categories.	• Default TAC emission factors for boilers • Default TAC emission factors for gas turbines

[2] **HRA Guidelines:** As of preparation of this document, the most recent version is December 2021 and is available here: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-2-permits/2021-amendments/documents/20211215_hraguidelines-pdf.pdf?rev=eb18ff83f96049fa84d54552b58baee3

[3] **HRA Modeling Protocol:** As of preparation of this document, the most recent version is December 2020 and is available here: https://www.baaqmd.gov/~/media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol-pdf.pdf?rev=0d07ca2f01de4c36a3a22f411c8b8f6f

[4] **Prioritization Score Procedures for Air Toxics Hot Spots Program and Regulation 11, Rule 18**: As of preparation of this document, the most recent version is March 2017 and is available here: https://www.baaqmd.gov/~/media/dotgov/files/rules/regulation-11-rule-18/documents/20171003_priorproc_1118-pdf.pdf?rev=14cd7841f4b64710907d28122806c45e&sc_lang=en

[5] **TAC Emission Factor Guidelines**: As of preparation of this document, the most recent version is August 2020 and is available here: https://www.baaqmd.gov/~/media/files/ab617-community-health/facility-risk-reduction/documents/tac_emission_factor_guidance_august_2020-pdf.pdf

[6] **TAC Emission Factor Guidelines, Appendix A: Default TAC Emission Factors for Specific Source Categories**: As of preparation of this document, the most recent version is August 2020 and is available here: https://www.baaqmd.gov/~/media/files/ab617-community-health/facility-risk-reduction/documents/tac_emission_factor_guidance_appendixa_august_2020-pdf.pdf

Document	Purpose	Example Contents
Petroleum Refinery Emissions Inventory Guidelines[7]	Describes methodologies for calculating and reporting refinery emission inventories	• Overriding principles • Source-specific emission calculation procedures • Other procedures to ensure consistency

1.2 Public Engagement

Rule 11-18 supports the Air District's mission to create a healthy breathing environment for every Bay Area resident. The Air District recognizes the public's desire to understand local health impacts due to air pollution in their communities and to be engaged in the process of reducing these health impacts.

To meet these public expectations and in addition to this document, the Air District regularly posts information about Rule 11-18 and implementation progress on two web pages: (1) the Air District's Facility Risk Reduction Program web page (https://www.baaqmd.gov/community-health/facility-risk-reduction-program) and (2) the Rule 11-18 Risk Reduction Facilities web page (https://www.baaqmd.gov/community-health/facility-risk-reduction-program/facility-risk-reduction-list). Please visit these web pages to find current lists of facilities under review and implementation status updates. These web pages are or will be used to:

- Identify procedures and guidelines to be used when preparing TAC inventories, conducting HRAs, and reviewing RRPs;
- Inform the public about the status and results of the Air District's TAC inventory review, risk assessment results, and risk reduction requirements for individual facilities; and
- Provide opportunities for public review and comment on site-specific HRA results and site-specific RRPs.

The Air District plans to update these Implementation Procedures when any future amendments to Rule 11-18 are adopted. Invitations to workshops and information about public comment opportunities will be posted to the Air District web site, and the Air District will use multiple messaging options to inform the public of these opportunities.

The Air District also plans to have meetings with interested stakeholders to inform the public about the progress of Rule 11-18 implementation, to discuss improvements to the Facility Risk Reduction Program, to learn about community air toxic concerns, and to strategize on ways to improve public health in adversely impacted communities.

[7] **Petroleum Refinery Emissions Inventory Guidelines**: As of preparation of this document, the most recent version is July 2019 and is available here: https://www.baaqmd.gov/~/media/files/engineering/refinery-emissions-inventory-guidelines/draft-refinery-emissions-inventory-guidelines.pdf?rev=3a8ff253965d441a89c25d54a8634714&sc_lang=en

2. Purpose

The main purpose of this document is to describe the procedures the Air District intends to follow to implement Rule 11-18. These procedures are presented in Section 4 of this document. The following gives a brief overview of other Air District air toxic programs and explains how current procedures for these programs are integrated into and used by the Facility Risk Reduction Program.

2.1 Annual Toxic Air Contaminant Emissions Inventories

In accordance with the California AB 2588 Air Toxics "Hot Spots" Information and Assessment Act of 1987, most facilities that have the potential to emit TACs are required to report routine and predictable toxic emissions from stationary sources located at the facility to their local air district on a regular basis. In the Bay Area, the Air District integrates this TAC emission reporting requirement into the annual permit renewal process for the facility. The Air District stores information about each facility, their sources, control equipment, process data, stack data, and emission rates in a computer database. On an annual basis, the Air District requires that facilities report throughput rates, material usage data, and other information to the Air District.

For most facilities, with the exception of the refineries, the Air District uses this "annual update information" in conjunction with stored emission factors to calculate an annual emission inventory for each permitted facility in the Air District. For refineries, annual emissions data are collected in accordance with Regulation 12: Miscellaneous Standards of Performance, Rule 15: Refining Emissions Tracking (Rule 12-15) requirements, which allows for direct emissions reporting from the facility or estimates using a similar procedure as described above for the annual update process. This annual facility inventory includes criteria pollutants, greenhouse gases, and toxic air contaminants. The annual TAC emission rates determined through this process constitute the annual TAC emissions inventory for the facility. The Air District reports the TAC emission inventories for all permitted facilities to the California Air Resources Board (CARB) on an annual basis.

2.2 Annual Prioritization Scores

The Air District uses prioritization scores to rank facilities based on health impact potential. Prioritization scores[8] represent the relative potential for health impacts from a facility based on the amount of TACs emitted from a facility, the relative toxicity of the TACs emitted, and the distance from the sources at the facility to people who are exposed to the emissions.

[8] For more information about prioritization scores, see the Air District's Prioritization Score Procedures: https://www.baaqmd.gov/~/media/dotgov/files/rules/regulation-11-rule-18/documents/20171003_priorproc_1118-pdf.pdf?rev=14cd7841f4b64710907d28122806c45e

In the Bay Area, the Air District's prioritization scoring process occurs automatically during the annual permit renewal process described above (Section 2.1). After the annual TAC emissions inventory is generated, the Air District applies the prioritization score calculation procedures to produce an annual prioritization score for each facility. As described in Section 4 below, the Facility Risk Reduction Program uses these annual prioritization scores to identify facilities that need further inventory review and to help inform the order in which HRAs are conducted for these facilities if HRAs are required.

2.3 Further Review of Toxic Air Contaminant Inventories

If further review is triggered under the Facility Risk Reduction Program, the Air District may re-evaluate the TAC emissions inventory. The Air District reviews the data used to create the annual TAC emissions inventory to ensure that it is based on complete and correct information about the TACs that are emitted from the facility. It is the Air District's intention to use the most accurate TAC emissions data available. Section 4 describes the procedures that need to be followed when preparing or updating TAC emissions inventories for the Facility Risk Reduction Program.

2.4 Health Risk Assessments

If the facility exceeds the prioritization score thresholds described in Section 4, the Air District may notify a facility that a facility-wide HRA is required. The facility will prepare or have a contractor prepare an HRA. The Air District has the authority to review, correct, and approve HRA inputs and results. Existing HRA information that has been previously prepared and approved for the facility to determine if a new or updated facility-wide HRA may be necessary. This existing HRA information may include past HRAs prepared for "Hot Spots" Program purposes. Section 4 describes the procedures that need to be followed when preparing new or updated HRAs to determine Rule 11-18 RRP requirements.

2.5 Risk Reduction Plans

The requirement to submit an RRP is determined based on the results of an Air District-approved HRA. If an Air District-approved HRA indicates that a facility's health risk meets or exceeds one of Section 11-18-217 risk action levels, the facility must submit a draft RRP, obtain and maintain Air District approval of an RRP, and implement the risk reduction measures in accordance with the RRP. The RRP must demonstrate (a) how the facility will reduce health risks below all risk action levels within the required timeframe or (b) that it is not feasible to reduce health risk below the risk action levels and that the facility has installed or will install best available retrofit controls for toxics (TBARCT)[9] on all significant sources of health risk. Section 4 describes the procedures that need to be followed when submitting, reviewing, and approving RRPs.

[9] Section 11-18-204 defines Best Available Retrofit Control Technology for Toxics (TBARCT).

3. Definitions

Many terms or phrases that are used in this document are defined in Rule 11-18. Please see the Rule for those definitions. Additional terms or phrases used in this document are defined below:

CARB means California Air Resources Board.

High-Priority Facility means any facility that has a facility cancer risk prioritization score of 10 or higher or a facility non-cancer prioritization score of 1 or higher. High-priority facilities are potentially subject to Rule 11-18 HRA and RRP requirements, unless the facility meets one of the exemption criteria in Sections 11-18-103 or 11-18-104.

OEHHA means Office of Environmental Health Hazard Assessment.

Potentially Subject Facility means a facility that may be subject to Rule 11-18 HRA and/or RRP requirements. The Air District will conduct a detailed review of the toxic air contaminant emissions inventory for this facility, and the facility may conduct an HRA to assess the applicability of Rule 11-18 RRP requirements.

Proximity Adjustment Factor is a multiplication factor that is used in the calculation of a prioritization score for a facility. Proximity Adjustment Factors represent the potential reduction in ground level concentration of a toxic air contaminant that may occur at increasing distances from the facility emitting the toxic air contaminant. Proximity adjustment factors are determined in accordance with California Air Pollution Control Officers Association procedures based on the distance from the facility to the nearest residence or off-site worker.

REL means Reference Exposure Level. The air concentration or exposure level for a specified exposure duration at or below which adverse non-cancer health effects are not anticipated to occur in the general human population.

4. Procedures

This section describes the procedures the Air District follows to implement Rule 11-18. There are typically four major steps to implementing this rule:

1. Identifying and notifying facilities that are potentially subject to Rule 11-18 HRA requirements based on prioritization scores.
2. Updating TAC emissions inventories and assessing health risks from TAC emissions through a facility-wide HRA.
3. Determining if the HRA results indicate that the facility meets or exceeds any of the RALs in Rule 11-18 and, if so, ensuring an RRP is developed and approved.
4. Implementing approved RRPs for facilities subject to Rule 11-18 RRP requirements.

The first step is to determine which facilities may require an HRA under Rule 11-18 based on prioritization scores, which are calculated using an Air District-approved TAC emissions inventory. After the facilities potentially subject to Rule 11-18 HRA requirements are identified, the Air District may notify them of their obligation to prepare an HRA, and, if an HRA is required, the Air District will provide a copy of the Air District-approved TAC emissions inventory and TAC emissions release data.

In the second step, the HRA results are provided by the facility. The Air District will review and correct, if needed, the HRA results and TAC emissions inventory before approving the HRA results. The adoption of Rule 11-18 and other recent state legislation (AB 197 and AB 617) has resulted in a renewed emphasis on improving the Air District's TAC emissions inventory data. Many facilities have requested to review and to update their TAC emissions inventory data and other facility information that would be used for Air District decisions during these first two steps. The Air District concurs that a current and accurate TAC emissions inventory is a key consideration for this process. Therefore, inventory and facility data improvements have been incorporated into the procedures (Section 4.1.5).

In the third step, the results from the HRA will be compared against the risk action levels to determine whether the facility will be required to submit an RRP. In this step, facilities that exceed any risk action levels are required to develop and submit an RRP for the Air District's review and approval.

Step 4 involves the implementation of the approved RRP, which includes meeting the applicable risk reduction requirements of Rule 11-18 within the specified timeline. This step includes the development, submittal, review, and approval of RRPs.

Procedures and criteria for the typical implementation steps are listed below.

4.1 Identify Potentially Subject Facilities

With minor exceptions, Rule 11-18 applies to any facility that is required to report a TAC emissions inventory to the Air District pursuant to the Air Toxics "Hot Spots" Information and Assessment Act of 1987, California Health and Safety Code, Section 44300 *et seq*. The Air District generally follows CARB's emission inventory, prioritization score, and HRA procedures that were developed for the "Hot Spots" Program when determining Rule 11-18 HRA and RRP applicability. Any deviations from these CARB procedures or clarifications to these CARB procedures are explained in Air District guidance documents or the procedures below.

4.1.1 Rule 11-18 Toxic Air Contaminant Emissions Inventories

For the purposes of Rule 11-18, toxic air contaminant (TAC) emission inventories will generally be consistent with the California Air Resources Board's Emission Inventory Criteria and Guidelines (EICG) for the "Hot Spots" Program. The EICG, last amended

August 18, 2021,[10] describes the types of facilities that must provide TAC emissions inventories to the Air District and what must be included in those inventories. The EICG requires that facilities report routine and predictable TAC emissions from stationary sources at a facility. Emissions from emergency operations are excluded from "Hot Spots" reporting requirements and from Rule 11-18 TAC emissions inventories. Tailpipe emissions from motor vehicles are also excluded from "Hot Spots" Program reporting requirements and Rule 11-18 TAC emissions inventories.

"Hot Spots" Program TAC emissions reporting requirements apply to the full list of compounds identified in Appendix A of the EICG.[11] Since Rule 11-18 requirements depend on health risk thresholds, the Air District is only including in Rule 11-18 TAC emissions inventories compounds that have health risk values listed in Table 2-5-1 of Rule 2-5.[12] This is in accordance with the definition of a toxic air contaminant in Section 11-18-225. The Office of Environmental Health Hazard Assessment (OEHHA) routinely updates the health effects values for toxic compounds that are required to be used for the "Hot Spots" Program. Although the Air District periodically updates Table 2-5-1 of Rule 2-5 to include any new toxic compounds or updated health effects values approved by OEHHA, there will be a lag between OEHHA approval of a new health effect value and Air District adoption of that new health effects value. Thus, Table 2-5-1 may not include all of the compounds with OEHHA-approved health effects values.

The Air District updates the TAC emissions inventory for a facility on an annual basis,[13] and this is consistent with the reporting requirements under EICG/CARB Criteria Pollutant and Toxics Emissions Reporting (CTR) guidelines.[14]

The TAC emissions inventory is generally based on throughput rates, which are updated on an annual basis; toxic air contaminant emission factors, which are updated on an as-needed basis; and emission calculation algorithms specific to each source type.[15] Fugitive equipment sources may also contribute significantly to facility risk but are not directly tied to throughput rates. Emissions from these sources are estimated using protocols appropriate to the source type and incorporated into the inventory to ensure that the HRA reflects all relevant risk drivers. The necessary data for each source are collected and entered into the Air District's database during the permit application process. TAC emission factors are determined in accordance with the Air District's Toxic Air Contaminant Emission Factor Guidelines and the EICG.

For example, a boiler burning natural gas would have a set of TAC emission factors that would include the pounds of formaldehyde generated per thousand cubic feet of natural

[10] California Air Resources Board's Emissions Inventory Criteria and Guidelines for the Air Toxic "Hot Spots" Program is available online here: https://ww2.arb.ca.gov/sites/default/files/2022-10/EICG%20Report.pdf

[11] Appendix A of the EICG is available here: https://ww2.arb.ca.gov/sites/default/files/2022-10/Appendix%20A.pdf

[12] Regulation 2, Rule 5 and Table 2-5-1 are available here: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-2-permits/2021-amendments/documents/20211215_rg0205-pdf.pdf?rev=ddf72e12b699400e953b9b8dc24d2c34

[13] Toxic Air Contaminant Special Reports and Emissions Inventories for each facility are available here: https://www.baaqmd.gov/en/about-air-quality/emission-inventory/toxic-air-contaminants

[14] https://ww2.arb.ca.gov/our-work/programs/criteria-and-toxics-reporting

[15] Petroleum refineries and support facilities must report emissions including emissions of toxic air contaminants pursuant to the requirements and procedures in Rule 12-15.

gas burned in the boiler. The facility reports the amount of natural gas (in thousand cubic feet) burned in the boiler each year. The Air District's computer system multiplies the formaldehyde emission factor by the annual reported throughput rate to calculate the amount of formaldehyde generated at that boiler during the inventory year. Sources equipped with emission control devices would also have abatement factors that are incorporated into this calculation procedure.

For Rule 11-18 purposes, the TAC emissions inventory includes the best estimate of actual annual routine TAC emissions (pounds per year) and not the maximum permitted or maximum potential annual emissions rate for each source, abatement device, or emission point. For hourly emissions, the Rule 11-18 TAC emissions inventory includes the best estimate of the maximum hourly emission rate (pounds per hour) for each TAC.

The TAC emissions inventory that is used for a facility-wide HRA is generally based on a single, representative emissions inventory year and it will usually, but not always, be based on the most recently available inventory year. The inventory year refers to the submission of required data for the 12-month period occurring prior to the year in which the annual permit renewal occurs. For example, a 2022 inventory year would include data pertinent to emissions in a consecutive 12-month period submitted in the annual update for a June 2023 permit renewal. Additionally, for example, as of December 2023, emissions data reported for calendar year 2022 are the most recent available inventory year for many facilities. The Rule 11-18 TAC emissions inventory would generally include 2022 inventory data for all sources at the facility, and not 2021 data for some sources and 2022 data for other sources, unless – due to the transition to annual reporting described above – a single inventory year of data is not available for all sources at a facility. In the latter case, emissions updated for a previous year would be considered to be part of the current inventory year for Rule 11-18.

When determining if an inventory year is representative of normal operations, the Air District intends to consider reported throughput data and other recent or planned changes to the facility that could have a major impact on future TAC emissions, such as new source or control equipment installations, source shutdowns, or material changes. For example, year 2020 is likely not a representative inventory year for many facilities due to very low throughput rates reported by many facilities during the COVID pandemic.

4.1.2 Prioritization Scores

Prioritization scores represent the relative potential for cancer and non-cancer health impacts from a facility. The Air District uses prioritization scores to rank facilities based on health impact potential and to determine when facilities should undergo further review. As described in Section 2, the facility's annual prioritization score (maximum of cancer and non-cancer prioritization scores) is calculated during annual permit renewal. During review and update of the TAC emissions inventory that will be used for a Rule 11-18 applicability determination, the Air District may need to review and revise TAC emissions or proximity adjustment factors and recalculate the prioritization score for a facility. Any

recalculation of the prioritization score for a facility shall follow the Air District's Prioritization Score Procedures.[16]

As explained in the Air District's Prioritization Score Procedures, the three criteria used to calculate prioritization scores are: 1) annual TAC emissions, 2) health effects values for toxic compounds, and 3) proximity adjustment factors. Proximity adjustment factors are intended to account for reductions in health impact potential that normally occur when the distance between a facility and a receptor increases. Most facilities in the Bay Area have a proximity adjustment factor of 1, which means that no reduction in health impact potential is being applied, because most facilities have receptors located less than 100 meters (328 feet) from the facility. Table 2 of the Air District's Prioritization Score Procedures identifies the proximity adjustment factors that may be applied when receptors (residents or off-site workers) are located at least 100 meters away from a facility.

Prioritization scores are conservative screening tools used to rank the relative potential for health impacts from different facilities based on the amount of TACs emitted from a facility, the relative toxicity of the TACs emitted, and the proximity of the facility to possible receptors. The Air District evaluates three categories of health impacts: cancer risk, chronic non-cancer impacts, and acute non-cancer impacts.

As discussed in the Air District's Prioritization Score Procedures, there are two types of prioritization scores: a cancer risk-based prioritization score and a non-cancer-based prioritization score. For Rule 11-18 reviews, the Air District considers both prioritization scores when determining the need for further review.

4.1.3 Prioritization Score Thresholds

In accordance with CARB guidance for the Hot Spots Program, any facility with a facility prioritization score of 10 or higher (PS≥10) is considered a high-priority facility and should undergo further review for health risks. Any facility with a facility prioritization score of less than 1 (PS<1) is considered a low-priority facility that is unlikely to result in significant health impacts and generally requires no further review. Any facility with a facility prioritization score between 1 and 10 (PS≥1 but PS<10) is an intermediate-priority facility that may potentially warrant further review.

For Rule 11-18, the Air District generally follows this "Hot Spots" Program guidance when determining if further review, such as a facility-wide HRA, is necessary. Under Rule 11-18, high-priority facilities are assessed based on both their cancer and non-cancer prioritization scores (see Table 2 below), and the Air District intends to require an updated facility-wide HRA for these facilities. Facilities with only emergency-use stationary diesel-fired engines (EDE Only Facilities) and facilities with only retail gasoline dispensing facilities (GDF Only Facilities) are potentially exempt from Rule 11-18 per Sections 11-

[16] The Air District's Prioritization Score Procedures for ATHS Program and Rule 11-18 can be found online here: https://www.baaqmd.gov/~/media/dotgov/files/rules/regulation-11-rule-18/documents/20171003_priorproc_1118-pdf.pdf?rev=14cd7841f4b64710907d28122806c45e&sc_lang=en

18-103 and 11-18-104. However, these exemptions do not apply if the cancer prioritization score is 250 or higher. The Air District intends to require an HRA for intermediate-priority facilities if the non-cancer prioritization score is greater than 1. Low-priority facilities (facility PS <1) are generally not subject to Rule 11-18 HRA requirements.

Due to the large number of facilities that meet the thresholds above for further review, the Air District split the inventory update and HRA review for these facilities into several phases. Phase I includes facilities with the highest potential for health risks. Phase II facilities have a lower potential for elevated health risks but are still considered high-priority facilities.

Prioritization score thresholds and associated actions for facilities that are potentially subject to Rule 11-18 HRA requirements are summarized in Table 2 below.

Table 2. *Prioritization Score Thresholds for Rule 11-18 Applicability Determinations*

Site Type	Cancer Risk Prioritization Score		Non-Cancer Prioritization Score	Review Phase	Anticipated Next Steps
All Facility Types	≥ 250	OR	≥ 10	Phase I	Facility-Wide HRA Required, Compare Results to: 11-18-217 Risk Action Levels
All Facility Types, Except EDE Only or GDF Only	≥ 10 and < 250	OR	≥ 1 and < 10	Phase II	Facility-Wide HRA Required, Compare Results to: 11-18-217 Risk Action Levels
EDE Only (Meets 11-18-103)	< 250	AND	< 10	NA	None (Exempt)
GDF Only (Meets 11-18-104)	< 250	AND	< 10	NA	None (Exempt)
All Site Types	< 10	AND	< 1	NA	None

During development of Rule 11-18, the Air District evaluated prioritization scores for all facilities and developed lists of potentially subject facilities. The Air District annually reviews prioritization scores for all facilities to ensure that any new facilities or changes to existing facilities are included and that facilities are categorized into the appropriate review phase. Current facility lists are posted here: https://www.baaqmd.gov/community-health/facility-risk-reduction-program/facility-risk-reduction-list.

4.1.4 Requests to Reconsider Prioritization Scores

A facility may choose to request that the Air District reconsider the facility prioritization scores pursuant to Section 11-18-404. The Air District intends to consider such requests

only if the facility can demonstrate that a reevaluation, provided sufficient documentation and justification, would result in a cancer prioritization score lower than 10 and a non-cancer prioritization score lower than 1. After reviewing the request, the Air District may notify the facility that the HRA requirement is withdrawn. Otherwise, the facility must submit the draft site-specific modeling protocol pursuant to Section 11-18-402.2.1. After reviewing the request, the Air District may notify the facility that the HRA requirement is withdrawn. Otherwise, the facility must submit the draft site-specific modeling protocol pursuant to Section 11-18-402.2.1.

As noted, the Air District anticipates reviewing requests only if the resultant recalculated prioritization scores would result in the facility no longer meeting the thresholds at or above which the Air District would generally require an HRA, as described in Section 4.1.3 Prioritization Score Thresholds, based on routine emissions. The Air District anticipates that requests may be submitted for issues including, but not limited to, objective errors in the emissions inventory (e.g., incorrect units, data entry mistakes, or source misidentification) or justified use of a different inventory year that is more representative of emissions. This pathway is not intended to be a forum for deliberation on emissions inventory methodology disagreements.

The Air District anticipates that requests would include all information necessary to sufficiently demonstrate the need for a prioritization score reconsideration including spreadsheets with formulas preserved to allow recalculation and verification. For example, requests regarding corrections of objective errors or use of a different inventory year may include the following:

1. If the facility proposes changes to the emissions inventory due to an objective error in the emission inventory, the submission should include, at a minimum:
    - Recalculated prioritization scores (cancer and non-cancer), demonstrating the facility is below the thresholds that would require an HRA described in Section 4.1.3, based on the inventory year selected by the Air District.
    - A revised emissions inventory based on the inventory year, and
    - Documentation of the changes to the emissions inventory, including, at a minimum:
        - All proposed changes with clear references to the original data,
        - A description of the nature of each proposed change (e.g., correction, addition, deletion), and
        - The justification or basis for each proposed change.
2. If the facility proposes a different inventory year as more representative of its emissions, the submission should include, at a minimum:
    - A justification explaining why the proposed year was chosen and addressing why the Air District–selected inventory year is not representative, including an explanation of significant increases or

decreases on a source and pollutant level between the Air District-selected inventory year and proposed year,

- Recalculated prioritization scores (cancer and non-cancer) based on the proposed inventory year, demonstrating that it is below the thresholds that would require an HRA described in Section 4.1.3, and

A revised emissions inventory based on the proposed inventory year.

Detailed instructions on how to calculate the prioritization scores can be found in the Prioritization Score Procedures hosted on the Air District's Facility Risk Reduction Program web page.

4.1.5 Toxic Air Contaminant Emissions Inventory and Toxic Air Contaminant Emissions Release Data Review and Correction Process

This section describes the emissions inventory review and correction process that occurs during the Rule 11-18 implementation process.

The Air District intends to use the TAC emissions inventory and TAC emission release data that are best available and most representative of routine operations to determine the applicability of Rule 11-18 requirements. The Air District's TAC emission factors and TAC emissions release data, which include, but are not limited to, source-specific information such as source location and stack parameters, were initially entered when a source was first permitted. These data may have undergone limited updates since that time and may therefore be outdated. To ensure that the TAC emissions inventory is accurate, the Air District provides facilities with an opportunity to review and update their TAC emission factors based on source test data or other on-site measurements, updated pooled source test data, new CARB or AP-42 emission factors or other available literature when the facility submits the preliminary HRA report and TAC emissions inventory utilized for the HRA model. The facilities are also given the opportunity to correct and/or provide any missing source-specific data at this time. The Air District also reviews emissions factors and source-specific data, and updates data where appropriate.

The Air District has developed TAC emissions calculation guidance for specific types of sources that will improve the Air District's TAC emissions inventories for many source categories.[17]

In addition to annual emissions, HRAs will require maximum one-hour TAC emissions data. The Air District does not currently maintain short-term TAC emissions data. Therefore, the Air District intends to estimate maximum hourly emissions for each source based on the Air District's best judgement. The maximum one-hour emissions data may

[17] The Air District's Toxic Air Contaminant Emission Factor Guidelines can be found online here: https://www.baaqmd.gov/~/media/files/ab617-community-health/facility-risk-reduction/documents/tac_emission_factor_guidance_august_2020-pdf.pdf?rev=1917e6634bb34bbfa28a0644119384c0

be used to estimate health risks from any toxic air contaminants that have acute reference exposure levels. Some of the common TACs that have acute RELs are: ammonia, benzene, 1,3 butadiene, chloroform, formaldehyde, hydrochloric acid, hydrogen sulfide, isopropyl alcohol, mercury compounds, methanol, methyl ethyl ketone, methylene chloride, nickel compounds, nitric acid, perchloroethylene, sulfuric acid, toluene, vinyl chloride, and xylene. See Table 2-5-1 in Rule 2-5 for a complete list of TACs with acute RELs.

The Air District notifies facilities in writing that an HRA is required in accordance with Section 11-18-401 or 11-18-402. For facilities subject to Section 11-18-402 (current HRA procedures), the Air District intends to first inform the facility that the Air District has started reviewing the facility's TAC emissions inventory; this initial communication will generally be made at least 60 days prior to the Air District providing notification (pursuant to Section 11-18-402.1) that the facility must prepare an HRA. This latter notification initiates the HRA procedures outlined in Section 4.2.3. The notification will generally include the most recent TAC emissions inventory data, which will include both annual emissions and maximum one-hour TAC emissions data, TAC emissions release data for the facility plus information about the facility, source emission rates and emission point data. Facilities may also request additional information from the Air District—such as emission factors, abatement factors, and the basis for the current TAC emissions data—if needed to support the facility's review process.

- For facilities subject to Section 11-18-401 (legacy HRA procedures), facilities are asked to review these data and submit corrected information, if necessary, within 60 days.
- For facilities subject to Section 11-18-402 (current HRA procedures), any necessary corrections to information are submitted with the preliminary HRA, which is due to the Air District within 90 days of receiving the final site-specific modeling protocol, pursuant to Section 11-18-402.2.3.

During the Air District review of TAC emissions inventory data, if the Air District does not agree with a proposed emission factor or TAC emissions inventory rate, the Air District will notify the facility. However, the Air District may move forward with Air District authorized emission factors, without reaching an agreement on emission factors, and approve and publish the preliminary HRA report for public comment pursuant Section 11-18-401.2 or Section 11-18-402.4.

For facilities subject to Section 11-18-402 that would like to request reconsideration of the determination that an HRA is required using a revised TAC emissions inventory in accordance with Section 11-18-404, please see Section 4.1.4 Requests to Reconsider Prioritization Scores.

For facilities that would like to request the Air District consider additional testing or studies before finalizing the emissions data for specific sources, a request may be submitted to conduct additional testing or perform studies in accordance with Section 11-18-405. This provision allows the facility to submit site-specific emissions data and provides the Air

District an opportunity to consider all available data to ensure that the data used for the HRA represent the best available TAC emissions information.

4.2 Assessing Health Impacts

Rule 11-18 is a health risk-based rule. As described in Sections 11-18-401 and 11-18-402, a facility becomes subject to the risk reduction requirements in Rule 11-18 after the Air District notifies the facility that an Air District-approved HRA results in a facility health risk equal to or greater than a risk action level listed in Section 11-18-217. Thus, the Air District will usually determine which facilities are required to undergo HRA review and then review these HRAs to assess the applicability of RRP requirements.

The Air District may inform a facility based on the facility's Air District-approved TAC emissions inventory and the resulting prioritization score if there are any changes to the Rule 11-18 status of the facility. Section 11-18-402 requires facilities to submit a site-specific modeling protocol within 60 days of the notification by the Air District to prepare an HRA, and requires the facility to provide a preliminary HRA report within 90 days of receiving the final site-specific modeling protocol pursuant to Section 11-18-402.2.3.

Section 11-18-402.3 requires facilities to provide all additional information needed for reproducing the results of the HRA with the submission of the preliminary HRA report. The Air District anticipates requiring at least the following:

- Modeling files, so the HRA can be rerun if necessary,
- Annual and hourly source-specific TAC emissions inventory data,
- Source and stack locations,
- Stack parameter data,
- Building parameter data,
- Meteorological data,
- Terrain data,
- Receptor locations, and
- Documentation of changes to the TAC emissions inventory data.[18]

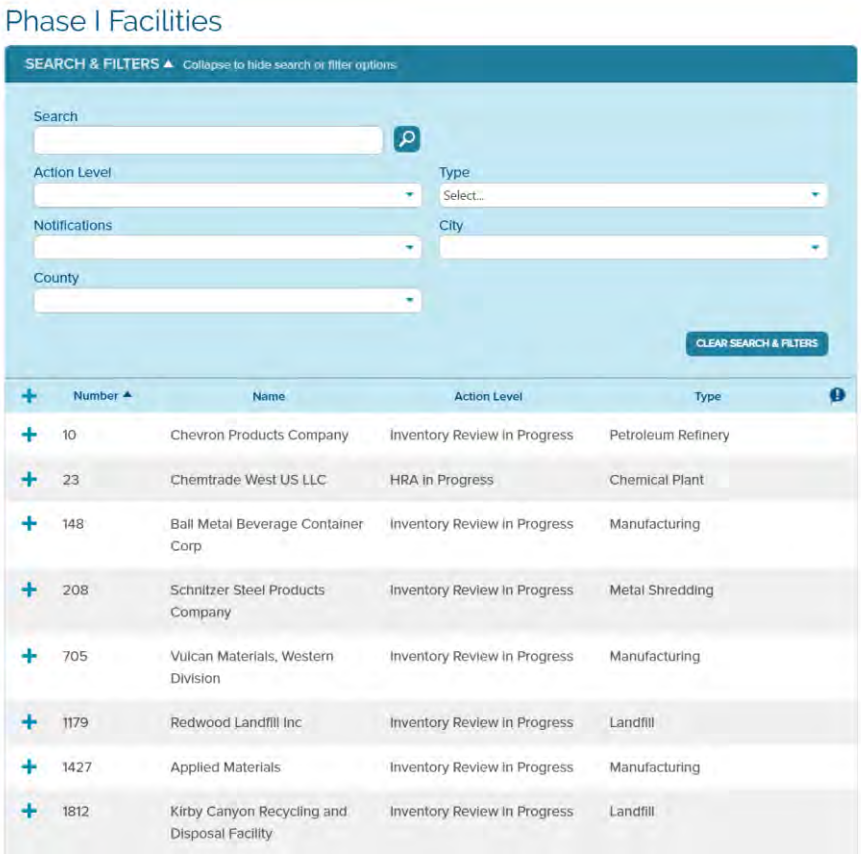
The Air District plans to initiate the TAC emissions inventory and HRA review processes for groups of facilities in small, manageable batches. Generally, the Air District plans to prioritize initiating this review for Phase I facilities, which are facilities with cancer risk prioritization scores (cancer PS) of 250 or higher or non-cancer prioritization scores (non-cancer PS) of 10 or higher. After the review of Phase I facilities is complete, the Air District intends to initiate the review of the remaining facilities in the following order: Phase II facilities with cancer PS of 100 or higher, Phase II facilities with cancer PS of 50 or higher, Phase II facilities with cancer PS of 25 or higher, Phase II facilities with cancer PS of 10 or higher, and finally Phase II facilities with non-cancer PS greater than one. The Air District has initiated this review for the first batch of facilities, which generally focuses on Phase I facilities the Air District has identified as top priority for HRA completion.

[18] The documentation of the emissions inventory changes should include, but is not limited to: all proposed changes with clear references to the original data, a description of the nature of each proposed change (e.g. correction, addition, deletion), and the justification or basis for each proposed change.

Although the Air District generally plans to review facilities in the batches described above, the Air District may prioritize review of TAC emissions inventories and HRAs for Rule 11-18 facilities that are located in Overburdened Communities as defined in Regulation 2: Permits, Rule 1: General Requirements, Section 2-1-243 and the communities selected by the California Air Resources Board for additional resources under Assembly Bill 617 (AB 617) pursuant to Health and Safety Code sections 42705.5(c)-(d) or 44391.2(c). The Air District may also elevate a facility located within an Overburdened Community or AB 617 Community from a future review batch to the current review batch.

The status of the Air District's inventory and HRA review process can be found on the Rule 11-18 Risk Reduction Facilities web page by searching the action level in the facility tables located at:
https://www.baaqmd.gov/community-health/facility-risk-reduction-program/facility-risk-reduction-list

Lists of facilities that are categorized into each phase will also be posted on this page and updated annually. The searchable table shown below currently includes Phase I facilities. The Air District will add the next batch of facilities to this table upon Air District initiation of review for that batch.



4.2.1 Guidelines for Health Risk Assessments

HRAs that will be used to determine applicability of Rule 11-18 risk reduction requirements will be conducted in accordance with the Air District's HRA Guidelines, which are published on Facility Risk Reduction Program web page at: https://www.baaqmd.gov/community-health/facility-risk-reduction-program.[19]

4.2.2 Modeling Protocol for Health Risk Assessments

The Air District has prepared a general HRA modeling protocol that describes how sources should be modeled and how health impacts should be calculated. It is available on the Facility Risk Reduction Program web page at: https://www.baaqmd.gov/community-health/facility-risk-reduction-program.[20]

4.2.3 Procedures for Implementing Health Risk Assessments

Two different procedures are described in this section. Legacy Procedures apply to facilities that have received a notification from the Air District that the site-specific modeling protocol has been finalized before the adoption of the 2026 amendments to Rule 11-18. Current Procedures apply to all other facilities. To the extent these procedures go beyond the specific language in Rule 11-18, they represent the Air District's intent but are subject to change where warranted.

Legacy Procedures (Section 11-18-401)

1. The Air District develops an initial emissions inventory and provides it to the facility for review. The Air District may request information to complete an HRA for the facility.
2. The facility reviews and responds with comments and requested information within 60 days. (Section 11-18-401.1)
3. The Air District reviews the facility's comments and submitted information and may adopt proposed alterations as appropriate. The Air District prepares a site-specific modeling protocol and performs the preliminary HRA. (Section 11-18-401.2)
4. The Air District publishes the preliminary HRA report and notifies the public and facility that the preliminary HRA report is open for comment for 90 days. (Section 11-18-401.2)

[19] HRAs should be conducted in accordance with the most recently approved version of the Bay Area Air District Air Toxics Control Programs HRA Guidelines. As of preparation of this document, the most recent version is December 2021 and is available here: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-2-permits/2021-amendments/documents/20211215_hraguidelines-pdf.pdf?rev=eb18ff83f96049fa84d54552b58baee3

[20] HRA modeling should be conducted in accordance with the most recently approved version of the Bay Area Air District HRA Modeling Protocol. As of preparation of this document, the most recent version is December 2020 and is available here: https://www.baaqmd.gov/~/media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol-pdf.pdf?rev=0d07ca2f01de4c36a3a22f411c8b8f6f

5. For refinery HRAs, the Air District publishes the following, after which the refinery has an opportunity within 15 days to request to convene the Dispute Resolution Panel. (Between Sections 11-18-401.2 and 11-18-401.3)
    a. Response to comments on the preliminary HRA report,
    b. Preliminary determination regarding (1) approval OR (2) deficiencies requiring alteration, and
    c. Preliminary list of identified alterations (if applicable).
6. The Air District reviews comments and may adopt proposed alterations as appropriate. The Air District finalizes and publishes the final HRA report. For non-refinery HRAs, the response to comments is published at the same time as the final HRA report. (Section 11-18-401.3)

Current Procedures (Section 11-18-402)

The Air District requires facilities receiving notifications pursuant to Section 11-18-402.1 to submit HRA results to the Air District. The Air District authorizes the use of a contractor to conduct an HRA.

Although the Air District requires facilities to conduct HRAs and submit HRA reports, it may, under certain circumstances, use an HRA and/or HRA report prepared by the Air District pursuant to Section 11-18-402.6. For example, the Air District anticipates it may prepare HRAs and HRA reports for certain small facilities that lack resources to prepare an HRA. In addition, the Air District also may take over the finalization of the HRA deliverables, including the site-specific modeling protocol, HRAs, and HRA reports.

During Air District review of the HRA deliverables, the Air District has the authority to require the facility to modify the deliverables, including, but not limited to, changing the TAC emissions inventory and TAC emissions release data.

The Air District charges HRA fees pursuant to Regulation 3, Section 3-342 for developing the HRA, including the site-specific modeling protocol. The Air District also charges HRA review fees pursuant to Regulation 3, Section 3-342 for reviewing HRAs, including the site-specific modeling protocol.

If a facility can establish to the Air District's satisfaction that additional time is necessary to complete certain steps of the process, as stated in specific Rule sections, the Air District may choose to approve the request. The facility may request an extension of up to the designated amount of days in each Rule section. If the facility requests additional time, the facility should assume that the provided timelines stand until the facility receives a notification of approval or disapproval for additional time.

Below are the procedures the Air District anticipates following for facilities subject to Section 11-18-402.

1. The Air District informs the facility that the Air District has started reviewing the facility's emissions inventory.
2. No less than 60 days following the start of the Air District's review of the facility's emission inventory, the Air District provides the facility with the notification to prepare an HRA in accordance with Section 11-18-402.1, along with an Air District-approved TAC emissions inventory and TAC emissions release data for the facility. (Section 11-18-402.1)
3. The facility notifies the Air District if the facility plans to use a contractor for the HRA.
4. Within 30 days of receiving a notification to prepare an HRA, a facility may recalculate the facility's prioritization scores using a revised TAC emissions inventory pursuant to Section 11-18-404 and request reconsideration from the Air District of whether an HRA is required. Based on the recalculated prioritization scores, the Air District may send the facility a notification withdrawing the requirement that the facility prepare an HRA. Section 4.1.4 Requests to Reconsider Prioritization Scores includes more details on this process. (Section 11-18-404)
5. The facility submits a draft site-specific modeling protocol that follows the Air District's HRA Modeling Protocol within 60 days of the notification by the Air District to prepare an HRA in accordance with Section 11-18-402.2.1. (Section 11-18-402.2.1)
6. The Air District reviews the draft site-specific modeling protocol. If any revisions to the draft modeling protocol are necessary, the Air District provides a list of necessary revisions to the facility. The facility must implement all revisions and resubmit the protocol within 30 days of receiving the notification with the list of required revisions from the Air District in accordance with Section 11-18-402.2.2. (Sections 11-18-402.2.2 and 11-18-402.2.3)
7. If issues remain in the revised draft modeling protocol, the Air District may reject the draft modeling protocol and use the Air District's HRA Modeling Protocol with default parameters, or make alterations as deemed necessary. After making any alterations, the Air District sends the facility a final modeling protocol. (Section 11-18-402.2.4)
8. The facility or the contractor conducts a preliminary HRA. (Section 11-18-402.3.1)
9. The facility submits to the Air District (1) the draft preliminary HRA report that follows the HRA report template approved by the Air District and (2) all supporting materials within 90 days of the approval of the site-specific modeling protocol by the Air District in accordance with Section 11-18-402.3.1. The draft preliminary HRA submission includes the TAC emissions inventory, documentation of any changes to the emissions inventory data, TAC emissions release data, and any other assumptions and information required to reproduce the HRA results. The documentation should include editable versions of all documents including, but not limited to, Microsoft Word versions of the draft report and supporting material and

all spreadsheets with formulas preserved to allow recalculation and verification. (Section 11-18-402.3.1)

a. The documentation of the emissions inventory changes should include, but is not limited to:

   i. all proposed changes with clear references to the original data,

   ii. a description of the nature of each proposed change (e.g. correction, addition, deletion), and

   iii. the justification or basis for each proposed change.

b. In its submission, the facility may request that the Air District allow the facility to conduct additional tests or studies in the future that might result in different emission data and/or emission factors for a specific source (Section 11-18-405). The Air District may authorize the facility to conduct such testing and/or studies to obtain updated emission data or emission factors.

   The facility shall make this request by including a table in the draft preliminary HRA report that identifies the sources, the Air District-approved emissions and emission factors for each source, and details regarding the tests and/or studies to be conducted. If the Air District approves the facility's request, the Air District shall continue with all the below-noted steps based on the existing, approved emissions and emission factors, but the Air District will leave open the possibility of altering the HRA should the subsequent testing and/or studies demonstrate that different emissions inputs are appropriate. All updated emission data and/or emission factors must be submitted for review and approval to the Air District prior to submittal of the draft RRP. The Air District may rescind approval of the final HRA report or otherwise alter the HRA as warranted by the data.

10. The Air District reviews the draft preliminary HRA report and supporting materials submitted by the facility. If any revisions to the draft preliminary HRA report are necessary, the Air District will provide a list of necessary revisions to the facility. The facility must implement all revisions and resubmit the HRA report and supporting materials within 30 days of receiving the revisions from the Air District in accordance with Section 11-18-402.3.3. (Sections 11-18-402.3.2 and 11-18-402.3.3)

    Once the draft preliminary HRA report meets all applicable requirements and is otherwise adequate, the Air District will approve the preliminary HRA report. (Section 11-18-402.4)

11. The Air District holds a 90-day review and comment process on the preliminary HRA report pursuant to Section 11-18-402.4. (Section 11-18-402.4)

12. The Air District considers all comments on the preliminary HRA report. (Section 11-18-402.4)

13. For refinery HRAs, the Air District publishes the following, after which the refinery has an opportunity within 15 days to request to convene the Dispute Resolution Panel. (Between Sections 11-18-402.4 and 11-18-402.5)
    a. Response to comments on the preliminary HRA report,
    b. Preliminary determination regarding (1) approval OR (2) deficiencies requiring alteration, and
    c. Preliminary list of identified alterations (if applicable).
14. If further revisions to the preliminary HRA report are determined to be necessary by the Air District after public comments, the Air District will provide a list of necessary revisions to the facility. The facility must implement all revisions and resubmit a draft final HRA report and supporting materials within 30 days of receiving the revisions from the Air District in accordance with Section 11-18-402.5.1. (Sections 11-18-402.5.1 and 11-18-402.5.2)

    Once all applicable requirements are met and the Air District otherwise determines the HRA report is adequate, the Air District may approve the final HRA report. (Section 11-18-402.5.4)
15. The Air District notifies the facility in writing of these final HRA results and their obligations under Rule 11-18, such as submittal of a draft RRP and the due date. The Air District publishes the final HRA report on the web site along with the facility's RRP requirements, if any. (Section 11-18-402.5.4)

    For non-refinery HRAs, the response to comments will be published on the web site with the final HRA report.
16. The Air District frequently updates the web site to include posts of preliminary HRA reports for comment and final HRA results that trigger risk reduction requirements.

4.3 Implementing Risk Reduction Plan Requirements

In accordance with Sections 11-18-401.3 and 11-18-402.5.4, the Air District notifies a facility, in writing, if the Air District-approved final HRA results meet or exceed a Rule 11-18 risk action level. As defined in Section 11-18-217, the risk action levels are: a cancer risk of 10 per million, a chronic hazard index of 1, and an acute hazard index of 1. In accordance with Section 11-18-403, this notification triggers the requirement for a facility to submit a draft RRP.

The Air District charges RRP review fees pursuant to Regulation 3, Section 3-341 for Risk Reduction Plan review.

The Air District intends to follow the procedures below for submittal, review, and approval of RRPs:

1. Any facility that receives a notification per Sections 11-18-401.3 or 11-18-402.5.4 prepares a draft RRP that meets the requirements of Section 11-18-403.2. (Section 11-18-403.1 or 11-18-403.2)
2. The facility submits a draft RRP within 180 days of notification that a draft RRP is required. (Section 11-18-403.1)
3. The Air District follows the Section 11-18-403.3 procedures to review and approve draft RRPs.
4. Draft RRPs (excluding confidential information) are posted on the Air District web site for at least 45 days. (Section 11-18-403.4)
5. The Air District considers all comments and prepares a response to comments on the draft RRP. (Section 11-18-403.4)
6. For refinery RRPs, the Air District publishes the following, after which the refinery has an opportunity within 15 days to request to convene the Dispute Resolution Panel. (Between Sections 11-18-403.4 and 11-18-403.5)
    a. Response to comments on the draft RRP,
    b. Preliminary determination regarding (1) approval OR (2) deficiencies requiring alteration, and
    c. Preliminary list of identified deficiencies (if applicable).
7. If the Air District finds that the draft RRP meets the requirements of Section 11-18-403.2, the Air District approves the draft RRP pursuant to Section 11-18-403.5.1 and provides written notification to the facility. (Section 11-18-403.5.1)

    If the Air District determines after the public comment period that the draft RRP does not meet the requirements of Section 11-18-403.2, the Air District notifies the facility in writing and specifies the basis for this determination. Upon receipt of such notification, the facility corrects the identified deficiencies and resubmits the draft RRP within 45 days. (Sections 11-18-403.5.2 and 11-18-403.5.3)

    If the Air District determines that the facility fails to correct any deficiency identified in the notification or that the RRP otherwise fails to comply with Rule Section 11-18-403.2, the Air District disapproves the draft RRP. (Section 11-18-403.5.4)

    For non-refinery RRPs, the response to comments is released with the ultimate decision to approve or disapprove the draft RRP. (Section 11-18-403.5.1 or 403.5.4)
8. The Air District posts the approved final RRP on the web site within 30 days of approval of the RRP. (Section 11-18-403.6)
9. The facility demonstrates compliance by implementing the RRP in accordance with the time frames in the RRP pursuant to Section 11-18-403.2.5 and by submitting Section 11-18-501 Progress Reports on an annual basis. (Sections 11-18-403.2.5 and 11-18-501)

10. The Air District maintains a list of facilities that are subject to the Rule 11-18 RRP requirements on the web site and identifies plan review dates, approval dates, implementation deadlines, and status of RRPs.

5. Dispute Resolution Panel

Consistent with the 2017 Air District Board Resolution originally adopting Rule 11-18 and a 2019 settlement agreement with Western States Petroleum Association and three companies that own and operate local refineries, the Air District intends to convene a panel of technical experts (Dispute Resolution Panel or DRP) to advise the Air District regarding technical disputes that may arise between industry and the Air District regarding implementation of Rule 11-18 at refineries. Refineries may request review of a disputed matter by the DRP after the Air District has considered and responded to comments on preliminary HRAs or draft RRPs.

The DRP consists of at least three independent experts[21] in the fields of toxic air contaminant inventories, HRA, or air pollution control. The DRP may select a chair for each dispute brought before the panel. The DRP may choose to rotate the chair for the different cases brought before the panel.

Per the procedures in Sections 4.2.3 and 4.3, the DRP provides its recommendations before the HRA or RRP is finalized.

Below is the timeline for the DRP:

1. Within 15 days of receiving Air District responses to comments on a preliminary HRA or draft RRP, the refinery that is the subject of the preliminary HRA or draft RRP may notify the assigned Air District contact in writing that they would like to convene the DRP in a request identifying the issues regarding which they are requesting DRP review.
2. The Air District notifies panelists of the case and technical issues and chooses three panel members from those who are available to review the case. The panel may select a chair, if necessary.
3. The Air District provides the DRP with facility comments regarding the technical dispute and Air District responses to comments.
4. The DRP reviews the case and poses any clarifying questions within 15 days of receiving the case information.
5. Each party responds in writing to questions from the DRP within 7 days.
6. The DRP considers the case and makes its recommendation in writing to the Air District within 15 days of receipt of the responses to their questions, or, if the DRP did not pose any questions, within 30 days of receipt of the facility

[21] The DRP independent experts will not include current Air District staff but may include retired Air District staff, staff from other air quality agencies, or other persons with acknowledged expertise relevant to the issue in dispute.

comments regarding the technical dispute and Air District responses to comments.

7. The ultimate decision maker regarding any matter on which the DRP provides a recommendation is the Air District.

Submissions to the DRP are subject to the following requirements and procedures:

1. The request for convening of the DRP for disputes involving HRAs or RRPs will be limited to facilities that are defined as refineries pursuant to Regulation 8: Organic Compounds, Rule 1: General Provisions, Section 8-1-211.
2. Each DRP request must identify specific disagreements with an Air District determination and must provide specific recommended changes or remedies to resolve the disputed matter. Each DRP request must include documents or materials to support the recommended changes or remedy.
3. Each DRP requestor may only raise an issue, propose a recommended change or remedy, or rely on documents or materials if:
   (1) the requestor raised the specific issue, proposed the specific recommended change or remedy, and relied on the specific documents or materials in a comment submitted during the comment period for the preliminary HRA pursuant to Section 11-18-402.4 or the comment period for the draft RRP pursuant to Section 11-18-403.4; or
   (2) the issue involves a dispute regarding a change to a preliminary HRA or draft RRP made after the comment period pursuant to Section 11-18-402.4 or 11-18-403.4, in which case the DRP requestor may submit additional documents and materials, which the Air District shall accept as a valid part of the DRP request if they are relevant to the question at issue and are not unduly burdensome to review.
4. After the Air District responds to comments on preliminary HRAs, the types of matters that can be raised are limited to the inventory and the methodology used for the HRA. Refineries may not use the DRP to challenge an Air District determination not to consider additional emissions data pursuant to Section 11-18-405.1.
5. After the Air District responds to comments on draft RRPs, the types of matters that can be raised are limited to the technological feasibility or economic burden involved in a demonstration pursuant to Sections 11-18-403.2.6.1, 11-18-403.2.6.2, and 11-18-403.2.6.3, determination of TBARCT, and any updates to the inventory that have been made pursuant to Section 11-18-405.
6. A facility is limited to one request to convene a DRP for the HRA and one request for the RRP. Each request will be limited to a total of three issues, where each issue consists of an individual specific disagreement and a specific recommended change or remedy.
7. The Air District may reject an issue in the request if the Air District determines that a disputed matter covers multiple issues, is overly burdensome, or is outside the appropriate scope of the DRP.
8. Matters that have been previously resolved by the DRP without new substantive information will not be reconsidered.

6. Stakeholder Meetings

The Air District intends periodically to hold meetings with interested stakeholders to explain procedures, answer questions, and inform communities and industry about the status of the emissions inventory reviews, HRAs, RRPs, and implementation of risk reduction measures. Stakeholders may also inform the Air District about educational or informational needs or public concerns about Rule 11-18 actions, facilities that are subject to Rule 11-18 or otherwise under review, and general air toxics concerns.

Bay Area Air District

APPENDIX C

Final Socioeconomic Impacts Analysis of Proposed Amendments to Rule 11-18

This page has been intentionally left blank.

bae urban economics

Socioeconomic Impact Analysis of Proposed Amendments to Rule 11-18: Reduction of Risk from Air Toxic Emissions at Existing Facilities

Submitted to: Bay Area Air District
May 1, 2026

Table of Contents

INTRODUCTION 1
Socioeconomic Impact Analysis Methodology 2
REGIONAL TRENDS 3
Demographic Trends 3
Economic Trends 3
Affected Industries 4
SOCIOECONOMIC IMPACTS 7
Compliance Costs Impacts on Affected Facilities 7
Regional Impacts 8
Impacts on Small Businesses 10

List of Tables

Table 1: Summary of Facilities Affected by Proposed Amendments to Rule 11-18..... 2
Table 2: Regional and Statewide Population and Household Trends, 2010-2025 3
Table 3: Bay Area Employment by Sector, 2010-2024 (a) 4
Table 4: Profile of Affected Industries by Facility Type 5
Table 5: Summary of Annualized Compliance Costs and Projected Cost Impacts on Facilities Affected by Proposed Rule 11-18 Amendments 8
Table 6: Regional Economic Impacts 10
Table 7: Summary of Impacted Small Businesses 12

INTRODUCTION

The Bay Area Air District ("Air District") is proposing to amend Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18) to address toxic air contaminant emissions from existing facilities. The purpose of Rule 11-18 is to prioritize the existing facilities with the highest health impacts and require them to reduce those impacts. Rule 11-18 requires existing facilities with health risks above specified risk action level (RAL) thresholds to either reduce those health risks below the thresholds or implement Best Available Retrofit Control Technology for Toxics (TBARCT) on significant sources of health risks. The amendments to Rule 11-18 are intended to improve program efficiency and accelerate the overall implementation of the Rule. As provided in the Staff Report describing the proposed amendments to Rule 11-18[1], the key components of the proposed amendments to Rule 11-18 include:

- Requiring facilities to prepare preliminary Health Risk Assessments (HRAs) using Air District-approved modeling protocols. The protocols would apply standardized methods customized with site-specific information, allowing for greater efficiency by leveraging facility-specific knowledge and resources and enabling more preliminary HRAs to move forward simultaneously;
- Give the Air District authority to review, correct, and approve HRA inputs and results;
- Establishing specific deadlines for facilities to respond to Air District comments and corrections;
- Formalizing the current practice of holding a public comment period on the preliminary HRA concurrent with the existing 90-day comment period for the facility;
- Outlining what happens when additional testing or emissions data may affect the facility's HRA results and risk action level (RAL) status;
- Revising the terminology and timeline associated with the Air District's review of draft Risk Reduction Plans (RRPs) prior to public comment; and
- Clarifying the circumstances under which extensions to the implementation of an RRP or risk reduction measure may be granted.

The proposed rule amendments would apply to commercial, industrial, and municipal facilities operating a wide variety of sources, including petroleum refineries, chemical plants, wastewater treatment facilities, foundries, landfills, data centers, hospitals, crematoriums, power plants, manufacturing facilities, and military facilities. As summarized in Table 1, based on the Air District's re-evaluation of facility prioritization scores in 2024, approximately 342 existing facilities would be affected by the proposed rule amendments, including 231 private-sector establishments.

[1] Bay Area Air District, March 2026. Staff Report: Proposed Amendments to Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Toxic Air Emissions at Existing Facilities.

Table 1: Summary of Facilities Affected by Proposed Amendments to Rule 11-18

Facility Type	Privately-Owned Facilities	Publicly-Owned Facilities	Total Affected Facilities
Sewage Treatment Facility	0	37	37
Landfill	17	7	24
Refinery	5	0	5
Chemical Plant	7	0	7
Metal Melting & Recycling	4	0	4
Cement Manufacturing	4	0	4
Coating	2	0	2
Loading/Tanks	4	0	4
Crematoria	25	0	25
Power Plant	19	3	22
Chrome Plating	1	0	1
Hospital / Medical	27	12	39
Misc. Manufacturing	11	0	11
Other Facilities	105	52	157
All Affected Facilities	231	111	342

Sources: Bay Area Air District; BAE, 2026.

Socioeconomic Impact Analysis Methodology

This report was prepared to meet the provisions of Section 40728.5 of the California Health and Safety Code, which requires an assessment of the socioeconomic impacts of proposed air quality rules. The analysis begins with an overview of demographic and economic conditions in the Air District region to provide context for the socioeconomic impact analysis that follows. Following that overview, the analysis turns to the specific facilities and industries affected by the proposed amendments to Rule 11-18, including data on average employment, revenues, and annual profits. The analysis relies on data from a number of sources, including the 2022 Economic Census, the Internal Revenue Service, Data Axle, the State of California's Employment Development Department and Department of Finance, and the Air District. BAE used this information to estimate the annual revenues and net profits for each potentially affected facility. The net profit figures were compared to the compliance costs associated with the proposed Rule 11-18 amendments to determine whether the compliance costs represent a significant portion of estimated profits (using a 10 percent impact threshold). The analysis also evaluates the potential for impacts on small businesses.

REGIONAL TRENDS

This section provides an overview of recent demographic and economic trends in the nine-county San Francisco Bay Area region and the State to provide context for the socioeconomic impact analysis that follows.

Demographic Trends

Table 2 shows population and household trends for the Bay Area and California between 2010 and 2025. During this period, the population in the Bay Area increased by approximately 7.1 percent, compared to 6.1 percent in California statewide. Meanwhile, the number of households in the Bay Area grew by 11.0 percent, compared to a 11.3 percent increase in households statewide.

Table 2: Regional and Statewide Population and Household Trends, 2010-2025

			Change, 2010-2025	
9-County Bay Area	**2010**	**2025**	**Number**	**Percent**
Population	7,150,739	7,656,691	505,952	7.1%
Households	2,606,288	2,892,482	286,194	11.0%
Avg. Household Size	2.69	2.59		
California				
Population	37,253,956	39,529,101	2,275,145	6.1%
Households	12,568,167	13,993,318	1,425,151	11.3%
Avg. Household Size	2.90	2.76		

Sources: State of California Department of Finance, E-8 Historical Population and Housing Estimates for Cities, Counties, and the State, 2010-2020 (May 2025) and E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-2025 (May 2025); BAE, 2026.

Economic Trends

Table 3 shows jobs by major industry sector in 2010 and 2024 in the Bay Area and state of California. In the period between 2010 and 2024, the Bay Area's employment base grew by 27.4 percent, increasing from 3.2 million jobs to 4.0 million jobs. Statewide, the employment base grew at a slightly lower rate, increasing 25.2 percent from 14.7 million jobs in 2010 to 18.4 million jobs in 2024. All of the major industry sectors in the state experienced job growth between 2010 and 2024. In the Bay Area, the Wholesale Trade and Retail Trade sectors contracted between 2010 and 2024, while most other sectors grew by at least five percent.

Overall, the Bay Area's economic base largely reflects the state's base, sharing a similar distribution of employment across sectors. In terms of total number of jobs, the largest non-government industry sectors in the Bay Area include Professional & Business Services (819,600 jobs), Educational and Health Services (697,600 jobs), Leisure & Hospitality (405,900 jobs), and Manufacturing (310,000 jobs). These four industry sectors together account for approximately 56 percent of the Bay Area's total employment. Statewide, the four sectors account for 51 percent of total employment.

Table 3: Bay Area Employment by Sector, 2010-2024 (a)

Industry Sector	2010 Number	2010 % Total	2024 Number	2024 % Total	Change, 2010-2024 Number	Change, 2010-2024 Percent
San Francisco Bay Area						
Agriculture	19,200	0.6%	20,300	0.5%	1,100	5.7%
Mining, Logging, and Construction	131,500	4.2%	205,600	5.1%	74,100	56.3%
Manufacturing	304,200	9.6%	310,000	7.7%	5,800	1.9%
Wholesale Trade	112,200	3.6%	106,600	2.7%	-5,600	-5.0%
Retail Trade	308,200	9.8%	296,000	7.4%	-12,200	-4.0%
Transportation, Warehousing, and Utilities	88,300	2.8%	128,100	3.2%	39,800	45.1%
Information	113,900	3.6%	234,100	5.8%	120,200	105.5%
Financial Activities	168,000	5.3%	182,200	4.5%	14,200	8.5%
Professional & Business Services	545,800	17.3%	819,600	20.4%	273,800	50.2%
Educational & Health Services	474,200	15.0%	697,600	17.4%	223,400	47.1%
Leisure & Hospitality	324,800	10.3%	405,900	10.1%	81,100	25.0%
Other Services, except Public Admin.	108,100	3.4%	128,900	3.2%	20,800	19.2%
Government (b)	455,200	14.4%	481,100	12.0%	25,900	5.7%
Total, All Employment (c)	**3,153,200**	**100.0%**	**4,016,100**	**100.0%**	**862,900**	**27.4%**

Industry Sector	2010 Number	2010 % Total	2024 Number	2024 % Total	Change, 2010-2024 Number	Change, 2010-2024 Percent
California						
Agriculture	383,200	2.6%	412,700	2.2%	29,500	7.7%
Mining, Logging, and Construction	584,800	4.0%	931,000	5.1%	346,200	59.2%
Manufacturing	1,240,300	8.5%	1,249,100	6.8%	8,800	0.7%
Wholesale Trade	630,700	4.3%	658,400	3.6%	27,700	4.4%
Retail Trade	1,509,200	10.3%	1,587,200	8.6%	78,000	5.2%
Transportation, Warehousing, and Utilities	468,000	3.2%	836,700	4.6%	368,700	78.8%
Information	431,900	2.9%	538,100	2.9%	106,200	24.6%
Financial Activities	761,200	5.2%	802,500	4.4%	41,300	5.4%
Professional & Business Services	2,092,000	14.3%	2,786,800	15.2%	694,800	33.2%
Educational & Health Services	2,132,100	14.5%	3,285,500	17.9%	1,153,400	54.1%
Leisure & Hospitality	1,501,000	10.2%	2,015,800	11.0%	514,800	34.3%
Other Services, except Public Admin.	483,700	3.3%	594,700	3.2%	111,000	22.9%
Government (b)	2,448,400	16.7%	2,662,900	14.5%	214,500	8.8%
Total, All Employment (c)	**14,666,600**	**100.0%**	**18,361,400**	**100.0%**	**3,694,800**	**25.2%**

Notes:
(a) Includes all wage and salary employment.
(b) Government employment includes workers in all local, state and Federal workers, not just those in public administration. For example, all public school staff are in the Government category.
(c) Totals may not sum due to independent rounding.
Sources: California Employment Development Department Labor Market Information Division, Industry Employment – Official Estimates – by Annual Average (March 2024 Benchmark); BAE, 2026.

Affected Industries

Table 4 shows the industry or industries associated with each type of facility and presents information on the average number of employees, average revenues, and average annual profits for establishments in each industry based on statewide data from the 2022 Economic Census. As shown, the affected facilities encompass most major sectors of the economy. Businesses in affected industries vary significantly in terms of size, annual revenues, and profits.

Table 4: Profile of Affected Industries by Facility Type

Facility Type	Industry or Industries Associated w/ Facility Type (a)	Average per Establishment			
		Employees (b)	Annual Revenue (b)	Profit Margin (2013-2022) (c)	Annual Profit
Landfill	Waste Mgmt & Remediation Svcs (NAICS 562)	24	$7,804,744	7.2%	$561,049
Refinery	Petroleum Refineries (NAICS 324110)	455	$5,935,214,219	4.7%	$277,655,291
Chemical Plant	Basic Chemical Manufacturing (NAICS 3251)	40	$53,186,936	8.5%	$4,498,255
Metal Melting & Recycling	Primary Metal Manufacturing (NAICS 331)	53	$45,197,559	5.0%	$2,239,207
	Recyclable Material Merchant Wholesalers (NAICS 423930)	13	$14,389,025	3.9%	$562,904
Cement Mfg	Cement & Concrete Product Mfg (NAICS 3273)	30	$13,531,859	7.1%	$957,478
Coating	Transportation Equipment Mfg (NAICS 336)	85	$63,166,474	5.7%	$3,616,597
Loading/Tanks	Petroleum Bulk Stations & Terminals (NAICS 424710)	19	$271,612,917	1.4%	$3,786,899
	Other Warehousing & Storage (NAICS 493190)	18	$3,129,523	5.5%	$172,347
Crematoria	Cemeteries & Crematories (NAICS 812220)	17	$4,017,674	8.8%	$354,643
	Funeral Homes & Funeral Services (NAICS 812210)	9	$2,110,180	8.8%	$186,267
Power Plant	Electric Power Generation, Transmission and Distribution (NAICS 2211)	76	$62,158,257	4.4%	$2,721,985
	Port and Harbor Operations (NAICS 488310)	28	$36,820,214	5.4%	$1,969,996
Hospital	General Medical & Surgical Hospitals (NAICS 622110)	1,566	$453,596,323	5.6%	$25,353,334
Chrome Plating	Electroplating/Anodizing/Coloring Metal (NAICS 332813)	24	$3,792,402	7.1%	$270,819
Misc. Mfg	Asphalt Paving, Roofing & Saturated Materials Mfg (NAICS 32412)	19	$27,698,428	8.2%	$2,273,058
	Pharmaceutical & Medicine Mfg (NAICS 3254)	118	$163,796,756	22.9%	$37,503,063
	Fabricated Metal Product Mfg (NAICS 332)	21	$6,170,263	8.1%	$501,741
	Computer & Electronic Product Mfg (NAICS 334)	68	$38,084,841	18.7%	$7,121,183
Other Facilities	Electric Power Generation, Transmission & Distribution (NAICS 2211)	76	$62,158,257	4.4%	$2,721,985
	Water, Sewage & Other Systems (NAICS 2213)	11	$6,023,283	8.2%	$492,578
	Food Manufacturing (NAICS 311)	44	$27,241,804	7.2%	$1,954,076
	Wineries (NAICS 312130)	21	$12,327,173	11.6%	$1,431,777
	Asphalt Paving, Roofing & Saturated Materials Manufacturing (NAICS 32412)	19	$27,698,428	8.2%	$2,273,058
	Chemical Manufacturing (NAICS 325)	52	$58,901,286	19.7%	$11,589,573
	Nonmetallic Mineral Product Mfg (NAICS 327)	29	$12,276,189	7.2%	$882,607
	Fabricated Metal Product Manufacturing (NAICS 332)	21	$6,170,263	8.1%	$501,741
	Computer & Electronic Product Mfg (NAICS 334)	68	$38,084,841	18.7%	$7,121,183
	Transportation Equipment Mfg (NAICS 336)	85	$63,166,474	5.7%	$3,616,597
	Air Transportation (NAICS 481)	130	$82,195,088	3.3%	$2,681,109
	Pipeline Transportation (NAICS 486)	14	$34,324,543	14.4%	$4,943,877
	Support Activities for Transportation (NAICS 488)	15	$5,476,031	5.4%	$292,985
	Media Streaming Distribution Svcs, Social Networks & Other Media and Content Providers (NAICS 5162)	86	$93,064,453	12.2%	$11,384,289

(continued on next page)

Table 4: Profile of Affected Industries by Facility Type (continued)

Facility Type	Industry or Industries Associated w/ Facility Type (a)	Average per Establishment			
		Employees (b)	Annual Revenue (b)	Profit Margin (2013-2022) (c)	Annual Profit
Other Facilities	Computing Infrastructure Providers, Data Processing, Web Hosting & Related Services (NAICS 5182)	53	$50,940,282	14.7%	$7,495,087
	Lessors of Real Estate (NAICS 5311)	5	$3,484,151	34.6%	$1,206,024
	Scientific Research & Dev Svcs (NAICS 5417)	57	$19,332,730	14.4%	$2,791,444
	Waste Mgmt & Remediation Svcs (NAICS 562)	24	$7,804,744	7.2%	$561,049
	Nursing Care Facilities (NAICS 6231)	73	$8,390,976	5.6%	$469,006
	Hotels (excl Casino Hotels) & Motels (NAICS 721110)	32	$5,877,757	10.9%	$643,576
	Drycleaning and Laundry Services (NAICS 8123)	9	$1,436,346	8.8%	$126,787

Notes:
(a) All publicly-owned facilities are excluded, regardless of sector.
(b) Average employment per establishment and annual revenues per establishment are based on 2022 Economic Census data for establishments in California.
(c) Average profit margins for each industry are based on corporation income tax return data published by the Internal Revenue Service. Values reflect the average across ten years of data. For additional information see: https://www.irs.gov/statistics/soi-tax-stats-corporation-income-tax-returns-complete-report-publication-16

Sources: Bay Area Air District; U.S. Census Bureau Economic Census, 2022; Internal Revenue Service Statistics of Income Division, Corporation Income Tax Returns Complete Report (Publication 16), Table 1 - Selected Income Statement, Balance Sheet and Tax Items and Coefficients of Variation by Minor Industry, 2013-2022; BAE, 2026.

SOCIOECONOMIC IMPACTS

This section summarizes the annualized compliance costs associated with the proposed Rule 11-18 amendments and assesses whether the annualized compliance costs would significantly burden the affected facilities based on a 10 percent of profits threshold. The analysis is based on publicly available information from a variety of sources, including Data Axle, IMPLAN, the Internal Revenue Service, the U.S. Census Bureau, and the Air District.

Compliance Costs Impacts on Affected Facilities

Facilities affected by the proposed Rule 11-18 amendments are expected to incur additional one-time costs associated with preparing and submitting a facility-wide Health Risk Assessment (HRA). Currently, the Air District performs HRAs for facilities undergoing compliance assessments under Rule 11-18, and the maximum cost to a facility for the Air District to conduct a Rule 11-18 HRA is approximately $200,000. With the proposed rule amendments, the Air District estimates that it would cost a facility up to $200,000 more to conduct a Rule 11-18 HRA, assuming the facility or contractor would be preparing the HRA instead of the Air District. Additionally, the Air District charges facilities review fees for reviewing Rule 11-18 HRAs. These review fees vary by HRA complexity and typically range from $3,000 to $20,000. Overall, the Air District estimates that total compliance costs would increase by a maximum of $220,000 under the proposed Rule 11-18 amendments. Assuming an interest rate of 6 percent and a five-year useful life period of the HRA, this results in a maximum annualized compliance cost of approximately $52,000.

Annual compliance costs for the facilities affected by the proposed Rule 11-18 amendments are expected to vary by facility based on number of Air District-permitted sources and HRA complexity. Air District staff has estimated annualized compliance costs for each facility affected by the proposed Rule 11-18 amendments based on the total number of Air District-permitted sources. The projected annual compliance costs range from $10,500 to $52,200 and are summarized by type of facility below in Table 5. As shown, annual compliance costs would average approximately $11,600. On average, private-sector facilities would incur compliance costs equal to approximately 1.6 percent of their estimated profits. Eight private-sector facilities would incur costs that are greater than 10 percent of estimated profits, including six crematoria, one metal coating and finishing facility, and one fix-based operator (FBO). However, it is important to note that the proposed rule amendments include provisions to allow the Air District to use an HRA prepared by the Air District when it is more expedient to do so or when a facility owner/operator lacks the resources to conduct the HRA. Facilities with Air-District prepared HRAs are not expected to incur any additional costs from the proposed rule amendments. Thus, the actual number of impacted facilities may be lower than shown here.

Table 5: Summary of Annualized Compliance Costs and Projected Cost Impacts on Facilities Affected by Proposed Rule 11-18 Amendments

Facility Type	Total Projected Compliance Costs (Annualized) (a)	Avg. Projected Annual Cost per Facility (a)	Projected Facility Costs as a % of Profit (b)			Total Number of Impacted Facilities (b)
			Average	Minimum	Maximum	
Sewage Treatment Facility	$415,800	$11,238	-	-	-	-
Landfill	$261,600	$10,900	2.0%	0.3%	7.9%	0
Refinery	$172,700	$34,540	0.0%	0.0%	0.1%	0
Chemical Plant	$86,700	$12,386	0.4%	0.0%	0.9%	0
Metal Melting & Recycling	$49,200	$12,300	0.3%	0.0%	1.0%	0
Cement Manufacturing	$44,300	$11,075	3.7%	0.5%	5.1%	0
Coating	$32,000	$16,000	0.1%	0.0%	0.2%	0
Loading/Tanks	$47,000	$11,750	0.3%	0.3%	0.3%	0
Crematoria	$265,700	$10,628	5.3%	0.4%	12.8%	6
Power Plant	$244,000	$11,091	1.6%	0.4%	9.3%	0
Chrome Plating	$10,500	$10,500	18.4%	18.4%	18.4%	1
Hospital / Medical	$429,800	$11,021	0.0%	0.0%	0.2%	0
Misc. Manufacturing	$145,900	$13,264	0.3%	0.0%	2.4%	0
Other Facilities	$1,771,100	$11,281	1.1%	0.0%	14.1%	1
All Affected Facilities	$3,976,300	$11,627	1.6%	0.0%	18.4%	8

Notes:
(a) Projected annual compliance costs for all affected facilities, including publicly-owned facilities.
(b) Estimates for projected impacts on percent of profit exclude publicly-owned facilities, as these facilities do not generate profits. A facility is considered impacted if annual compliance costs are greater than 10 percent of estimated profit. The proposed rule amendments include provisions to allow the Air District to use an HRA prepared by the Air District when it is more expedient to do so or when a facility owner/operator lacks the resources to conduct the HRA. Facilities with Air District prepared HRAs are not expected to incur any increased costs from the proposed rule amendments. Thus, the number of impacted facilities may be less than indicated here.

Sources: Bay Area Air District; BAE, 2026.

Although compliance costs for the facilities affected by the proposed rule amendments are expected to be primarily dependent on the number of Air District-permitted sources, as estimated above, costs are also expected to vary based on HRA complexity. Generally, for this analysis, a low-complexity HRA would assess only point sources, and a high-complexity HRA would assess area sources with many pollutants and/or the facility is a process-heavy industrial facility. The Air District has estimated that annual compliance costs associated with the proposed rule amendments are $10,000 for a low-complexity HRA and a maximum of $52,000 for a high-complexity HRA. Additionally, the proposed rule amendments include provisions to allow the Air District to use an HRA prepared by the Air District when a facility owner/operator lacks the resources to conduct the HRA.

Regional Impacts

For this analysis, it is assumed that the costs of complying with the proposed Rule 11-18 amendments would result in equivalent lower total revenues for affected facilities and that the additional expenditures associated with purchasing needed HRA services would not circulate through the local economy. It is likely that actual impacts will be lower than shown here, since

some of the needed services will likely be purchased locally, which would generate benefits for the businesses providing these services in the region.

The costs shown in Table 5 above are assumed to occur somewhere in the local economy and thus have a direct effect on jobs and the impact equivalent to a decline in output (total revenues). In addition to these direct impacts, there would be indirect and induced impacts on the regional economy. Indirect and induced impacts refer to regional multiplier effects of increasing or decreasing regional economic activity. If the proposed rule amendments were to significantly impact local businesses, any closures would result in direct regional economic losses. Firms would no longer buy goods from local suppliers, thereby resulting in reduced indirect impacts, or business-to-business expenditures. In addition, firms would no longer employ regional residents, resulting in induced impacts due to decreases in household spending. Because there is potential for the proposed rule amendments to result in significant direct impacts for some facilities, the analysis uses the IMPLAN input-output model to estimate the indirect or induced impacts.

IMPLAN Input-Output Model

Regional and national input-output models have been used for years by economists as a tool to understand the extremely complex interactions among the various parts of an economy. The economic model used in this analysis, IMPLAN ("IMpact analysis for PLANning"), is a PC-based computer software package that automates the process of developing input-output models for regions within the United States. At the heart of the model is an input-output dollar flow table. For the specified region, the input-output table accounts for all of the dollar flows between the different sectors within the economy. Using this information, the IMPLAN software models the way income injected into one sector is then spent, and re-spent in other sectors of the economy, generating waves of economic activity, or so-called "economic multiplier" effects.

Regions studied using the IMPLAN model can be defined at various geographic levels to fit the particular analysis. The developers of the IMPLAN model maintain large databases of economic and trade data that are collected and published by the federal government, which they compile and format for use in the computer model. The data regarding input-output relationships between sectors used in the model for this analysis are from 2024 (latest currently available), and have been adjusted to provide results expressed in 2025 dollar figures. The data that IMPLAN uses are customized to reflect the specific, detailed economic characteristics of each individual county that is included within the specified regional study area. The IMPLAN model in turn is able to summarize the economic effects of a given economic "event" that is input into the model, expressing the impacts in terms of direct, indirect, and induced jobs and output by industry sector.

- Direct Impacts. Direct impacts refer to the dollar value of economic activity available to circulate through the economy.

- **Indirect Impacts**. The indirect impacts refer to the inter-industry impacts of the input-output analysis, which would include any payments that the directly impacted industries make to other businesses in the region for goods and services.

- **Induced Impacts**. The induced impacts refer to the impacts of household expenditures in the model. When households earn income, they spend part of that income on goods and services. The model treats households as an "industry" in determining their local expenditure patterns in the model, based on the availability of goods and services within the geography.

Economic Impacts of Compliance Costs

Table 6 shows the direct, indirect, and induced regional impacts due to the decline in operating revenues flowing through the Air District economy. The total impacts on annual economic output are estimated to equal approximately $6.3 million with a related annual loss of 21.7 jobs. As noted previously, it is assumed that the costs of complying with the proposed Rule 11-18 amendments would result in equivalent lower total revenues for all affected facilities, and that the additional expenditures would not circulate through the local economy.

As context, the IMPLAN model estimates the gross annual regional product for the nine-county Bay Area at approximately $1.4 trillion; the reduction in output shown below is equivalent to less than 0.001 percent of this total.

Table 6: Regional Economic Impacts

Economic Impact	Employment	Output
Direct (a)	-13.7	-$3,926,746
Indirect (b)	-3.3	-$1,116,994
Induced (c)	-4.7	-$1,214,669
Total	**-21.7**	**-$6,258,410**

Notes:
(a) Based on the initial decline in output (revenues) at affected facilities. Direct impacts measure the reduction of dollars available to flow through the local economy. Figures assume that the additional expenditures associated with purchasing needed HRA services would not circulate through the local economy.
(b) Indirect impacts refer to business-to-business impacts.
(c) Induced impacts occur when workers spend their household incomes throughout the local economy.

Sources: IMPLAN, 2025; BAE, 2026.

Impacts on Small Businesses

According to California Government Code 14835, a small business is any business that meets the following criteria:

- Must be independently owned and operated;
- Cannot be dominant in its field of operation;
- Must have its principal office located in California;

- Must have its owners (or officers in the case of a corporation) domiciled in California; and
- Together with its affiliates, be either:
    - A business with 100 or fewer employees, and average annual gross receipts of $15 million or less over the previous three tax years, or
    - A manufacturer with 100 or fewer employees

Based on the available data, there are 24 small businesses in the following industries that would be affected by the proposed Rule 11-18 amendments:

- Wineries (NAICS 312130)
- Ready-Mix Concrete Manufacturing (NAICS 327320)
- Concrete Block and Brick Manufacturing (NAICS 327331)
- Electroplating, Plating, Polishing, Anodizing, and Coloring (NAICS 332813)
- Fabricated Pipe and Pipe Fitting Manufacturing (NAICS 332996)
- All Other Miscellaneous Fabricated Metal Product Manufacturing (NAICS 332999)
- Other Airport Operations (NAICS 488119)
- Lessors of Nonresidential Buildings (NAICS 531120)
- Solid Waste Collection (NAICS 562111)
- Materials Recovery Facilities (NAICS 562920)
- Funeral Homes and Funeral Services (NAICS 812210)
- Cemeteries and Crematories (NAICS 812220)

Annual compliance costs for small businesses affected by the proposed Rule 11-18 amendments are expected to average approximately $10,600. Based on the projected facility compliance costs summarized below, eight of the 24 affected small businesses would be significantly impacted as measured by a 10 percent or greater impact on net income. The impacted small businesses include six crematoria, one metal coating and finishing facility, and a fix-based operator (FBO). As mentioned previously, the proposed rule amendments include provisions to allow the Air District to use an HRA prepared by the Air District when a facility owner/operator lacks the resources to conduct the HRA. Thus, the actual number of impacted small businesses may be lower.

Table 7: Summary of Impacted Small Businesses

Facility Type	Total Small Businesses	Total Projected Facility Compliance Costs (Annualized)	Avg. Projected Annual Cost per Facility	Projected Facility Costs as a % of Profit (a)			Total Number of Impacted Small Businesses (a)
				Average	Minimum	Maximum	
Sewage Treatment Facility	0	$0	-	-	-	-	0
Landfill	1	$10,800	$10,800	2.6%	2.6%	2.6%	0
Refinery	0	$0	-	-	-	-	0
Chemical Plant	0	$0	-	-	-	-	0
Metal Melting & Recycling	0	$0	-	-	-	-	0
Cement Manufacturing	2	$21,600	$10,800	2.8%	0.5%	5.1%	0
Coating	0	$0	-	-	-	-	0
Loading/Tanks	0	$0	-	-	-	-	0
Crematoria	13	$137,800	$10,600	7.9%	2.5%	12.8%	6
Power Plant	0	$0	-	-	-	-	0
Chrome Plating	1	$10,500	$10,500	18.4%	18.4%	18.4%	1
Hospital / Medical	0	$0	-	-	-	-	0
Misc. Manufacturing	0	$0	-	-	-	-	0
Other Facilities	7	$74,600	$10,657	4.5%	0.0%	14.1%	1
All Affected Facilities	24	$255,300	$10,638	6.7%	0.0%	18.4%	8

Note:

(a) Estimates for projected impacts on percent of profit exclude publicly-owned facilities, as these facilities do not generate profits. facility is considered impacted if annual compliance costs are greater than 10 percent of estimated profit. The proposed rule amendments includes provisions to allow the Air District to use an HRA prepared by the Air District when it is more expedient to do so or when a facility owner/operator lacks the resources to conduct the HRA. Facilities with Air-District prepared HRAs are not expected to incur any additional costs from the proposed rule amendments. Thus, the number of impacted facilities may be less than indicated here.

Sources: Bay Area Air District; BAE, 2026

Bay Area Air District

APPENDIX D

Final Addendum to the Environmental Impact Report for Rule 11-18

This page has been intentionally left blank.

BAY AREA AIR DISTRICT

Final Addendum to the Environmental Impact Report for Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities

May 2026

State Clearinghouse No. 2016102043
[November 2017 EIR]

Bay Area Air District
375 Beale Street, Suite 600
San Francisco, California 94105

Contact: Katie Gong, Senior Air Quality Engineer,
Regulatory Development Division
(415) 749-4790

Prepared by:
Environmental Audit, Inc.

[This page intentionally left blank]

TABLE OF CONTENTS

FINAL ADDENDUM TO THE EIR FOR RULE 11-18

Page No.

1.0 INTRODUCTION 1

2.0 CALIFORNIA ENVIRONMENTAL QUALITY ACT AND BASIS FOR DECISION TO PREPARE AN ADDENDUM 1

3.0 CEQA DOCUMENTS PREPARED FOR RULE 11-18 3

4.0 MODIFIED PROJECT DESCRIPTION 5

5.0 PROJECT LOCATION 6

6.0 IMPACT ANALYSIS 8

6.1 Air Quality 9

6.2 Greenhouse Gas Emissions 15

6.3 Hazards and Hazardous Materials 17

6.4 Hydrology and Water Quality 20

7.0 POTENTIAL ENVIRONMENTAL IMPACTS FOUND TO BE NOT SIGNIFICANT 24

7.1 Aesthetics 24

7.2 Agricultural and Forestry Resources 26

7.3 Biological Resources 28

7.4 Cultural Resources 30

7.5 Geology and Soils 32

7.6 Land Use and Planning 35

7.7 Mineral Resources 37

7.8 Noise 38

7.9 Population and Housing 40

7.10 Public Services 41

7.11 Recreation 43

7.13 Transportation/Traffic 44

7.14 Utilities and Service Systems 47

8.0 CHANGES TO THE CHECKLIST SINCE 2016 50

9.0 CONCLUSIONS 50

Page No.

10.0 REFERENCES 51

FIGURES

Figure 1: Regional Location Map.....7

TABLES

Table 1: Worst-Case Construction Emissions Under Rule 11-18.....10
Table 2: Worst-Case Operational Emissions Under Rule 11-18 12
Table 3: Predicted Operational GHG Emissions Under Rule 11-18.....15

1.0 INTRODUCTION

Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18) was adopted by the Bay Area Air District (Air District) in 2017 to address facilities whose emissions of toxic air contaminants (TACs) pose an elevated risk to nearby residents and workers. The purpose of Rule 11-18 was to prioritize existing facilities with the highest health impacts across the Bay Area and require them to reduce those impacts. Rule 11-18 required existing facilities with health risks above specified risk action level (RAL) thresholds to either reduce those health risks below the Rule's risk action thresholds or implement Best Available Retrofit Control Technology for Toxics (TBARCT) on all significant sources of health risks.

Since the approval of Rule 11-18, concerns have been raised regarding delays in Rule 11-18 implementation, including the finalization of health risk assessments (HRAs) and the development, submission, and approval of Risk Reduction Plans (RRPs). These concerns about Rule 11-18 were raised at multiple Air District Stationary Source Committee meetings, and community members voiced similar concerns at Assembly Bill (AB) 617 Community Steering Committee meetings. Additionally, the Richmond-North Richmond-San Pablo Path to Clean Air (PTCA) includes a strategy to improve Rule 11-18, including rule amendments to improve efficiency and transparency. To address these needs, the Air District anticipates developing amendments to Rule 11-18 (the proposed project or Modified Project) in two phases:

- Phase 1 (current): focused on procedural improvements and implementation efficiency;
- Phase 2 (future): focused on evaluating and potentially increasing rule stringency.

The Air District is currently developing the Phase 1 amendments to Rule 11-18. The Air District does not yet have a timeline for Phase 2 or set of potential rule amendments that it intends to include in Phase 2, but it anticipates beginning to conduct an analysis of the rule's stringency and other more substantive aspects of the rule after Phase 1 is complete.

2.0 CALIFORNIA ENVIRONMENTAL QUALITY ACT AND BASIS FOR DECISION TO PREPARE AN ADDENDUM

The Air District's review and approval of the currently proposed modifications to Rule 11-18 is a discretionary action subject to CEQA. When Rule 11-18 was originally proposed, the Air District was considered the Lead Agency under CEQA and prepared and certified an Environmental Impact Report (EIR) for the Rule (Approved Project). Feasible mitigation measures to address the potentially significant adverse impacts were identified in the EIR. Findings were made and a Statement of Overriding Considerations was adopted by the Air District.

Adoption of Rule 11-18 was considered a "project" subject to CEQA and the environmental impacts of the project were evaluated in the EIR. The currently proposed modifications to Rule 11-18 are also subject to CEQA. CEQA requires evaluation of the potential adverse environmental impacts of proposed projects and identification of feasible methods to reduce or avoid identified significant adverse environmental impacts of those projects. However, CEQA Guidelines Section

15164(a) allows the preparation of an Addendum to a previously certified EIR if some changes or additions are necessary but none of the following conditions as described in CEQA Guidelines Section 15162 occur:

- Substantial changes which will require major revisions of the previous CEQA document due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

- Substantial changes, with respect to the circumstances under which the project is undertaken, which will require major revisions of the previous CEQA document due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or,

- New information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence at the time the previous CEQA document was certified as complete, shows any of the following:

  – The project will have one or more significant effects not discussed in the previous CEQA document;

  – Significant effects previously examined will be substantially more severe than shown in the previous CEQA document;

  – Identification of mitigation measures or alternatives previously found not to be feasible, but would in fact be feasible, and would substantially reduce one or more significant effects, but the project proponent declines to adopt the mitigation measure or alternatives; or

  – Identification of mitigation measures or alternatives which are considerably different from those analyzed in the previous CEQA document would substantially reduce one or more significant effects on the environment, but the project proponent declines to adopt the mitigation measure or alternative.

To determine whether the conditions described in CEQA Guidelines Section 15162 have occurred, the effects of the proposed modifications to Rule 11-18 were compared to the baseline or the existing setting of the environmental impacts described in the original EIR.

As concluded in Section 6.0 of this Addendum, the currently proposed modifications to Rule 11-18 do not change the conclusions reached in the EIR. The EIR concluded that significant adverse impacts are expected to occur for the topics of: 1) construction air quality impacts for ROG, NOx, PM_{10} and $PM_{2.5}$ emissions; 2) greenhouse gas impacts associated with the implementation of air pollution control equipment for the reduction of TAC emissions under proposed Rule 11-18, as well as cumulative GHG emission impacts; and 3) water demand impacts associated with implementation of air pollution control equipment, as well as cumulative water demand impacts. As explained in Subsections 6.1 through 6.4 of this Addendum, the currently proposed modifications to Rule 11-18 will neither increase the severity of these significant adverse impacts nor result in new significant adverse impacts beyond those previously identified in the EIR.

Further, the Air District is also not aware of any other occurrence, such as a change in circumstances or the existence of new information, that would warrant additional environmental review under CEQA Guidelines Section 15162.

The analysis in Sections 6.0 and 7.0 of this Addendum supports the conclusion that the currently proposed revisions to Rule 11-18 are not expected to trigger any conditions identified in CEQA Guidelines Section 15162 that would require the preparation of a subsequent EIR. Therefore, when considering the effects of the Modified Project, the Air District has determined that an Addendum is the appropriate type of CEQA document to be prepared for evaluating potential environmental impacts.

The previous paragraphs and the impact analyses in Sections 6.0 and 7.0 of this Addendum provide the rationale to comply with CEQA Guidelines Section 15164(e) which requires a brief explanation supported by substantial evidence to be included in the Addendum about the reasoning behind the decision to not prepare a subsequent EIR or supplemental EIR under Guidelines Sections 15162 and 15163, respectively. Although CEQA contains a presumption of finality after an EIR is certified, because there are proposed changes to the Approved Project that require discretionary action by the Air District, this Addendum is appropriate. Finally, pursuant to CEQA Guidelines Section 15164(c), "an addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration," but the Air District is circulating this Addendum for review to ensure the public and regulated entities have an opportunity to provide any input prior to finalization.

3.0 CEQA DOCUMENTS PREPARED FOR RULE 11-18

This section provides summaries of the activities associated with Rule 11-18 that were evaluated in CEQA documents, which are presented in sequential order. The CEQA documents can be downloaded from the Air District Webpage at: https://www.baaqmd.gov/en/rules-and-compliance/rules/regulation-11-rule-18-reduction-of-risk-from-air-toxic-emissions-at-existing-facilities?rule_version=Adopted.

October 2016 Notice of Preparation of an Environmental Impact Report and Initial Study (Air District, 2016): The Air District prepared an Initial Study (IS) and published a Notice of Preparation (NOP) for Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18) and Regulation 12: Miscellaneous Standard of Performance, Rule 16: Petroleum Refining Facility-Wide Emissions Limits (Rule 12-16). The NOP/IS were released for a 30-day public review and comment period on October 14, 2016. The NOP/IS included a project description, project location, and a preliminary discussion of potential adverse environmental impacts. The NOP requested public agencies and other interested parties to comment on the scope and content of the environmental information to be evaluated in the Draft EIR. Public scoping meetings were held on November 14, 2016 and November 16, 2016.

March 2017 Draft EIR (Air District, 2017a): The Air District prepared a Draft EIR, which it released for a 45-day public review and comment period from March 24, 2017 through May 8, 2017. The Draft EIR included a project description, a description of the existing environmental setting, a preliminary analysis of potential adverse environmental impacts (including cumulative

impacts) for each environmental topic that could be adversely affected by the proposed project, mitigation measures, project alternatives, and all other relevant topics required by CEQA. The Draft EIR also included a copy of the October 2016 NOP/IS (Appendix NOP). The Draft EIR concluded that the Project would have significant and unavoidable impacts associated with: 1) air quality impacts during construction activities (NOx emissions) and operational emissions of NOx; 2) greenhouse gas emissions; 3) transportation and use of hazardous materials; and 4) water demand impacts.

The Project would result in less than significant impacts following mitigation for: 1) construction air quality emissions associated with ROG, PM_{10} and $PM_{2.5}$ and odor impacts; and 2) hazard impacts.

Impacts to all other environmental topic areas were concluded to be less than significant.

September 2017, Draft EIR (Air District, 2017b): An additional Draft EIR for Proposed District Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities was released for public review from September 1, 2017 to October 16, 2017. The revised Draft EIR eliminated the review of proposed Air District Rule 12-16.

The Draft EIR discussed proposed revisions to Rule 11-18 and potential air quality impacts associated with implementation of the Rule. . The revised Draft EIR concluded that construction air quality impacts would be significant for ROG, NOx, PM_{10} and $PM_{2.5}$ emissions with implementation of Rule 11-18 due to the potential construction overlap associated with facilities that would be required to comply with the Rule. Operational air quality impacts were concluded to be less than significant. Greenhouse gas impacts associated with the implementation of air pollution control equipment for the reduction of TAC emissions under proposed Rule 11-18 were found to be significant, as well as cumulatively significant. Finally, water demand impacts during the implementation of Rule 11-18 were also considered to be cumulatively considerable and found to be potentially significant following mitigation.

November 2017, Recirculated Final EIR, Regulation 11-18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Air District, 2017c): The Recirculated Final EIR was approved and Rule 11-18 was adopted by the Air District Board of Directors on November 14, 2017. Responses to comments were prepared and minor modifications to the Recirculated Final EIR were made. The changes that were reflected in the Final EIR did not constitute significant new information relating to the environmental analysis or mitigation measures that were presented in the September 2017 Draft EIR. The Recirculated Final EIR was certified on November 14, 2017, and the Board of Directors made Findings and issued a Statement of Overriding Considerations.

4.0 MODIFIED PROJECT DESCRIPTION

Rule 11-18 required facilities whose health risk was determined to exceed a specific action level to either reduce the facility risk below the action level or to install TBARCT on all significant sources of risk. This could include operational changes, increases in stack height for better dispersion, installation of air pollution control equipment, etc.

Air District staff is proposing amendments to Rule 11-18 that would expedite the HRA approval steps, as well as other changes that would improve implementation efficiency of this rule. These proposed amendments focus on measures aimed at accelerating risk reduction and improving program efficiency to implement the requirements of the rule as soon as feasible.

The proposed amendments to Rule 11-18 include the following:

- Health Risk Assessments (HRAs)
    - Require facilities to prepare preliminary HRAs using Air District-approved modeling protocols. The protocols would apply standardized methods customized with site-specific information.
    - Provide updated HRA procedures, including site-specific modeling requirements. A site-specific modeling protocol is required to be submitted to the Air District for review and approval.
    - Give the Air District authority to review, correct, and approve HRA inputs and results;
    - Provide a provision where the Air District can prepare the HRA, when it is more expedient to do so or when the facility owner/operator lacks resources to conduct an HRA.
    - Establish specific deadlines for facilities to respond to Air District comments and corrections;
    - Formalize the current practice of holding a public comment period on the preliminary HRA concurrent with the existing 90-day comment period for the facility; and
    - Outline what happens when additional testing or emissions data may affect the facility's HRA results and RAL status.
- Risk Reduction Plans (RRPs)
    - Revise the terminology and timeline associated with the Air District's review of draft RRPs; and
    - Clarify the circumstances under which extensions to the implementation of an RRP or risk reduction measure may be granted.

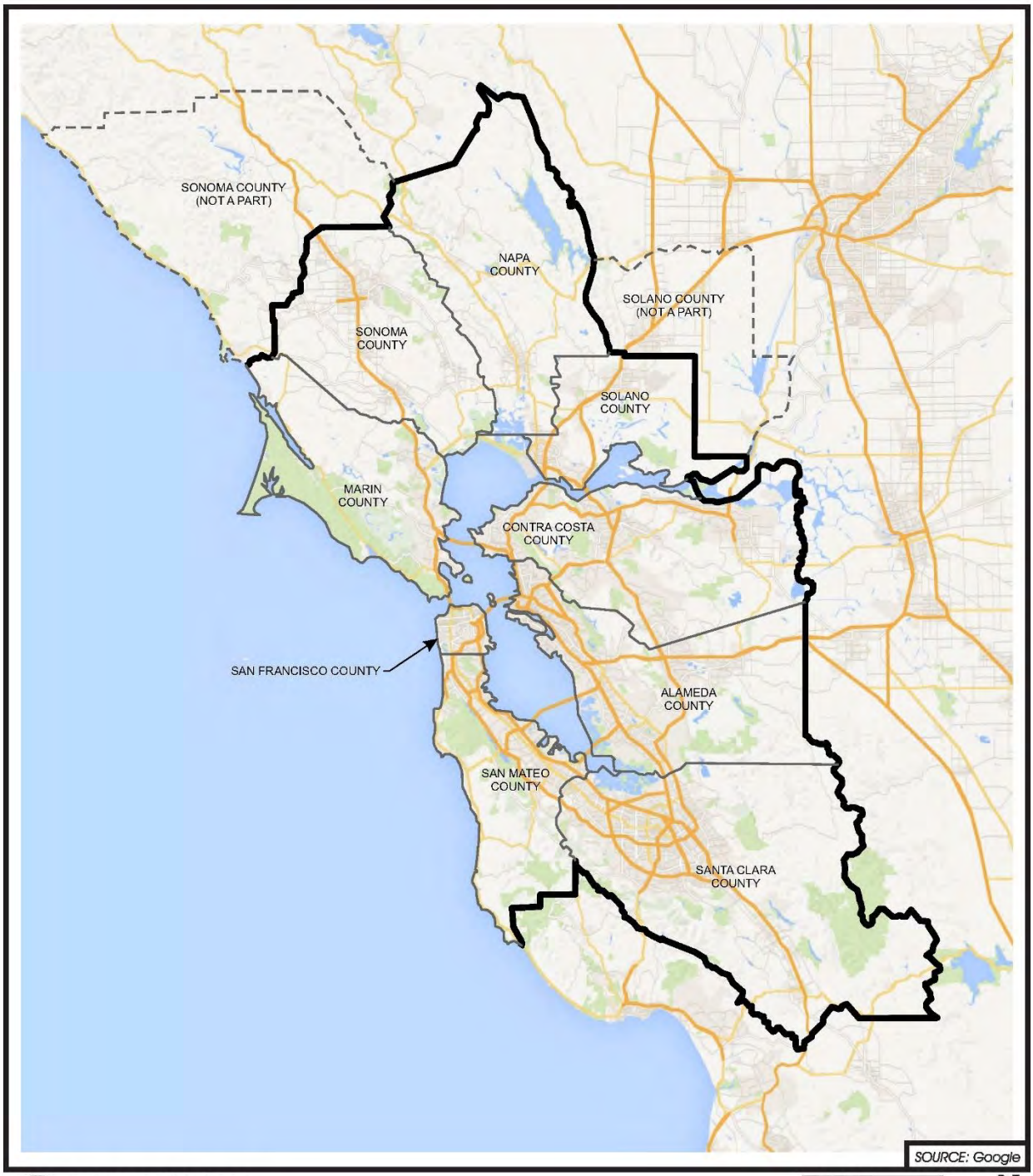
Rule 11-18 applies to all facilities whose emissions of TACs may result in a significant risk to nearby receptors. This includes a broad range of commercial, industrial, and municipal facilities such as data centers, refineries, chemical plants, wastewater treatment facilities, foundries, forges, landfill operations, hospitals, crematoria, power plants, colleges and universities, and military installations.

To comply with the risk action levels for those affected facilities that are required to prepare a risk reduction plan, operators could reduce operations or install TBARCT equipment. Risk reduction measures may include the use of emission capture and control technologies that are intended to capture and remove a TAC or to convert a TAC into a less toxic material, alternative system designs, alternative products, or technologies that reduce or prevent the emission of the TAC or other measures that reduce the amount of TACs to which nearby receptors are exposed. See Chapter 2 of the EIR for a detailed discussion of the potential technologies that were evaluated in the EIR (Air District, 2017b).

5.0 PROJECT LOCATION

The proposed amendments to Rule 11-18 are being implemented to reduce toxic air contaminant emissions within the Air District's jurisdiction. The equipment affected by the proposed rule amendments is located within the jurisdiction of the Air District (see Figure 1). The Air District's jurisdiction includes all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma counties (approximately 5,600 square miles).

The San Francisco Bay Area is characterized by a large, shallow basin surrounded by coastal mountain ranges tapering into sheltered inland valleys. The combined climatic and topographic factors result in increased potential for the accumulation of air pollutants in the inland valleys and reduced potential for buildup of air pollutants along the coast. The basin is bounded by the Pacific Ocean to the west and includes complex terrain consisting of coastal mountain ranges, inland valleys, and bays.



Project No. 3375

Figure 1

N:\3375\Bay Area Quality Management District.cdr

6.0 IMPACT ANALYSIS

The following sections present a summary of the impact analyses contained in the EIR for Rule 11-18 plus the analysis of the impacts of the proposed amendments to Rule 11-18. As required by CEQA Guidelines Section 15125, the EIR included a description of the physical environmental conditions, also referred to as the existing setting or baseline, within the Bay Area as they existed at the time the environmental analysis commenced. Specifically, the baseline was identified in the EIR as 2015, the last full year prior to the release of the NOP/IS.

This Addendum includes an evaluation of the same 19 environmental topic areas evaluated in the November 2017 EIR. The four environmental topic areas fully evaluated in the EIR for which there were less than significant impacts only after mitigation or significant impacts are evaluated in Subsections 6.1 through 6.4. The remaining environmental topic areas that were determined to have no significant or less than significant impacts in the EIR are examined in Section 7.0 of this Addendum. The below analyses support the Air District's conclusion that the proposed amendments to Rule 11-18 are not expected to trigger any conditions identified in CEQA Guidelines Section 15162 that would require the preparation of a subsequent EIR. Thus, a subsequent EIR or a supplement to the EIR as reflected in Guidelines Sections 15162 and 15163, respectively, are not appropriate.

Because this Addendum is associated with modifications to Rule 11-18, the Addendum focuses primarily on whether the modifications to Rule 11-18 constitute changes to the project warranting additional environmental review. The Air District is also not aware of any other changes to the project, changes in circumstances, or new information that would warrant additional environmental review under CEQA Guidelines Section 15162. Most obviously, the Air District is not aware of any changes to the abatement equipment that the Air District would expect to be installed, or to the facilities where that equipment would be installed, that would be sufficiently significant to potentially meet any of the triggers in CEQA Guidelines Section 15162(a)(3)(A)-(D).

6.1 Air Quality

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Conflict with or obstruct implementation of the applicable air quality plan?	No Impact	No	No	No	None
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	Significant Impact	No	No	No	None
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	Less than Significant (Potentially Significant Impact in NOP/IS)	No	No	No	None
d) Expose sensitive receptors to substantial pollutant concentrations?	Less than Significant (Potentially Significant Impact in NOP/IS)	No	No	No	None
e) Create objectionable odors affecting a substantial number of people?	No Impact	No	No	No	None

6.1.1 Construction Emissions

Summary of November 2017 EIR for Rule 11-18

The EIR determined that there were a wide variety of TAC emissions with different physical or chemical characteristics, so that different types of control technologies may need to be installed at affected facilities to reduce risk levels to those required by Rule 11-18. Therefore, to comply with

Rule 11-18, air pollution control equipment may need to be installed, which would generate air emissions during the construction phase.

Based on assumptions of the number and types of air pollution control equipment that would be installed, it was determined that construction emissions associated with implementing Rule 11-18 could generate emissions that exceed the Air District's construction emission thresholds. Therefore, as shown in Table 1, construction air quality impacts were concluded to be significant for ROG, NOx, PM_{10} and $PM_{2.5}$ emissions in the EIR.

TABLE 1

Worst-Case Construction Emissions Under Rule 11-18

ACTIVITY	ROG	CO	NOx	SOx	PM_{10}	$PM_{2.5}$
Construction Emissions Per Unit Under Rule 11-18 (lbs/day)						
Diesel ICE Replacements 1 ICEs	0.88	4.73	4.77	<0.01	1.02	1.00
Diesel ICE Retrofits 1 ICEs	0.27	1.32	2.36	<0.01	0.08	0.06
1 Non-Refinery WGS, Baghouse, or ESP	2.96	15.23	17.99	0.10	2.69	2.44
1 Carbon Adsorption Unit or Thermal Oxidizer	3.27	10.84	16.53	0.01	2.22	2.01
1 Enclosure	1.56	14.08	17.61	0.04	1.54	1.20
Refinery WGS	17	67	84	<1	39	23
Potential Overlapping Emissions	25.94	113.2	143.26	1.15	46.55	29.71
Significance Thresholds	54	None	54	None	82	54
Significant?	No	--	**Yes**	--	No	No
Potential Overlapping Construction Emissions Under Rule 11-18 (lbs/day)						
10 Diesel ICE Replacements	8.8	47.3	47.7	0.1	10.02	10.0
10 Diesel ICE Retrofits	2.74	13.2	23.2	0.01	0.80	0.58
10 Non-Refinery WGS, Baghouse, or ESP	29.6	152.3	179.9	1.0	26.9	24.4
5 Carbon Adsorption Unit or Thermal Oxidizer	16.35	54.25	82.65	0.05	11.1	10.05
3 Enclosures	4.68	42.23	52.82	0.13	4.62	3.60
3 Refinery WGSs	51	201	252	1	117	69
Total Potential Overlapping Emissions (lbs/day)	113.71	510.28	638.27	2.29	170.44	117.63
Significance Thresholds	**54**	None	**54**	None	**82**	**54**
Significant?	**Yes**	--	**Yes**	--	**Yes**	**Yes**
Potential Overlapping Construction Emissions Under Rule 11-18 (tons per year)						
10 Diesel ICE Replacements	0.004	0.024	0.024	0	0.005	0.005
10 Diesel ICE Retrofits	0.001	0.007	0.012	0	0.001	0.001
10 Non-Refinery WGS, Baghouse or ESP)	1.44	7.42	8.77	0.05	1.31	1.20
5 Carbon Adsorption Units or Thermal Oxidizers	0.8	2.64	4.03	0	0.54	0.49
3 Enclosures	0.56	5.05	6.31	0.01	0.55	0.43
3 Refinery WGS	6.3	25.2	31.2	<1	14.1	8.4
Total Potential Overlapping Emissions (tons/year)	2.81	15.14	19.15	0.06	2.41	2.13

ICE = internal combustion engine; WGS = wet gas scrubber; ESP = electrostatic precipitator
Source: Air District, 2017b

Based on the construction emissions in Table 1, the EIR concluded that construction air quality impacts associated with ROG, NOx, PM_{10} and $PM_{2.5}$ would be significant. Construction emissions, however, are temporary as construction emissions would cease following completion of construction activities. Mitigation measures were identified for the potentially significant

construction emissions impacts; nonetheless, it is likely that the construction emissions would remain significant following mitigation.

Impacts of the Modifications to Rule 11-18 (Proposed Project)

The modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the type of facilities that would be affected, air pollution control equipment that would be installed, or construction activities that would be required to comply with the modified rule. Therefore, the construction emissions estimated in the EIR would not be expected to change. The modifications to Rule 11-18 would not have any new or substantially more severe impacts related to construction than the approved Rule 11-18 and would not alter the conclusions of the EIR.

The modifications are anticipated to increase the pace of Rule 11-18 implementation, which one might think could theoretically result in more overlap of construction activities. However, the assumptions utilized to determine the potential for overlap in the EIR were highly conservative; for instance, the EIR relied on an assumption that all facility HRAs for high-priority facilities designated "Phase 1" would be complete within two years. The Air District's subsequent experience has demonstrated that this pace is infeasible and therefore the Air District is confident that the degree of potential overlap examined in the EIR remains conservative.

On February 7, 2024, the U.S. EPA revised the primary (health-based) annual $PM_{2.5}$ ambient air quality standard from 12 micrograms per cubic meter (ug/m^3) to 9 ug/m^3 to provide increased public health protection. Modeling completed by the Air District indicates that the Bay Area air basin is not in attainment of the revised annual $PM_{2.5}$ standard. Although the EIR identified an exceedance of the 24-hour $PM_{2.5}$ standard of 35 ug/m^3, it did not discuss an exceedance of the previous annual standard because the Bay Area air basin had attained that standard.

The existence of the new, lower annual $PM_{2.5}$ standard would not result in any new or substantially more severe air quality impacts. As noted, $PM_{2.5}$ emissions are not expected to increase compared to what was discussed in the EIR, and the EIR already discussed how those emissions may contribute to an exceedance of national ambient air quality standards. Further, the federal government has requested that the U.S. Court of Appeals for the D.C. Circuit strike down the revised annual standard, so it is unclear whether the Bay Area Air Basin will be formally designated nonattainment.

Last, the EIR indicated that the mitigation measures would be imposed through local land use permits for any future projects that require the installation of air pollution control equipment. After further evaluation, the Air District proposes to enforce the mitigation measures through conditions on air permits to simplify and ensure adequate monitoring and enforcement of the measures. This logistical change would not be expected to have any environmental impacts.

6.1.2 Operational Emissions

Summary of November 2017 EIR for Rule 11-18

The net effect of implementing Rule 11-18 was to reduce health risks by reducing TAC emissions from regulated sources. However, some control technologies have the potential to generate secondary or indirect air quality impacts as part of the control process. The air pollution control technologies that have the potential to generate secondary or indirect operational air quality impacts included:

- Diesel Particulate Filters – slight increase in nitrogen dioxide (NO_2) from regenerating filters;
- Carbon Adsorption – increase in combustion emissions from regenerating spent carbon;
- Thermal Oxidizer – potential increase in combustion emissions;
- Wet Gas Scrubber – slight increase in TAC emissions, minor indirect mobile source emissions increases.

As shown in Table 2, adopting Rule 11-18 was not expected to produce operational emissions that exceed either the Air District's daily or annual criteria pollutant significance thresholds. ROG, NOx, PM_{10} and $PM_{2.5}$ emissions would be less than the applicable significance thresholds and, therefore, were concluded to be less than significant.

TABLE 2

Worst-Case Operational Emissions Under Rule 11-18

ACTIVITY	ROG	CO	NOx	SOx	PM_{10}	$PM_{2.5}$
Peak Operational Emissions Per Facility Under Rule 11-18 (lbs/day)						
Regenerating Spent Carbon	0.02	0.08	0.29	<0.01	0.02	0.02
Thermal Oxidizer	0.16	7.10	0.88	0.01	0.17	0.17
Caustic/Catalyst for WGS Unit Truck Trips	0.06	0.26	1.84	0.02	0.04	0.02
Total Potential Overlapping Emissions	0.24	7.44	3.01	0.03	0.23	0.21
Significance Thresholds	54	None	54	None	82	54
Significant?	No	--	No	--	No	No
Peak Operational Emissions for Multiple Facilities Under Rule 11-18 (lbs/day)						
Regenerating Spent Carbon	0.77	0.40	1.43	0.01	0.08	0.08
Thermal Oxidizer	1.6	71.0	8.80	0.1	1.7	1.7
Caustic/Catalyst for WGS Unit Truck Trips	0.04	0.13	23.96	0.26	0.52	0.26
Total Potential Overlapping Emissions	2.41	71.23	34.19	0.37	2.3	2.04
Significance Thresholds	54	None	54	None	82	54
Significant?	No	--	No	--	No	No
Annual Operational Emissions for 1 Facility (tons per year)						
Regenerating Spent Carbon	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thermal Oxidizer	0.03	1.30	0.16	0.00	0.03	0.03
Caustic/Catalyst for WGS Unit Truck Trips	0.003	0.01	0.10	0.00	<0.01	<0.01
Total Potential Overlapping Emissions	0.33	1.31	0.26	0	0.03	0.03
Worst-case Annual Operational Emissions for Multiple Facilities (tons per year)						
Regenerating Spent Carbon (5 Units)	0.14	0.07	0.26	<0.01	0.02	0.02
Thermal Oxidizers (10 Units)	0.29	12.96	1.61	0.02	0.31	0.31
Caustic/Catalyst for WGS Truck Trips (13 Units)	0.04	0.13	1.3	0.01	0.03	0.01
Total Potential Overlapping Emissions	0.47	13.16	3.17	0.04	0.37	0.34
Significance Thresholds tons/year	10	None	10	None	15	10
Significant?	No	--	No	--	No	No

It should be noted that in addition to the estimated emission increases associated with the operation of new air pollution control equipment under Rule 11-18, reduction in air emissions would also be expected. Some of those reductions would be large, for example, a wet gas scrubber (WGS), baghouse, or electrostatic precipitator (ESP) would be expected to result in PM_{10}/$PM_{2.5}$ and TAC emission reductions. However, it is not possible to estimate those emission reductions until the sources that will be controlled are known, the type of air pollution control device has been identified, appropriate engineering analyses have been completed and so forth. Nonetheless, the potential emission increases were expected to be either wholly or partially offset with emission decreases.

To comply with the risk or emission reduction requirements of Rule 11-18, WGS may be used. For example, caustic is used in the operation of a WGS. There are several types of caustic solutions that can be used in WGS operations, but NaOH (50 percent solution, by weight) is the one most commonly used. NaOH is a TAC that is a non-cancerous, but an acutely hazardous substance (i.e., an acute reference exposure level has been established by the California Office of Environmental Health Hazard Assessment). The analysis in the EIR determined that NaOH emissions are expected to be relatively low and would not be expected to impact sensitive receptors. Further, an alternative to using NaOH as the caustic solution is sodium carbonate (Na_2CO_3) which is commonly known as soda ash, a non-toxic, non-cancerous, and nonhazardous substance. This caustic does not have the potential to generate significant adverse TAC emission impacts. For these reasons, it is unlikely that NaOH emissions would create significant adverse acute hazard impacts to any nearby sensitive receptors.

It should be noted that in addition to the estimated TAC emission increases associated with the operation of new air pollution control equipment under Rule 11-18, a reduction in TAC emissions would also be expected. However, it is not possible to estimate those emission reductions until the sources that will be controlled are known, the type of air pollution control device has been identified, appropriate engineering analyses have been completed and so forth. Nonetheless, air pollution control equipment installed to control TAC emissions as a result of the proposed rule was expected to result in a reduction in TAC emissions from affected facilities.

Impacts of the Modifications to Rule 11-18 (Proposed Project)

The modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the type of facilities that would be affected, the type of air pollution control equipment that would be installed, or the potential air emissions associated with operation of any new equipment. Therefore, the operational criteria and TAC emissions are not expected to change from those estimated in the EIR.

Based on the above, the modifications to Rule 11-18 would not have any new or substantially more severe impacts related to criteria pollutants than the Approved Project and would not alter the conclusions of the EIR.

6.1.3 Cumulative Air Quality Impacts

Summary of November 2017 EIR for Rule 11-18

In the analysis of construction air quality impacts, it was concluded that air quality impacts from construction activities would be significant from implementing Rule 11-18 because the potential overlap in construction activities for moderately-sized pieces of air pollution control equipment would likely exceed the applicable significance thresholds for construction air quality impacts, even after implementing mitigation measures. Likewise, the ROG, NOx, PM_{10} and $PM_{2.5}$ air quality impacts due to construction are considered to be cumulatively considerable pursuant to CEQA Guidelines Section 15064 (h)(1) and therefore, generate significant adverse cumulative construction air quality impacts. It should be noted, however, that the air quality analysis is a conservative, "worst-case" analysis so the actual construction impacts are not expected to be as great as estimated in the EIR. Further, the construction activities are temporary and would be terminated once any future construction activities are completed.

Implementing Rule 11-18 was not expected to generate significant adverse project-specific air quality impacts due to operation. Air quality impacts from Rule 11-18 were also not considered to be cumulatively considerable pursuant to CEQA Guidelines Section 15064(h)(1). As discussed above, in addition to the estimated emission increases associated with the operation of new air pollution control equipment under Rule 11-18, reductions in air emissions would also be expected, some of which are potentially large. However, it is not possible to estimate those emission reductions until the sources that will be controlled are known, the type of air pollution control device has been identified, appropriate engineering analyses have been completed and so forth. Nonetheless, the potential emission increases are expected to be either wholly or partially offset with emission decreases.

Impacts of the Modifications to Rule 11-18 (Proposed Project)

Because the modifications to Rule 11-18 are not expected to have any impact on emissions as compared to the impacts analyzed in the EIR, the modifications to Rule 11-18 definitionally cannot have any impact on cumulative air quality impacts.

6.1.4 Conclusions

As discussed above, the modifications to Rule 11-18 would not have any new or substantially more severe impacts related to air quality than the approved Rule 11-18 and would not alter the conclusions of the EIR.

6.2 Greenhouse Gas Emissions

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Significant Impact (Potentially Significant Impact)	No	No	No	None
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less than Significant Impact	No	No	No	None

6.2.1 Summary of November 2017 EIR for Rule 11-18

The EIR determined that the impacts on Greenhouse Gas (GHG) emissions would be significant, as shown in Table 3.

TABLE 3

Predicted Operational GHG Emissions Rule 11-18

Activity	CO_2e MT/Year
Total Amortized Construction Emissions	970
Total Operational Emissions for 5 Carbon Adsorption Units	7
Total Operational Emissions 10 Thermal Oxidizers	4,550
Total Haul Truck Emissions for 13 WGS Units	314
Total Electrical Emissions for 13 WGS Units and 5 ESPs	15,095
Total Potential Overlapping GHG Emissions	20,936
Significance Threshold	10,000 MT/yr
Significant?	**Yes**

See October 2021 Draft EIR, Table 3.3-18 for detailed information.

Evaluation of those air pollution control technologies that would most likely be used to reduce TAC emissions from affected facilities pursuant to Rule 11-18 indicates that Rule 11-18 could generate direct and indirect GHG emission impacts that exceed the Air District's operational GHG emissions significance threshold of 10,000 $MTCO_2e/yr$. Therefore, because the analysis of GHG emission impacts is by definition a cumulative impact analysis, cumulative operational GHG emission impacts for Rule 11-18 were concluded to be significant.

GHG emission increases at facilities that are covered under the California Air Resources Board's (CARB's) Cap and Trade program (e.g., refineries, power plants, manufacturing facilities, etc.) are required to offset GHG emissions on an annual basis. CARB's Cap and Trade program allows covered facilities to buy and sell GHG emissions credits to demonstrate compliance with the program requirements. Rule 11-18 was not expected to generate substantial GHG emissions at any one facility that would interfere with the facility's ability to comply with CARB's Cap and Trade requirements. Since there is no specific information as to where control equipment would be required, it would be speculative to assume that GHG emissions would be offset under Cap and Trade. However, GHG emission increases at facilities that are covered under CARB's Cap and Trade program (e.g., refineries, power plants, manufacturing facilities, etc.) would be required to offset under the Cap and Trade Program. Therefore, a portion of the GHG emission increases that may occur due to implementation of Rule 11-18 are expected to be offset. Since the GHG emissions reductions expected due to compliance with AB 32 and the Cap and Trade Program are speculative, cumulative GHG emission impacts are expected to remain significant for implementing Rule 11-18.

6.2.2 Impacts of the Modifications to Rule 11-18 (Proposed Project)

The modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the type of facilities that would be affected, air pollution control equipment that would be installed, construction activities that would be required to comply with the modified rule, or GHG emissions associated with the operation of new air pollution control equipment. Therefore, the proposed modifications to Rule 11-18 would not change the GHG impacts as evaluated in the EIR.

6.2.3 Conclusions

As discussed above, the impacts of the proposed rule modifications on greenhouse gas emissions are expected to remain significant. The proposed modifications to Rule 11-18 would not have any new or substantially more severe GHG emission impacts than the approved Rule 11-18 and would not alter the conclusions of the EIR. The impacts of Rule 11-18 would remain significant for GHG emissions.

6.3 Hazards and Hazardous Materials

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less than Significant Impact (following mitigation)	No	No	No	None
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Less than Significant Impact	No	No	No	None
c) Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	No Impact	No	No	No	None
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Less than Significant Impact	No	No	No	None
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area?	No Impact	No	No	No	None
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	No Impact	No	No	No	None

Would the Project?	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No Impact	No	No	No	None
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	Less than Significant Impact	No	No	No	None

6.3.1 Summary of November 2017 EIR for Rule 11-18

With the exception of baghouses and dry ESPs, the hazard impacts associated with the installation of air pollution control equipment under Rule 11-18 were expected to be less than significant without mitigation.

For baghouses and dry ESPs, there was the potential for fire or explosion impacts. Therefore, feasible mitigation measures pursuant to CEQA Guidelines Section 15126.4 were identified and are described in Chapter 3.4.5.1 and 3.4.5.2 of the EIR. The hazard impacts under implementation of Rule 11-18 were expected to be less than significant following mitigation.

Installation of most types of air pollution control equipment, if required in the future, is not expected to cause or contribute to significant adverse hazard impacts, with the exception of baghouses or dry ESPs. As a result, feasible mitigation measures pursuant to CEQA Guidelines Section 15126.4 were identified and were described. Implementing those mitigation measures was expected to reduce significant adverse hazards and hazardous materials impacts to less than the applicable hazards and hazardous materials significance thresholds. Therefore, overall hazards and hazardous materials impacts, including accidental releases of hazardous materials during transport, were concluded to be less than significant. Cumulative impacts related to hazards and hazardous materials were also not determined to be significant after mitigation.

6.3.2 Impacts of the Modifications to Rule 11-18 (Proposed Project)

The modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not

expected to change the type of facilities that would be affected, air pollution control equipment that would be installed, construction activities that would be required to comply with the modified rule, or hazard impacts emissions associated with the operation of new air pollution control equipment. Therefore, the proposed modifications to Rule 11-18 would not change the hazard impacts, including the cumulative impacts, as evaluated in the EIR.

6.3.3 Conclusions

As discussed above, the impacts of the proposed rule modification on hazard impacts are expected to remain less than significant following mitigation. The proposed modifications to Rule 11-18 would not have any new or substantially more severe hazard impacts than the approved rule and would not alter the conclusions of the EIR. The impacts of Rule 11-18 would remain less than significant after mitigation for hazard impacts.

6.4 Hydrology and Water Quality

Both Hydrology and Water Quality (discussed in Section 3.5 of the EIR) and Utilities and Service Systems (discussed in Section 3.6.3.13 of the EIR) deal with water demand and water quality impacts. The EIR discussed water demand and water quality impacts in the Hydrology and Water Quality section. This Addendum follows the same approach. Please note that although the checklist in Section 7.14 below, for Utilities and Service Systems, identifies a significant impact related to water demand, this Addendum discusses that impact primarily in this section.

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Violate any water quality standards or waste discharge requirements?	Less than Significant Impact	No	No	No	None
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	Significant Impact	No	No	No	None
c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite?	No Impact	No	No	No	None
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite?	No Impact	No	No	No	None

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
e) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	No Impact	No	No	No	None
f) Otherwise substantially degrade water quality?	Less than Significant Impact	No	No	No	None
g) Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	No Impact	No	No	No	None
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	No Impact	No	No	No	None
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	No Impact	No	No	No	None
j) Inundation by seiche, tsunami, or mudflow?	No Impact	No	No	No	None

6.4.1 Summary of November 2017 EIR for Rule 11-18

The EIR determined that certain types of air pollution control equipment will require water including water for dust suppression during construction activities, as well as the operation of wet electrostatic precipitators, and wet gas scrubbers. Water demand impacts from installing most types of air pollution control equipment that use water as part of the control process would not create water demand impacts that exceed the applicable water demand significance thresholds. However, it is likely that water demand impacts from installing wet gas scrubbers, especially on large refinery equipment, could exceed applicable water demand significance thresholds and, therefore, water demand impacts were concluded to be significant.

Water quality impacts from installing most types of air pollution control equipment that use water as part of the control process would not be expected to exceed applicable water quality significance thresholds and, therefore, were concluded to be less than significant. Wastewater from certain types of air pollution equipment (e.g., wet gas scrubbers and wet electrostatic precipitators) can be treated and then recirculated back to the equipment to be used again. Depending on a facility's wastewater treatment system, the rest of the effluent may be further treated and discharged to the sanitary sewer system. Wet gas scrubbers are most likely to be used on large emission sources such as refinery units, gas turbines or other large industrial facilities that currently have wastewater discharges and wastewater treatment systems. Depending on the type of equipment, some water may be lost as steam. For these reasons, it is not expected that wastewater from air pollution control equipment would exceed a facility's current wastewater discharge limits, require changes to existing wastewater permit conditions, or require new wastewater permits. Refineries and other large manufacturing facilities are large users of water, have large wastewater discharges, have large wastewater treatment facilities, and operate under the requirements of industrial waste discharge permits. Regardless of the facility, wastewater discharges from an industrial facility would be required to be discharged in compliance with applicable wastewater discharge permits. Therefore, water quality impacts are not expected to exceed any applicable water quality significance thresholds, so water quality impacts during operation are concluded to be less than significant.

Mitigation measures for water demand were imposed. However, because of the prevalence of drought conditions in Northern California, in spite of implementing the mitigation measures identified, water demand impacts associated with implementing Rule 11-18 were expected to remain significant, in part because there was no guarantee that reclaimed water will be available to all of the affected facilities.

With regard to water quality, it was concluded that impacts would be less than significant, so no mitigation measures were required.

The EIR determined that water demand and water quality during construction activities would be less than significant. Similarly, it was concluded that water quality impacts from the proposed project during operation would be less than significant. Construction water quality, construction water demand impacts and operational water quality impacts were also not considered to be cumulatively considerable (CEQA Guidelines Section 15064 (h)(1)) and, therefore, were not expected to generate significant adverse cumulative impacts for these environmental topic areas.

The EIR concluded that water demand impacts from the proposed project during operation have the potential to generate significant adverse operational water demand impacts associated with installing a WGS. Therefore, operational water demand impacts during operation of the proposed project are considered to be cumulatively considerable for implementation of Rule 11-18 (CEQA Guidelines Section 15064 (h)(1)).

6.4.2 Impacts of the Modifications to Rule 11-18 (Proposed Project)

The modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not

expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, construction activities that would be required to comply with the modified rule, or water demand or water quality associated with the operation of new air pollution control equipment. Therefore, the water demand impacts associated with the proposed amendments to Rule 11-18 are expected to be the same as those estimated in the EIR, including cumulative impacts, and would not change the hydrology/water quality impacts as evaluated in the EIR.

6.4.3 Conclusions

As discussed above, the modifications to Rule 11-18 will have no additional impacts on hydrology and water quality than the Approved Project evaluated in the EIR.

The proposed modifications to Rule 11-18 would not have any new or substantially more severe hydrology or water quality impacts than the approved rule and would not alter the conclusions of the EIR. The impacts of the implementation of Rule 11-18 on hydrology and water quality would remain significant due to the potential water demand impacts associated with the potential operation of large WGSs at industrial (e.g., refinery) facilities.

7.0 POTENTIAL ENVIRONMENTAL IMPACTS FOUND TO BE NOT SIGNIFICANT

This section discusses the remaining 14 environmental topic areas found not to be significantly affected by implementation of the Rule 11-18 October 2016 NOP/IS and the November 2017 EIR, and as a result of the currently proposed modifications to Rule 11-18. The EIR found that the following topics would have less than significant or no impacts. The proposed amendments to Rule 11-18 would have similar or reduced impacts as compared to the currently approved Rule 11-18 for these resources, as discussed below. These environmental topic areas were found not to be significant in the October 2016 NOP and the EIR. The effect of the proposed Rule 11-18 modifications on the conclusions relating to each of these environmental topic areas is discussed in the following sections. The currently proposed modifications to Rule 11-18 are not expected to create new significant impacts or worsen the potential less than significant impacts for the environmental topic areas discussed in this section.

7.1 Aesthetics

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Have a substantial adverse effect on a scenic vista?	No Impact	No	No	No	None
b) Substantially damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?	No Impact	No	No	No	None
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	Less than Significant Impact	No	No	No	None
d) Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	Less than Significant Impact	No	No	No	None

Rule 11-18 required facilities whose health risk is determined to exceed a specific action level to either reduce the facility risk below the action level or to install TBARCT on all significant sources of risk. Some control options include stack modifications. Stack modifications are another common and generally inexpensive risk reduction measure that are often used to reduce risk by increasing the stack height, for example, providing better dispersion of emissions. Rule 11-18 could also result in the installation of new air pollution control equipment to mitigate TAC emissions. While these control devices may be visible to surrounding areas, they would be installed within existing industrial or commercial areas, would be subject to local height limits, and were not expected to block any scenic vista, degrade visual character or quality or an area, or result in significant adverse aesthetic impacts.

The facilities affected by Rule 11-18, including petroleum refineries, may need to install or modify air pollution control equipment or modify operations to implement risk reduction measures. However, it is unlikely that any of the changes would result in additional night-time operation that would require extra lighting. New light sources, if any, were not expected to be noticeable in residential areas. Most local land use agencies have ordinances that limit the intensity of lighting and its effects on adjacent property owners. Therefore, implementation of Rule 11-18 was not expected to have significant adverse aesthetic impacts to the surrounding community.

The proposed modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the aesthetic impacts as evaluated in the EIR.

7.2 Agricultural and Forestry Resources

In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	No Impact	No	No	No	None
b) Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?	No Impact	No	No	No	None
c) Conflict with existing zoning for, or cause rezoning of, forest land as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	No Impact	No	No	No	None
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact	No	No	No	None

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	No Impact	No	No	No	None

As discussed in the EIR, the facilities that would be affected by Rule 11-18 are located primarily in industrial and commercial areas where agricultural or forest resources are generally not located. Some construction activity is expected to result from compliance with Rule 11-18; but such activities were expected to occur on the premises of the affected facilities and, therefore, would not impact agricultural and forestry resources.

The modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the agricultural and forestry resource impacts as evaluated in the EIR.

7.3 Biological Resources

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	No Impact	No	No	No	None
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	No Impact	No	No	No	None
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?	No Impact	No	No	No	None
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	No Impact	No	No	No	None

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
e) Conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact	No	No	No	None
f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	No Impact	No	No	No	None

As discussed in the EIR, the facilities affected by Rule 11-18 are expected to be located in the commercial and industrial areas within the Bay Area. These commercial/industrial areas have been graded to develop the various structures, and are typically surrounded by other commercial and industrial facilities. Native vegetation, other than landscape vegetation, has usually been removed from these facilities.

Similarly, modifications at existing facilities would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with native or resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Further, since the Rule 11-18 would primarily regulate stationary emission sources at commercial or industrial facilities, it would not directly or indirectly affect riparian habitat or other sensitive natural communities identified in local or regional plans, policies, or regulations, or identified by the California Fish and Wildlife or U.S. Fish and Wildlife Service. Improved air quality resulting from Rule 11-18 would be expected to provide health benefits to plant and animal species in the Bay Area. Therefore, implementation of Rule 11-18 was not expected to have significant adverse biological resource impacts.

The modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the impacts on biological resources as evaluated in the EIR.

7.4 Cultural Resources

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	No Impact	No	No	No	None
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	No Impact	No	No	No	None
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	No Impact	No	No	No	None
d) Disturb any human remains, including those interred outside of formal cemeteries?	No Impact	No	No	No	None

As discussed in the EIR, implementing Rule 11-18 was primarily expected to result in controlling stationary source emissions at commercial or industrial facilities. Affected facilities are typically located in appropriately zoned commercial or industrial areas that have previously been graded and developed. Because controlling stationary source emissions from existing facilities does not typically require extensive cut-and-fill activities, or excavation, it is unlikely that additional stationary source control measures that may result from Rule 11-18 will: (1) adversely affect historical or archaeological resources as defined in CEQA Guidelines Section15064.5; (2) destroy unique paleontological resources or unique geologic features; or (3) disturb human remains interred outside formal cemeteries.

In a small number of cases, Rule 11-18 may require minor site preparation and grading at an affected facility to install new or modify existing equipment. Under this circumstance, it is possible that archaeological or paleontological resources could be uncovered. Even if this circumstance were to occur, significant adverse cultural resource impacts are not anticipated because there are existing laws in place that are designed to protect and mitigate potential adverse impacts to cultural resources. As with any construction activity, should archaeological resources be found during construction that results from implementing the rule, the activity would cease until a thorough archaeological assessment is conducted. Therefore, no significant adverse impacts to cultural resources were expected due to implementation of Rule 11-18.

The modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the impacts on cultural resources as evaluated in the EIR.

7.5 Geology and Soils

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	No substantial change to prior analysis
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	No Impact	No	No	No	None
ii) Strong seismic ground shaking?	Less than Significant Impact	No	No	No	None
iii) Seismic-related ground failure, including liquefaction?	Less than Significant Impact	No	No	No	None
iv) Landslides?	Less than Significant Impact	No	No	No	None
b) Result in substantial soil erosion or the loss of topsoil?	No Impact	No	No	No	None
c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	Less than Significant Impact	No	No	No	None

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	No substantial change to prior analysis
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	No Impact	No	No	No	None
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	No Impact	No	No	No	None

As discussed in the EIR, some new structures, or structural modifications at existing affected facilities may occur as a result of installing control equipment or making process modifications to comply with Rule 11-18. However, the rule will not directly expose people or structures to earthquake faults, seismic shaking, seismic-related ground failure including liquefaction, landslides, mudslides or substantial soil erosion. Existing affected facilities or modifications to existing facilities would be required to comply with relevant California Building Code requirements in effect at the time of initial construction or modification of a structure.

The California Building Code is considered to be a standard safeguard against major structural failures and loss of life. The goal of the Code is to provide structures that will: (1) resist minor earthquakes without damage; (2) resist moderate earthquakes without structural damage but with some non-structural damage; and (3) resist major earthquakes without collapse but with some structural and non-structural damage. Therefore, compliance with the California Building Code requirements is expected to minimize the potential impacts associated with earthquakes as well as liquefaction. The issuance of building permits from the local cities or counties will assure compliance with the California Building Code requirements. Therefore, no significant impacts from earthquakes, groundshaking, liquefaction, collapse or expansive soils were expected.

Although Rule 11-18 may require modifications at existing industrial or commercial facilities, such modifications are not expected to require substantial grading or construction activities. Any new air pollution control equipment is not expected to substantially increase the area subject to compaction since the subject areas would be limited in size and, typically, have already been graded or displaced in some way. Therefore, significant adverse soil erosion impacts were not anticipated from implementing Rule 11-18.

Rule 11-18 would only affect existing industrial or commercial facilities, which already are hooked up to appropriate sewerage facilities, and therefore no impacts on septic tanks or alternative wastewater disposal systems were expected.

The modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the impacts on geology and soils as evaluated in the EIR.

7.6 Land Use and Planning

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Physically divide an established community?	No Impact	No	No	No	None
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to a general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	No Impact	No	No	No	None
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	No Impact	No	No	No	None

As discussed in the EIR, Rule 11-18 was designed to reduce risk from existing stationary sources located throughout the Bay Area. Potential risk reduction measures include measures that would limit emissions of TACs. The rule does not include any components that would require major modifications to existing commercial or industrial facilities and, therefore, the rule would not result in impacts that would physically divide an established community or generate additional development.

Rule 11-18 was not expected to require any new substantial construction or development. New or modified pollution control equipment or enclosures may be required and would be located within existing commercial or industrial facilities. Construction activities would be limited to the confines of existing facilities which are zoned for commercial or industrial land use. Modifications to equipment would be limited to the confines of existing facilities and are not expected to affect adjacent land uses, divide an established community, conflict with any applicable land use plan or policy or conflict with any habitat conservation plan. Therefore, no impacts on land use and planning were expected.

The currently proposed modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that

would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the land use and planning impacts as evaluated in the EIR.

7.7 Mineral Resources

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	No Impact	No	No	No	None
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	No Impact	No	No	No	None

As discussed in the EIR, Rule 11-18 was designed to reduce risk from existing stationary sources located throughout the Bay Area. Potential risk reduction measures include measures that would limit emissions of TACs. The rule is not associated with any action that would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state, or of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. Therefore, no impacts on mineral resources were expected.

The modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the mineral resources impacts as evaluated in the EIR.

7.8 Noise

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Exposure of persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Less than Significant Impact	No	No	No	None
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	Less than Significant Impact	No	No	No	None
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	Less than Significant Impact	No	No	No	None
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	Less than Significant Impact	No	No	No	None
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport would the project expose people residing or working in the project area to excessive noise levels?	No Impact	No	No	No	None
f) For a project within the vicinity of a private airstrip would the project expose people residing or working in the project area to excessive noise levels?	No Impact	No	No	No	None

As discussed in the EIR, Rule 11-18 was designed to reduce risk from existing stationary sources located throughout the Bay Area. Potential risk reduction measures include measures that would limit emissions of TACs. New modifications are expected to be limited to the commercial and industrial facilities. The existing noise environment at each of the affected facilities is typically dominated by noise from existing equipment onsite, vehicular traffic around the facilities, and trucks entering and exiting facility premises. No new major industrial equipment was expected to

be required to be installed due to the implementation of Rule 11-18, so that no noise impacts associated with the operation of the rule are expected. Air pollution control equipment is not generally a major noise source. Further, all noise producing equipment must comply with local noise ordinances and applicable OSHA and Cal/OSHA noise requirements. Therefore, industrial operations affected by the Rule 11-18 were not expected to result in noise that would exceed levels established by local noise control laws or ordinances.

As discussed in the EIR, construction activities associated with Rule 11-18 may generate some noise associated with temporary construction equipment and construction-related traffic. Construction would likely require truck trips to deliver equipment, a construction crew of up to about 15 workers, and a few pieces of construction equipment (e.g., forklift, welders, backhoes, cranes, and generators). All construction activities would be temporary and are expected to occur within the confines of existing commercial or industrial facilities so that no significant increase in noise was expected.

As discussed in the EIR, Rule 11-18 was not expected to generate or expose people to excessive groundborne vibration or groundborne noise. No major construction equipment that would generate vibration (e.g., backhoes, graders, jackhammers, etc.) is expected to be required. Therefore, Rule 11-18 was not expected to generate excessive groundborne vibration or noise.

The currently proposed modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the noise resources impacts as evaluated in the EIR.

7.9 Population and Housing

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Induce substantial population growth in an area either directly (e.g., by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)?	No Impact	No	No	No	None
b) Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?	No Impact	No	No	No	None
c) Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?	No Impact	No	No	No	None

As discussed in the EIR, Rule 11-18 was not anticipated to generate any significant effects, either directly or indirectly, on the Bay Area's population or population distribution. The rule would affect commercial and industrial facilities. It is expected that the existing labor pool would accommodate the labor requirements for any new or modified equipment at the facilities. In addition, it is not expected that the affected facilities would need to hire additional personnel to implement the rule. In the event that new employees are hired, it is expected that the existing local labor pool in the Bay Area (comprised from a population of approximately seven million people) can accommodate any increase in demand for workers that might occur as a result of adopting the rule. As such, adopting Rule 11-18 was not expected to induce substantial population growth.

As discussed in the EIR, Rule 11-18 could result in the installation of air pollution control equipment operated in commercial and industrial settings. However, Rule 11-18 was not expected to result in the creation of any industry that would affect population growth, directly or indirectly induce the construction of single- or multiple-family units, or require the displacement of people or housing elsewhere in the Bay Area. Based upon these considerations, significant population and housing impacts were not expected from the implementation of the rule.

The currently proposed amendments to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the population and housing impacts as evaluated in the EIR.

7.10 Public Services

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:					
Fire protection?	No Impact	No	No	No	None
Police protection?	No Impact	No	No	No	None
Schools?	No Impact	No	No	No	None
Parks?	No Impact	No	No	No	None
Other public facilities?	No Impact	No	No	No	None

As discussed in the EIR, Rule 11-18 was designed to reduce toxic health risks from stationary sources in the Bay Area. Rule 11-18 could require minor construction activities and modifications at existing facilities. The modifications were not expected to require additional service from local fire or police departments above current levels.

As noted in the "Population and Housing" discussion above, implementation of Rule 11-18 was not expected to induce population growth because the local labor pool (e.g., workforce) is expected to be sufficient to accommodate any activities that may be necessary at affected facilities. Additionally, modifications to existing facilities were not expected to require an increase in employees. Therefore, there was no expected increase in local population and thus no impacts were expected to local schools or parks.

The rule would not result in the need for new or physically altered government facilities in order to maintain acceptable service ratios, response times, or other performance objectives. There was not an expected increase in population as a result of the adoption of the rule, therefore, no need for physically altered government facilities.

The currently proposed amendments to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the public services impacts as evaluated in the EIR.

7.11 Recreation

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	No Impact	No	No	No	None
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	No Impact	No	No	No	None

As discussed under "Land Use" above, there were no provisions in Rule 11-18 that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments; no land use or planning requirements will be altered by Rule 11-18. Air pollution control equipment, if necessary, would be installed within the confines of existing facilities, including refineries, and would not impact existing recreational facilities.

As noted in the "Population and Housing" discussion above, Rule 11-18 was not expected to induce population growth because the local labor pool (e.g., workforce) was expected to be sufficient to accommodate any activities that may be necessary at affected facilities. Additionally, operation of new air pollution control equipment is not expected to require a substantial increase in employees. Therefore, there was no expected increase in local population and thus no impacts were expected to local recreational facilities.

The currently proposed amendments to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the recreation impacts as evaluated in the EIR.

7.13 Transportation/Traffic

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior Analysis?
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	Less than Significant Impact	No	No	No	None
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	Less than Significant Impact	No	No	No	None
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	No Impact	No	No	No	None
d) Substantially increase hazards because of a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	No Impact	No	No	No	None

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior Analysis?
e) Result in inadequate emergency access?	No Impact	No	No	No	None
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	No Impact	No	No	No	None

As discussed in the EIR, Rule 11-18 was designed to reduce health risks from stationary sources in the Bay Area. Any new or modified pollution control equipment is expected to be located in commercial, industrial, or institutional facilities and may require construction activities. It was estimated that approximately 30 facilities per year were expected to meet reductions by implementing either a baghouse or an enclosure. The construction of enclosures is expected to require the most construction equipment and workers, e.g., up to 34 delivery and/or disposal trucks and up to about 45 construction worker trips on a peak construction day (during the building construction phase for enclosures). Given the size of the Bay Area, this amount of construction traffic would not be noticeable, particularly since construction activities would be expected at existing commercial, industrial and institutional land uses and would be temporary. Rule 11-18 was not expected to require modification to circulation for temporary construction activities. As a result, construction traffic from Rule 11-18 was not expected to have significant impacts on the performance of the circulation system or on standards established for congestion management.

Waste products may be generated from the use of several types of control technologies. Wastes could include: spent carbon generated from the carbon adsorption process; spent metal catalysts from the catalytic oxidation process; and dry solids from filtration controls. The majority of wastes will likely need to be transported to disposal or recycling facilities. The catalysts in catalytic oxidizers need to be replaced every few years so this potential waste product was considered to contribute to the waste transport impacts.

As discussed in the EIR, for a "worst case" analysis, it was assumed that about 180 facilities per year would be required to install a control device to comply with the rule. These facilities at any given day would generate an additional one-two truck trips per day in the entire Air District for delivery and disposal. These potential truck trips were not expected to significantly adversely affect circulation patterns on local roadways near affected facilities. In addition, this volume of additional daily truck traffic is negligible over the entire area of the Air District. Finally, the number of waste disposal transport trips substantially overestimates the number of anticipated trips

because owners/operators at affected facilities may use other types of add-on control equipment or limit throughput rates or operating times which would have no impact on traffic. No increase in worker traffic was expected as the operation of air pollution control equipment of the type expected under the rule is not expected to require any additional employees. Therefore, operational traffic under the Rule 11-18 was expected to be less than significant.

Rule 11-18 was not expected to involve the delivery of materials via air, so no increase in air traffic was expected. The addition of new or modified air pollution control equipment is not expected to change air traffic patterns or result in a change in location that results in substantial safety risks.

Rule 11-18 was not expected to increase traffic hazards or create incompatible uses. The Rule does not involve construction of any roadways or other transportation design features, so no changes to current roadway designs that would increase traffic hazards were expected. Emergency access at the commercial and industrial facilities affected by Rule 11-18 was not expected to be impacted by the rule. Each affected facility is expected to continue to maintain their existing emergency access. The rule was not expected to increase vehicle trips or to alter the existing long-term circulation patterns. The rule was not expected to require a modification to circulation, thus, no long-term impacts on the traffic circulation system were expected to occur.

Rule 11-18 was not expected to affect the performance of mass transit or non-motorized travel to street, highways and freeways, pedestrian or bicycle paths. No conflicts with any congestion management programs, to include level of service and travel demand measures, or other standards established by county congestion management agencies for designated roads or highways, were expected. No changes were expected to parking capacity at or in the vicinity of affected facilities as the rule only pertains to equipment located within existing commercial and industrial facilities. Therefore, no significant adverse impacts resulting in changes to traffic patterns or levels of service at local intersections were expected.

The currently proposed amendments to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the transportation/traffic impacts as evaluated in the EIR.

7.14 Utilities/Service Systems

Both Hydrology and Water Quality (discussed in Section 3.5 of the EIR) and Utilities and Service Systems (discussed in Section 3.6.3.13 of the EIR) deal with water demand and water quality impacts. The EIR discussed water demand and water quality impacts in the Hydrology and Water Quality section. This Addendum follows the same approach. Please note that although the checklist in this section identifies a significant impact related to water demand, this Addendum discusses that impact primarily in Section 6.4, above.

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	Less than Significant Impact	No	No	No	None
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	Less than Significant Impact	No	No	No	None
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	No Impact	No	No	No	None
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements needed?	Significant Impact	No	No	No	None
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less than Significant Impact	No	No	No	None
f) Be served by a landfill with sufficient permitted capacity to	Less than Significant Impact	No	No	No	None

	accommodate the project's solid waste disposal needs?					
g)	Comply with federal, state, and local statutes and regulations related to solid waste?	Less than Significant Impact	No	No	No	None

As discussed in the EIR, Rule 11-18 was designed to reduce health risks from stationary sources in the Bay Area. The facilities affected by the rule already exist and already use water, generate wastewater, treat wastewater, and discharges wastewater under existing wastewater discharge permits. The potential water demand impacts associated with implementation of Rule 11-18 were addressed under Hydrology and Water Quality (see above Section 6.4 for a summary of the water demand impacts). Water demand impacts were considered potentially significant in the EIR as certain types of air pollution control equipment (e.g., wet gas scrubbers) can require the use of substantial amounts of water (see Section 6.4.1 above for a more detailed discussion).

Wastewater/water quality impacts are also discussed in Section 6.4 and concluded to be less than significant. While certain types of air pollution control equipment may use substantial amounts of water, because of the expense and size associated with this type of equipment, it is expected that their use would be limited to large manufacturing facilities, e.g., refineries. Further, wet gas scrubbers can use substantial amounts of water, they lose a lot of water through steam generation and loss. Further, large manufacturing facilities are expected to have their own wastewater treatment facilities so any increase in wastewater would be handled by their own wastewater treatment facilities and any impacts on public facilities would be limited and less than significant.

Implementation of Rule 11-18 may require new or modified pollution control equipment within the confines of existing facilities. These modifications would not alter the existing drainage system or require the construction of new storm water drainage facilities. Nor would the changes required by the rule create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. Therefore, no significant adverse impacts on storm drainage facilities were expected.

Rule 11-18 would reduce health risk posed by existing commercial or industrial facilities. The primary method for reducing these health impacts would be to reduce emissions of TACs, including the use of control technology like baghouses and catalytic oxidizers. Baghouses and catalytic oxidizers will generate solid waste, but they are not expected to require annual replacement events. The baghouses and spent catalyst are only expected to generate a few tons of waste per change out. It is assumed that any hazardous material will be taken to the U.S. Ecology Beatty Nevada hazardous waste facility for treatment and disposal. U.S. Ecology, Inc. is currently receiving waste, and is in the process of extending the operational capacity for an additional 35 years (U.S. Ecology, 2015). Clean Harbors in Grassy Mountain, Utah is also available to receive hazardous waste and is expected to continue to receive waste for an additional 70 years (Clean Harbors, 2015). Therefore, the impacts of implementation of Rule 11-18 on hazardous waste landfills are less than significant. Rule 11-18 was not expected to generate any significant increase in solid waste. Therefore, no significant adverse impacts were expected to solid waste as a result of the rule.

The currently proposed amendments to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the utilities and service system impacts as evaluated in the EIR.

8.0 CHANGES TO THE CHECKLIST SINCE 2016

At the time the NOP/IS for the Rule 11-18 EIR was circulated for public review and comment, and at the time of the certification of the November 2017 EIR, the environmental checklist did not include tribal cultural resources or wildfires as specific environmental topics. However, the CEQA Guidelines have since been updated to include these specific topics.

Tribal cultural resources were previously generally included under Cultural Resources (see Section 7.4). As with other cultural resources, the facilities affected by Rule 11-18 are typically located in commercial or industrial areas that have previously been graded and developed. Because emission control devices for stationary sources do not typically require extensive cut-and-fill activities or excavation, it is unlikely that additional stationary source control measures that may be required by implementation of Rule 11-18 will adversely impact tribal cultural resources.

Wildland fires were previously addressed in Hazards and Hazardous Materials, in question h (see Section 6.3). As discussed in the October 2016 NOP/IS, no increase in hazards associated with wildfires was anticipated from implementing Rule 11-18. The existing facilities affected by the proposed rule already exist and operate within the confines of existing commercial or industrial areas. Native vegetation has been removed from the operating portions of the affected facilities to minimize fire hazards. Therefore, implementation of Rule 11-18 was not expected to increase the risk of hazards associated with wildland fires.

It should be noted that the checklist has also been revised for transportation to focus on vehicle miles travelled (VMT) as opposed to level of service or congestion impacts. VMT as per CEQA Guidelines Section 15064.3 refers to the amount and distance of automobile travel attributable to a project. The State Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA do not require that transportation or VMT analyses be calculated for trucks or construction activities associated with a project (OPR, 2018). Therefore, project-related trucks are not part of this assessment. Further, construction workers are temporary and traffic related to construction activities will cease following the completion of construction.

As discussed above, implementation of Rule 11-18 is not expected to require additional employees following the construction phase. As a result, implementation of Rule 11-18 is not anticipated to generate additional VMT associated with worker vehicles.

9.0 CONCLUSIONS

As explained in Sections 6.0 and 7.0 of this Addendum, the analysis of the currently proposed amendments to Rule 11-18 indicate that no new significant adverse impacts would be created for any environmental areas analyzed in the EIR, nor would the modifications make substantially more severe any existing significant adverse impacts. Further, none of the other triggers for additional environmental review in CEQA Guidelines Section 15162 are met. Based on the environmental analysis prepared for the currently proposed modifications to Rule 11-18, the Air District has quantitatively and qualitatively demonstrated that the currently proposed modifications to Rule 11-18 qualify for an Addendum to the previously certified EIR.

10.0 REFERENCES

Air District, 2022. Bay Area Air Quality Management District 2022 CEQA Guidelines, April 2022, https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines

Air District, 2016. NOP/IS for Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18) and Regulation 12: Miscellaneous Standard of Performance, Rule 16: Petroleum Refining Facility-Wide Emissions Limits (Rule 12-16), October, 2016. Available at: aaqmd.gov/~/media/dotgov/files/rules/regulation-11-rule-18/documents/20161012_nop_is_1216_1118-pdf.pdf?rev=c3eb782653e6492998e6f6f0580c3ec2&sc_lang=en

Air District, 2017a. Draft EIR for Regulation 11-18: Toxic Risk Reduction Rule and Regulation 12-16: Petroleum Refining Emissions Limits and Risk Thresholds, March 2017. Available at: https://www.baaqmd.gov/~/media/dotgov/files/rules/regulation-11-rule-18/documents/20170325_deir_1118_1216-pdf.pdf?rev=8a3cf32356ff4fc7a4c320c6c5c361db&sc_lang=en

Air District, 2017b. Recirculated Draft EIR for Regulation 11-18: Reduction of Risk from Air Toxic Emissions at Existing Facilities. August 2017. Available at: https://www.baaqmd.gov/~/media/dotgov/files/rules/regulation-11-rule-18/documents/20170901_rdeir_1118-pdf.pdf?rev=baa99d88fb0344cb9b4acba35eeec4a5&sc_lang=en

Air District, 2017c. November 2017, Recirculated Final EIR, Regulation 11-18: Reduction of Risk from Air Toxic Emissions at Existing Facilities. November 2017. Available at: https://www.baaqmd.gov/~/media/dotgov/files/rules/regulation-11-rule-18/documents/20171115_rfeir_1118-pdf.pdf?rev=055e56fae4e0474dbbc1393e5252f22e&sc_lang=en

Office of Planning and Research, 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. Available at: https://lci.ca.gov/docs/20190122-743_Technical_Advisory.pdf

Bay Area Air District

APPENDIX E

Environmental Impact Report for Rule 11-18

This page has been intentionally left blank.

Recirculated
Final Environmental Impact Report for the Bay Area Air Quality Management District

Regulation 11-18: Reduction of Risk From Air Toxic Emissions at Existing Facilities

State Clearinghouse No. 2016102043

Prepared for:

Bay Area Air Quality Management District
375 Beale St., Suite 600
San Francisco, CA 94105
Contact: Victor Douglas
(415) 749-4752

Prepared By:

Environmental Audit, Inc.
1000-A Ortega Way
Placentia, CA 92870
Contact: Debra Bright Stevens
(714) 632-8521

November 2017

This page intentionally left blank.

Table of Contents

Recirculated Final Environmental Impact Report for Regulation 11-18: Reduction of Risk from Air Toxic Emissions at Existing Facilities

Page No.

PREFACE AND COMMENT INSTRUCTIONS

CHAPTER 1 – INTRODUCTION

1.1 Introduction 1-1
1.2 California Environmental Quality Act 1-1
1.2.1 Notice of Preparation and Initial Study. 1-1
1.2.2 Type of EIR. 1-2
1.2.3 Intended Use of this Document. 1-3
1.2.4 Areas of Potential Controversy. 1-3
1.3 Executive Summary: Chapter 2 – Project Description. 1-4
1.3.1 Project Objectives 1-4
1.3.2 Sources Affected by Rule 11-18 and Applicable Control Technologies. 1-5
1.4 Executive Summary: Chapter 3 – Environmental Setting, Impacts, and Mitigation Measures. 1-6
1.4.1 Air Quality 1-6
1.4.2 Greenhouse Gas Emissions 1-8
1.4.3 Hazards and Hazardous Materials 1-9
1.4.4 Hydrology and Water Quality 1-10
1.4.5 Utilities and Service Systems 1-11
1.5 Executive Summary: Chapter 4 – Alternatives 1-12
1.6 Executive Summary: Chapter 5 – References 1-13

CHAPTER 2 – PROJECT DESCRIPTION

2.1 Introduction 2-1
2.2 Project Location 2-1
2.3 Project Objectives 2-3
2.4 Background and Project Description 2-3
2.4.1 Background 2-3
2.4.2 Rule 11-18 Project Description. 2-5
2.5 Sources Affected by Rule 11-18 and Applicable Control Technologies 2-8
2.5.1 Sources that May be Subject to Regulation 11, Rule 18 2-9
2.5.2 TAC Emission Control Technologies 2-20

Page No.

CHAPTER 3- ENVIRONMENTAL SETTING, IMPACTS, MITIGATION MEASURES AND CUMULATIVE IMPACTS

3.1 Introduction. 3.1-1
3.1.1 Environmental Setting. 3.1-1
3.1.2 Significance Criteria 3.1-2
3.1.3 Environmental Impacts. 3.1-2
3.1.4 Mitigation Measures. 3.1-3
3.1.5 Cumulative Impacts. 3.1-4
3.2 Air Quality. 3.2-1
3.2.1 Environmental Setting. 3.2-1
3.2.2 Regulatory Setting 3.2-15
3.2.3 Significance Criteria 3.2-21
3.2.4 Environmental Impacts 3.2-22
3.2.5 Mitigation Measures 3.2-45
3.2.6 Cumulative Impacts 3.2-47
3.3 Greenhouse Gas Emissions…. 3.3-1
3.3.1 Environmental Setting 3.3-2
3.3.2 Regulatory Setting. 3.3-7
3.3.3 Thresholds of Significance. 3.3-14
3.3.4 Environmental Impacts. 3.3-15
3.3.5 Mitigation Measures 3.3-27
3.4 Hazards and Hazardous Materials. 3.4-1
3.4.1 Environmental Setting. 3.4-1
3.4.2 Regulatory Setting. 3.4-4
3.4.3 Significance Criteria 3.4-17
3.4.4 Environmental Impacts. 3.4-18
3.4.5 Mitigation Measures. 3.4-22
3.4.6 Cumulative Impacts 3.4-24
3.5 Hydrology and Water Quality. 3.5-1
3.5.1 Environmental Setting. 3.5-1
3.5.2 Regulatory Setting. 3.5-9
3.5.3 Significance Criteria 3.5-15
3.5.4 Environmental Impacts 3.5-16
3.5.5 Mitigation Measures. 3.5-22
3.5.6 Cumulative Impacts. 3.5-23
3.6 Other CEQA Sections. 3.6-1
3.6.1 Growth Inducing Impacts. 3.6-1
3.6.2 Significant Environmental Effects Which Cannot be Avoided and Significant Irreversible Environmental Changes. 3.6-3
3.6.3 Potential Environmental Impacts Found Not to be Significant 3.6-3

Page No.

CHAPTER 4 – ALTERNATIVES ANALYSIS

4.1 Discussion of Alternatives 4-1
4.2 Description of the Project Alternatives 4-2
4.2.1 Alternative 1 – No Project Alternative 4-2
4.2.2 Alternative 2 – Set Risk Action Level at 25/M Cancer and 2.5 Hazard Indices. 4-2
4.3 Environmental Impacts of Project Alternatives to Rule 11-18 4-3
4.3.1 Alternative 1 – No Project Alternative 4-3
4.3.2 Alternative 2 – Set Risk Action Level at 25/M Cancer and 2.5 Hazard Indices. 4-5
4.4 Environmentally Superior Alternative 4-9
4.4.1 Alternative 2.1 – No Project Alternative 4-9
4.4.2 Alternative 2.2 – Set Risk Action Level at 25/M Cancer and 2.5 Hazard Indices 4-10
4.5 Comparison of Alternatives 4-10
4.5.1 Comparison of Alternatives to Rule 11-18 4-11

CHAPTER 5 – REFERENCES

5.1 References 5-1
5.2 Organizations and Persons Consulted 5-6
5.3 List of Environmental Impact Report Preparers 5-6

APPENDIX A: NOP/IS for Regulation 11-18 and 12-16 Original Draft
APPENDIX B: Emission Calculations
APPENDIX C: Response to Comments on the Recirculated DEIR

Page No.

FIGURES:

Figure 2.2-1 Bay Area Air Quality Management District 2-2
Figure 3.2-1 Cancer Risk Weighted Toxics Trends 3.2-13

TABLES:

Table 1-1 Summary of Environmental Impacts, Mitigation Measures and Residual Impacts 1-14
Table 2.4-1 Implementation Phases 2-5
Table 2.5-1 Summary of Toxic Air Contaminant Emitting Facilities and Sources. 2-10
Table 2.5-2 Risk Reduction Measures and Target Substances 2-22
Table 2.5-3 Summary of Toxic Air-Contaminant Control Equipment 2-29
Table 2.5-4 Air Pollution Control Equipment Potentially Installed under Rule 11-18 2-30
Table 3.2-1 Federal and State Ambient Air Quality Standards 3.2-2
Table 3.2-2 Bay Area Pollution Summary - 2015. ..... 3.2-3
Table 3.2-3 Bay Area Air Quality Summary Days over Standards. 3.2-5
Table 3.2-4 2011 Air Emission Inventory – Annual Average 3.2-9
Table 3.2-5 Summary of 2014 BAAQMD Ambient Air Toxics Monitoring Data 3.2-14
Table 3.2-6 Summary of Bay Area Air Toxics Hot Spots Program Risk Management Thresholds 3.2-19
Table 3.2-7 Thresholds of Significance for Construction-Related Criteria Air Pollutants and Precursors 3.2-21
Table 3.2-8 Thresholds of Significance for Operation-Related Criteria Air Pollutants and Precursors 3.2-22
Table 3.2-9 Emission Factors Associated with Typical Construction Equipment 3.2-24
Table 3.2-10 Construction Equipment Used to Install a Tier 4 ICE 3.2-25
Table 3.2-11 Construction Emissions from Installing a Tier 4 ICE 3.2-26
Table 3.2-12 Construction Emissions for Retrofitting Diesel ICEs 3.2-27
Table 3.2-13 Estimated Peak Day Off-Road Construction Emissions from Installing One Wet Gas Scrubber, Baghouse, or ESP 3.2-28
Table 3.2-14 Estimated Construction Emissions for New Air Pollution Control Equipment 3.2-29
Table 3.2-15 Estimated Peak Day Off-Road Construction Emissions from Installing One Carbon Adsoprtion Unit, One Thermal Oxidizer, or One Catalytic Oxidation Unit 3.2-30
Table 3.2-16 Construction Emissions for a Carbon Adsorption, Thermal Oxidizer or Catalytic Oxidation Unit 3.2-31
Table 3.2-17 Emissions for Construction of Enclosures 3.2-32
Table 3.2-18 Estimated Peak Day Off-Road Construction Emissions from Installing One Refinery Wet Gas Scrubber 3.2-33
Table 3.2-19 Estimated Construction Emissions for Wet Gas Scrubbers 3.2-34
Table 3.2-20 Worst-Case Construction Emissions Under Rule 11-18 ..... 3.2-36
Table 3.2-21 Potential Operational Air Quality Impacts from Installing Air Pollution Control Equipment 3.2-37

Page No.

Table 3.2-22 Emission Reductions Associated with New Diesel ICEs 3.2-38
Table 3.2-23 Estimated Operational Emissions Impacts from Carbon Adsorption Regeneration 3.2-40
Table 3.2-24 Potential Operational Air Quality impacts from Thermal Oxidizers 3.2-41
Table 3.2-25 Delivery Truck Emissions 3.2-42
Table 3.2-26 Worst-Case Operational Emissions under Rule 11-18 ..... 3.2-43
Table 3.3-1 Greenhouse Gases Addressed in the 2016 Plan 3.3-3
Table 3.3-2 California Greenhouse Gas Emission and Sinks Summary 3.3-4
Table 3.3-3 2015 BAAQMD Greenhouse Gas Emission Inventory 3.3-5
Table 3.3-4 Bay Area GHG Emission Trends by Major Sources 3.3-6
Table 3.3-5 GHG Emission Estimates for Typical Construction Equipment Assuming an 8-Hour Operational Day 3.3-17
Table 3.3-6 GHG Emissions During Construction Associated with Replacing ICEs 3.3-18
Table 3.3-7 GHG Emissions During Construction Associated with Retrofitting ICEs 3.3-18
Table 3.3-8 GHG Emissions During Construction of Medium Sized Air Pollution Control Equipment 3.3-19
Table 3.3-9 GHG Emissions During Construction of Carbon Adsorption Units/Thermal Oxidizer/Catalytic Oxidation Unit 3.3-19
Table 3.3-10 GHG Emissions During Construction of Enclosures 3.3-20
Table 3.3-11 GHG Emissions from Installing Refinery Wet Gas Scrubbers 3.3-21
Table 3.3-12 Worst-Case Construction GHG Emissions Under Rule 11-18 ..... 3.3-22
Table 3.3-13 Potential Operational GHG Impacts from Installing Air Pollution Control Equipment under Rule 11-18 ..... 3.3-23
Table 3.3-14 Potential Direct GHG Emission Impacts Associated with Carbon Adsorption Units 3.3-24
Table 3.3-15 Potential Direct GHG Emission Impacts Associated with Thermal Oxidizers 3.3-24
Table 3.3-16 Annual GHG Emissions from Delivery Truck Trips 3.3-25
Table 3.3-17 GHG Emissions from Electricity Use at Wet Gas Scrubbers 3.3-26
Table 3.3-18 Predicted Operational GHG Emissions Rule 11-18 ..... 3.3-26
Table 3.4-1 Hazardous Materials Incidents 2016 by County 3.4-3
Table 3.4-2 Hazardous Materials Incidents 2016 ..... 3.4-3
Table 3.4-3 NFPA 704 Hazards Rating Code 3.4-10
Table 3.4-4 Potential Hazards Impacts from Installing Air Pollution Control Equipment under Rule 11-18 ..... 3.4-18
Table 3.5-1 Watersheds of the San Francisco Bay Hydrologic Region 3.5-3
Table 3.5-2 Summary of Bay Area Region Water Supply and Demand 3.5-6
Table 3.5-3 Potential Control Technologies and Potential Water Use and Wastewater Generation During Equipment Operations 3.5-17
Table 3.5-4 Estimated Water Use during Construction of Medium and Large Control Equipment 3.5-19

Page No.

Table 3.5-5 Estimated Operational Water Use of Wet Gas Scrubbers 3.5-20
Table 3.6-1 Impacts Identified as Potentially Significant in this EIR..... 3.6-3
Table 4-1 Comparison of Air Polluted Control Equipment under Proposed Rule 11-18 and Alternative 2..... 4-3
Table 4-2 Estimated Construction Emissions Under Alternatives to Rule 11-18..... 4-5
Table 4-3 Estimated Criteria Pollutant Operational emissions Under Alternative 2 to Rule 11-18 4-6
Table 4-4 Estimated Construction GHG Emissions Under Alternative 2 to Rule 11-18 4-7
Table 4-5 Estimated Operational GHG Emissions Under Alternative 2 to Rule 11-18 4-8
Table 4-6 Estimated Operational Water Use Under Alternative 2..... 4-9
Table 4-7 Comparison of Alternatives to Proposed Rule 11-18 4-11

PREFACE AND COMMENT INSTRUCTIONS

Background
CEQA Recirculation Requirements
Changes to Recirculated Final EIR
Public Review Requirements for Recirculated Draft EIR
Comments on the Recirculated Draft EIR
Final Recirculated EIR

This page intentionally left blank.

PREFACE

BACKGROUND

The Air District seeks to adopt new Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18 or “Toxic Risk Reduction Rule”). A draft EIR ("original DEIR") addressing this project in combination with another proposed project, Regulation 12, Rule 16: Petroleum Refining Facility-Wide Emission Limits, was circulated for public review during the period from March 24, 2017, to May 8, 2017 (State Clearinghouse No. 2016102043). The original DEIR was structured to address the impacts of adopting either or both proposed rules. The Air District is now proposing to adopt Rule 11-18 alone. Rule 12-16 is not being considered for adoption at this time. To address this change in the project description and to address minor changes in proposed Rule 11-18 language, the Air District prepared a Recirculated Draft Environmental Impact Report ("recirculated DEIR or RDEIR") and a Recirculated Final Environmental Impact Report (“recirculated FEIR or RFEIR”), which addresses only Rule 11-18 and its potential impacts. Although proposed Rule 11-18 language has been revised, the revisions do not result in new or different impacts and do not alter the conclusions of the original DEIR. The RDEIR was recirculated to avoid any confusion that might arise from reliance on the original DEIR, to provide an additional opportunity for public comment on the project, and to create a more readable document for use by the Air District's Board of Directors when they consider adoption of Rule 11-18.

CEQA RECIRCULATION REQUIREMENTS

CEQA Guidelines §15088.5 require recirculation of an EIR when significant new information is added after notice of public review has been given, but prior to certification of the EIR. New information "can include changes in the project or environmental setting as well as additional data or other information," but the new information is not considered significant unless the EIR is "changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse effect ... or a feasible way to mitigate or avoid such an effect...."

Although the changes incorporated into this RFEIR do not appear to be "significant new information" that would require recirculation under Guidelines §150188.5, the Air District wished to provide an additional opportunity for public comment. Nothing in CEQA or the CEQA Guidelines describes optional grounds for recirculation, but nothing in these laws prohibit recirculation solely to further "the purposes of CEQA," at least where, as here, there is no private permit applicant concerned with the economic costs of "voluntary" recirculation, and the proposed project is not subject to the 1-year deadline for completing EIRs found in Public Resources Code §§21100.2(a)(1) and 21151.5(a)(1).

CHANGES TO RECIRCULATED FINAL EIR

The proposed changes to the project incorporated into this RFEIR largely fall into two categories: (1) elimination of all language related to proposed Regulation 12, Rule 16, and (2) the revision of descriptions of Regulation 11, Rule 18 to reflect currently-proposed rule language. Given the extensive deletion of language throughout, the draft EIR was recirculated in its entirety.

PUBLIC REVIEW REQUIREMENTS FOR RECIRCULATED DRAFT EIR

A recirculated DEIR is subject to the same notice and review requirements that applied to the original DEIR. This RDEIR was made available for a 45-day public comment period, beginning September 1, 2017 and ending on October 16, 2017 at 5:00 p.m. Members of the public and other interested agencies and individuals were invited to provide comments on the entire RDEIR. In addition, as required by CEQA Guidelines §15088.5, the Air District provided separate notice of recirculation to those who commented on the original DEIR, inviting comments as described below.

COMMENTS ON THE RECIRCULATED DRAFT EIR

Recirculation of a draft EIR usually results in receipt of a second set of comments, some of which may duplicate comments on the original DEIR or may no longer be relevant because of project revisions. The CEQA Guidelines provide mechanisms to help an agency avoid the confusion that can result from responding to two sets of comments. Under CEQA Guidelines §15088.5(f)(1), when, an agency recirculates an entire draft EIR, the agency may require reviewers to submit new comments and need not respond to comments received during the earlier circulation period, provided the agency advises reviewers that it will not respond to the earlier comments. **The Air District advised reviewers that new comments must be submitted on the recirculated DEIR. The Air District will not respond to comments received on the original DEIR, except that anyone who previously commented in writing may comment on the RDEIR by writing and identifying prior comments (preferably by date of comment and any identifying numbering used) and asking that the specified comments be considered as comments on the RDEIR.**

FINAL RECIRCULATED EIR

This document constitutes the Final Recirculated Environmental Impact Report (EIR) for the Air District Regulation 11-18: Reduction of Risk from Air Toxics Emissions at Existing Facilities. A total of five comment letters were received on the RDEIR. The comment letters and responses are included in Appendix C of this document. The comments were evaluated and minor modifications have been made to the RDEIR such that it is now a Final EIR. None of the modifications alter any conclusions reached in the

RDEIR, nor provide new information of substantial importance relative to the draft document that would require recirculation of the RDEIR pursuant to CEQA Guidelines §15088.5. Therefore, this document is now a Final EIR. Additions to the text of the Final EIR are denoted using underline. Text that has been eliminated is shown using ~~strike outs~~. To avoid confusion, the Table of Contents have been revised but the underline/~~strike out~~ have not been included.

CHAPTER 1

INTRODUCTION AND EXECUTIVE SUMMARY

Introduction
Areas of Potential Controversy
Executive Summary: Chapter 2 – Project Description
Executive Summary: Chapter 3 – Environmental Setting, Impacts and Mitigation Measures
Executive Summary: Chapter 4 – Alternatives Analysis
Executive Summary: Chapter 5 – References

This page intentionally left blank.

1.0 INTRODUCTION AND EXECUTIVE SUMMARY

1.1 INTRODUCTION

The Bay Area Air Quality Management District (BAAQMD or Air District) was established in 1955 by the California Legislature to control air pollution in the counties around San Francisco Bay and to attain federal air quality standards by the dates specified in federal law. There have been significant improvements in air quality in the Bay Area over the last several decades. The BAAQMD is also required to meet state standards by the earliest date achievable.

This EIR addresses the impacts due to implementation of Regulation 11, Rule 18, Toxic Risk Reduction Rule. The development of Rule 11-18 was included as Stationary Source Control Measure SS20 in the Air District's 2017 Clean Air Plan.

The Air District seeks to adopt new Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18 or "Toxic Risk Reduction Rule"). Rule 11-18 would apply to all facilities whose emissions of toxic air contaminants may result in a significant risk to nearby residents and workers – this would include numerous industrial and commercial sources. The purpose of Rule 11-18 is to focus on those facilities causing the highest health impacts across the Bay Area and to require these facilities to reduce their health risk. The proposed rule would potentially affect hundreds of facilities, including data centers, petroleum refineries, a cement kiln, chemical plants, etc. These facilities emit a variety of TACs that can adversely impact public health. These pollutants include compounds such as diesel particulate matter (DPM), benzene, polycyclic aromatic hydrocarbons (PAHs), and 1,3-butadiene. These toxic emissions disproportionately impact vulnerable communities in the Bay Area. Therefore, any risk reduction from existing facilities achieved by this proposed Rule is expected to provide greater benefit to these communities.

1.2 CALIFORNIA ENVIRONMENTAL QUALITY ACT

The California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq., requires that the potential environmental impacts of proposed projects be evaluated and that feasible methods to reduce or avoid identified significant adverse environmental impacts of these projects be identified. To fulfill the purpose and intent of CEQA, the Air District has prepared this Environmental Impact Report (EIR) under the requirements of CEQA Guidelines §15187 to address the potential environmental impacts associated with the proposed Rule 11-18. Prior to making a decision on the adoption of the proposed Toxic Risk Reduction Rule, the Air District Board of Directors must review and certify the EIR as providing adequate information on the potential adverse environmental impacts of implementing the proposed new Rule 11-18.

1.2.1 NOTICE OF PREPARATION/INITIAL STUDY

A Notice of Preparation for the Draft EIR for Rule 11-18, the Toxics Risk Reduction Rule, and 12-16, the Refinery Caps Rule (included as Appendix A of this EIR) was distributed to

responsible agencies and interested parties for a 30-day review on October 16, 2016. A notice of the availability of this document was distributed to other agencies and organizations and was placed on the Air District's web site, and was also published in newspapers throughout the area of the Air District's jurisdiction. Six public comment letters were submitted on the NOP to the Air District and are included in Appendix A of this EIR.

The NOP/IS identified the following environmental resources as being potentially significant, requiring further analysis in the EIR: air quality, greenhouse gases, hazards and hazardous materials, hydrology and water quality, and utilities and service systems. Please note that the hydrology and water quality impacts were determined to be potentially significant due to the potential increase in water demand. The utilities and service systems impacts were also determined to be potentially significant due to increased water demand. To avoid repetition, the potential water demand impacts have been consolidated and evaluated under hydrology and water impacts only. The following environmental resources were considered to be less than significant in the NOP/IS: aesthetics, agriculture and forestry resources, biological resources, cultural resources, geology/soils, land use/planning, mineral resources, noise, population/ housing, public services, recreation, and transportation/traffic (see Appendix A).

Some of the impacts identified in the Initial Study were related to Rule 12-16 which is no longer included as part of this project. Nonetheless, the potential impacts identified in the Initial Study prepared for both rules will be evaluated in this EIR.

1.2.2 TYPE OF EIR

In accordance with §15121(a) of the State CEQA Guidelines (California Administrative Code, Title 14, Division 6, Chapter 3), the purpose of an EIR is to serve as an informational document that: "will inform public agency decision-makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project." The EIR is an informational document for use by decision-makers, public agencies and the general public. The proposed project requires discretionary approval and, therefore, it is subject to the requirements of CEQA (Public Resources Code, §21000 et seq.).

The focus of this EIR is to address the environmental impacts of the implementation of Regulation 11-18 as identified in the NOP and Initial Study (included as Appendix A of this EIR). The degree of specificity required in an EIR corresponds to the degree of specificity involved in the underlying activity described in the EIR (CEQA Guidelines §15146). Rule 11-18 would apply to a variety of sources and focus on those facilities causing the highest toxic air pollution health impacts across the Bay Area and would require these facilities to reduce those health risks. Since the need for emission reductions has not yet been precisely determined, the actual control measures that will be required to reduce emissions, if any, is unknown. Therefore, the EIR evaluates the impacts of potential emissions control measures that could be utilized.

1.2.3 INTENDED USES OF THIS DOCUMENT

In general, a CEQA document is an informational document that informs a public agency's decision-makers, and the public generally, of potentially significant adverse environmental effects of a project, identifies possible ways to avoid or minimize the significant effects, and describes reasonable alternatives to the project (CEQA Guidelines §15121). A public agency's decision-makers must consider the information in a CEQA document prior to making a decision on the project. Accordingly, this EIR is intended to: (a) provide the Air District's Board of Directors and the public with information on the environmental effects of the proposed project; and, (b) be used as a tool by the Air District's Board to facilitate decision making on the proposed project.

Additionally, CEQA Guidelines §15124(d)(1) requires a public agency to identify the following specific types of intended uses of a CEQA document:

1. A list of the agencies that are expected to use the EIR in their decision-making;

2. A list of permits and other approvals required to implement the project; and

3. A list of related environmental review and consultation requirements required by federal, state, or local laws, regulations, or policies.

Local public agencies, such as cities, and counties could be expected to tier off this EIR if local approval is required for the installation of air pollution control equipment that may be required when implementing Rule 11-18, pursuant to CEQA Guidelines §15152. There is no State, federal or local permits required to adopt the proposed Rule. However, implementation of Rule 11-18 could require permits from local governments (e.g., cities and counties with land use approval).

1.2.4 AREAS OF POTENTIAL CONTROVERSY

In accordance with CEQA Guidelines §15123(b)(2), the areas of controversy known to the lead agency including issues raised by agencies and the public shall be identified in the EIR. As noted above, six comment letters were received on the NOP/IS. Issues and concerns raised in the comment letters included: (1) concerns that the Air District has piecemealed the CEQA refinery projects; (2) concerns that refinery expansion projects and trends toward increased exports have not been included; (3) concerns about potential legal conflicts and consistency with the Clean Air Act, as well as California Air Resources Board's (CARB's) Cap and Trade Program; (4) an adequate environmental setting should be included; (5) an alternative to use the 25 per million (25/M) risk threshold option and other concerns regarding the alternatives analysis; and (6) cross-media environmental impacts should be evaluated. Some of the areas of controversy were related to Rule 12-16 which is no longer included as part of the proposed project. Copies of the comment letters on the NOP/IS are provided in Appendix A.

1.3 EXECUTIVE SUMMARY: CHAPTER 2 – PROJECT DESCRIPTION

The Air District seeks to adopt new proposed Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18 or "Toxic Risk Reduction Rule"). Rule 11-18 would apply to all facilities in the Bay Area whose emissions of toxic air contaminants may result in a significant risk to nearby residents and workers. The purpose of Rule 11-18 is to reduce the public's exposure to health risks associated with the emissions of toxic air contaminants (TACs) from stationary sources by reducing those risks to the lowest feasible levels. Proposed Rule 11-18 would use the most up-to-date assumptions about the toxic risk of compounds and would require an affected facility to take action to reduce its risk below a specified risk threshold if the facility exceeds the risk thresholds. If the facility could not devise a means to reduce the risk below the specified risk level, the facility would be required to install best available retrofit control technology for toxic pollutants (TBARCT) on every significant source of TAC emissions at the facility.

The Air District would screen all facilities that report toxic emissions. From this screening, the Air District would determine each facility's prioritization score. The Air District would conduct health risk assessments (HRA) for facilities with a cancer risk prioritization score of 10 or greater or a non-cancer prioritization score of 1.0 or greater. The HRAs would incorporate the Office of Environmental Health Hazard Assessment (OEHHA) new protocols and health risk values adopted in March 2015, the Risk Management Guidelines adopted in July 2015 by the CARB and the California Air Pollution Control Officers Association (CAPCOA), as well as revised Air District HRA guidelines. The Air District would prioritize the development of the HRAs according to prioritization score and then according to type of facility. Until January 1, 2020, facilities that pose a cancer risk in excess of 25 per million or a chronic or acute hazard index in excess of 2.5 must either:

- Reduce the facility cancer risk below 10 per million (10/M) and reduce the chronic and acute hazard indices below 1.0 within five years; or

- Install TBARCT on all significant sources of toxic emissions.

On January 1, 2020, the risk action levels drop from 25/M for cancer risk and 2.5 for hazard indices to 10/M and 1.0 respectively. Proposed Rule 11-18 includes an exemption for gasoline dispensing facilities (gas stations) and facilities for which the only source of TACs is one or more emergency standby engines if that facility has a prioritization score that is less than 250.

1.3.1 PROJECT OBJECTIVES

The objectives of Toxic Risk Reduction Rule (Rule 11-18) are to:

- Reduce the public's exposure to health risks associated with the emissions of TACs from stationary sources to the lowest levels achievable;

- Incorporate the most up-to-date health risk methodologies and health values into the Air District's risk evaluation process for existing stationary sources of TACs;

- Ensure the facilities that impact the most sensitive and overburdened communities reduce their associated health risk in an efficient and expeditious manner;

- Provide the public opportunity to comment on the draft HRAs to provide transparency and clarity to the process; and

- Provide the public opportunity to comment on risk reduction plans as they are drafted by the affected facilities.

1.3.2 SOURCES AFFECTED BY RULE 11-18 AND APPLICABLE CONTROL TECHNOLOGIES

Proposed Rule 11-18 would apply to sources that generate TAC emissions and include a variety of emission sources, as identified below.

- Refineries
- Data Centers
- Cement Manufacturing
- Chemical Plants
- Crematoria
- Landfills
- Foundries and Forges
- Hospitals
- Sewage Treatment Facilities
- Power Plants
- Military Facilities
- Manufacturing Facilities

Draft Rule 11-18 would apply to existing facilities and would require preparation of a risk reduction plan for those facilities that pose a health risk in excess of the proposed risk action levels, until January 1, 2020: 25/M cancer risk or 2.5 hazard indices, and 10 per million cancer risk level or a 1.0 hazard indices thereafter. Facilities that exceed the risk action levels must either: implement an Air District-approved risk reduction plan that details how the facility would reduce its health risk below the risk action level in the specified timeframe or demonstrate to the Air District that all significant sources of risk are controlled with best available retrofit control technology for toxics (TBARCT).

To comply with the risk action levels for those affected facilities that are required to prepare a risk reduction plan, operators could reduce operations or install TBARCT equipment. Risk reduction measures may include the use of emission capture and control technologies that are intended to capture and remove a TAC or to convert a TAC into a less toxic material. However,

risk reduction measures may also include use of alternative system designs, products, or technologies that reduce or prevent TAC emissions or other measures that reduce the amount of TACs that nearby individuals are exposed to. The most common risk reduction measures that are likely to be encountered as a result of the proposed Rule 11-18 are categorized into the following groups:

- Enclosures and collection systems for particulate matter TACs;
- Filtration for toxic aerosols and particulate matter;
- Carbon adsorption and adsorption-oxidation systems for VOCs;
- Chemical absorption for VOCs;
- Thermal and catalytic oxidation for inorganic gases (such as hydrogen sulfide) and organic compounds;
- Replace old equipment with newer, more efficient equipment;
- Changes in facilities operations;
- Reduced throughput or operating time for particulate matter TACs and organic compound TACs;
- Alternative technologies; and
- Product substitution.

1.4 EXECUTIVE SUMMARY: CHAPTER 3 – ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES

This chapter of the Final EIR describes the existing environmental setting in the Bay Area, analyzes the potential environmental impacts of Rule 11-18 and recommends mitigation measures (when significant environmental impacts have been identified). The chapter provides this analysis for each of the environmental areas identified in the Initial Study (see Appendix A), including: (1) Air Quality; (2) Climate Change and Greenhouse Gas Emissions; (3) Hazards and Hazardous Materials; and (4) Hydrology and Water Quality. Included for each impact category is a discussion of the environmental setting, significance criteria, whether the proposed rule will result in any significant impacts (either individually or cumulatively in conjunction with other projects), and feasible project-specific mitigation (if necessary and available). The Initial Study concluded that potential water demand impact on hydrology/water quality and utilities/service systems were potentially significant. Note that the potential water demand impacts have been consolidated into one discussion under hydrology and water quality to avoid repetition.

1.4.1 AIR QUALITY

1.4.1.1 Air Quality Setting

It is the responsibility of the Air District to ensure that State and federal ambient air quality standards are achieved and maintained in its geographical jurisdiction. Health-based air quality standards have been established by California and the federal government for the following criteria air pollutants: ozone, CO, nitrogen dioxide (NO_2), particulate matter (PM10 and PM2.5), sulfur dioxide (SO_2), and lead. These standards were established to protect sensitive receptors

with a margin of safety from adverse health impacts due to exposure to air pollution. California has also established standards for sulfate, visibility, hydrogen sulfide, and vinyl chloride.

The Air District is in attainment of the State Ambient Air Quality Standards for CO NO_2, and SO_2. However, the Bay Area does not comply with the State 24-hour PM10 standard. The Air District is unclassifiable/attainment for the federal NO, NO_2, SO_2, lead, and PM10 standards. A designation of unclassifiable/attainment means that the U.S. EPA has determined to have sufficient evidence to find the area either is attaining or is likely attaining the National Ambient Air Quality Standards. The Bay Area is designated as a non-attainment area for the federal and state 8-hour ozone standard and the federal 24-hour PM2.5 standard. The State 8-hour standard was exceeded on 12 days in 2015 in the Air District; most frequently in the Eastern District (Livermore, Patterson Pass, and San Ramon). The federal 8-hour standard was exceeded on 12 days in 2015.

The Air District monitors and maintains databases that contain information concerning criteria pollutant and TAC emissions from sources in the Bay Area. The criteria pollutant emission concentrations and inventory data are used to determine compliance with state and federal ambient air quality standards as well as to determine the most appropriate approach to complying with ambient air quality standards. TAC emission inventories are used to plan strategies to reduce public exposure to TACs. The primary health risk of concern due to exposure to TACs is the risk of contracting cancer. The carcinogenic potential of TACs is a particular public health concern because many scientists currently believe that there are not "safe" levels of exposure to carcinogens without some risk to causing cancer. Based on ambient air quality monitoring, and using OEHHA cancer risk factors, the estimated lifetime cancer risk for Bay Area residents, over a 70-year lifespan from all TACs combined, declined from 4,100 cases per million in 1990 to 690 cases per million people in 2014.

1.4.1.2 Air Quality Impacts

Based on the evaluation of those air pollution control technologies that would most likely be used to reduce TAC emissions from affected facilities if required pursuant to proposed Rule 11-18, construction and secondary operational air quality impacts from the proposed project could generate emissions that exceed the Air District's construction emission thresholds. Therefore, construction air quality impacts are concluded to be significant for ROG, NOx, PM10 and PM2.5 emissions. Air quality emissions were determined to be less than significant during the operational phases associated with implementation of Rule 11-18.

Mitigation measures were identified for the potentially significant construction emissions impact; nonetheless, it is likely that these emissions would remain significant following mitigation.

1.4.2 GREENHOUSE GAS EMISSIONS

1.4.2.1 Greenhouse Gas Emissions Setting

Global climate change refers to changes in average climatic conditions on the earth as a whole, including temperature, wind patterns, precipitation and storms. Global warming, a related concept, is the observed increase in the average temperature of the earth's surface and atmosphere. One identified cause of global warming is an increase of greenhouse gases (GHGs) in the atmosphere. The six major GHGs identified by the Kyoto Protocol are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), haloalkanes (HFCs), and perfluorocarbons (PFCs), plus black carbon.

It is the increased accumulation of GHGs in the atmosphere that may result in global climate change. Climate change involves complex interactions and changing likelihoods of diverse impacts. Due to the complexity of conditions and interactions affecting global climate change, it is not possible to predict the specific impact, if any, attributable to GHG emissions associated with a single project, which is why GHG emission impacts are considered to be a cumulative impact.

Transportation sources generate approximately 40 percent of the total GHG emissions in the District. The remaining 60 percent of the total District GHG emissions are from stationary and area sources.

1.4.2.2 Greenhouse Gas Emissions Impacts

Most GHG emissions sources at facilities that would be regulated by proposed Rule 11-18 would include equipment or processes, primarily combustion sources that are part of the facilities' operations. Though the proposed project may include combustion processes that could generate GHG emissions such as CO_2, CH_4, and N_2O, the proposed project does not affect equipment or operations that have the potential to emit other GHGs such as sulfur hexafluoride (SF6), hydrofluorocarbons (HFCs) or perfluorocarbons (PFCs). GHGs could be emitted during construction activities to install air pollution control equipment from sources such as off-road construction equipment, which could be comprised of off-road mobile sources, e.g., bull dozers, cranes, forklifts, etc. GHGs could also be emitted during construction from on-road mobile sources such as haul trucks delivering products used in the pollution control process and construction worker commute trips. GHG emissions would also be generated by increased use of electricity and increased mobile source emissions associated with material deliveries (e.g., sodium hydroxide used in wet gas scrubbers.)

Greenhouse gas impacts associated with the implementation of air pollution control equipment for the reduction of TAC emissions under proposed Rule 11-18 were found to potentially exceed the Air District's GHG significance threshold of 10,000 MTCO2e/yr and are, therefore, found to be significant. Additionally, because the analysis of GHG emission impacts is by definition a cumulative impact analysis, cumulative operational GHG emission impacts for Rule 11-18 are concluded to be significant.

1.4.3 HAZARDS AND HAZARDOUS MATERIALS

1.4.3.1 Hazards and Hazardous Materials Setting

The potential for hazards exist in the production, use, storage and transportation of hazardous materials. Hazardous materials may be found at industrial production and processing facilities. Some facilities produce hazardous materials as their end product, while others use such materials as an input to their production process. Examples of hazardous materials used as consumer products include gasoline, solvents, and coatings/paints. Hazardous materials are stored at facilities that produce such materials and at facilities where hazardous materials are a part of the production process. Currently, hazardous materials are transported throughout the Air District in great quantities via all modes of transportation including rail, highway, water, air, and pipeline.

The potential hazards associated with industrial activities are a function of the materials being processed, processing systems, and procedures used to operate and maintain the facility. The hazards that are likely to exist are identified by the physical and chemical properties of the materials being handled and their process conditions and include: (1) toxic gas clouds due to releases of volatile chemicals; (2) fires or explosions; (3) thermal radiation from the heat generated by a fire; and (4) explosion and overpressure when vessels containing flammable explosive vapors and potential ignition sources are combined.

In 2016, there were a total of 1,397 hazardous materials incidents reported in the nine counties regulated by the Air District, with the most incidents (321) reported in Alameda County. Hazardous materials incidents during transportation, at commercial facilities, and at waterways were the most common locations, respectively, for hazardous materials incidents. About 19 percent of the hazardous materials incidents that occurred within California occurred within the nine counties that comprise the Bay Area, with spills in waterways being the most common (30 percent), followed by commercial facilities and residential areas (24 percent each).

1.4.3.2 Hazards and Hazardous Materials Impacts

Proposed Rule 11-18 is designed to reduce health risk associated with emissions of TACs from existing stationary sources in the Bay Area. The proposed rule is not expected to require substantial new development. Any new air pollution control equipment or enclosures would be expected to occur within existing commercial or industrial facilities. Facility modifications associated with the proposed rule are largely expected to include limiting throughput or hours of operations; increased use of diesel particulate filters; additional enclosures and bag houses, and thermal oxidizers or carbon adsorption systems. The hazards associated with the use of these types of air pollution control equipment and systems are minimal.

As discussed in Chapter 3.4.4, installation of most air pollution control equipment would not generate additional hazard impacts. The potential hazards associated with the construction and operation of baghouses and ESPs under the proposed project were potentially significant (prior to mitigation). Explosions can occur in baghouses when dust concentrations reach explosive limits. Hazards associated with dry ESPs include fire and explosion hazards that can occur at the

inlet to ESPs when highly charged dust particles are transported by a gas that can contain the mixtures of both incombustible and combustible flue gases. However, the potentially significant adverse hazard impacts associated with the installation of baghouses and ESPs are expected to be less than significant after mitigation. Additionally, because hazards and hazardous materials impacts do not exceed the applicable hazards and hazardous materials significance thresholds, they are not considered to be cumulatively considerable (CEQA Guidelines §15064 (h)(1)) and, therefore, are not expected to generate significant adverse cumulative hazards and hazardous materials impacts.

1.4.4 HYDROLOGY AND WATER QUALITY

1.4.4.1 Hydrology and Water Quality Setting

The Air District is within the San Francisco Bay Hydrologic Region (Bay Region) which includes all of San Francisco County and portions of Marin, Sonoma, Napa, Solano, San Mateo, Santa Clara, Contra Costa, and Alameda counties. It occupies approximately 4,500 square miles; from southern Santa Clara County to Tomales Bay in Marin County; and inland to near the confluence of the Sacramento and San Joaquin rivers at the eastern end of Suisun Bay. The eastern boundary follows the crest of the Coast Ranges, where the highest peaks are more than 4,000 feet above mean sea level.

The most prominent surface water body in the Bay Region is San Francisco Bay itself. Other surface water bodies include: Creeks and rivers; ocean bays and lagoons (such as Bolinas Bay and Lagoon, Half Moon Bay, and Tomales Bay); urban lakes (such as Lake Merced and Lake Merritt); human-made lakes and reservoirs (such as Lafayette Reservoir, Briones Reservoir, Calaveras Reservoir, Crystal Springs Reservoir, Kent Lake, Lake Chabot, Lake Hennessey, Nicasio Reservoir, San Andreas Lake, San Antonio Reservoir, San Pablo Reservoir, Upper San Leandro Reservoir, Anderson Reservoir, and Lake Del Valle).

The Bay Area relies on imported water, local surface water, and groundwater for water supply. Local supplies account for about 30 percent of the total, and the remaining supply is imported from the State Water Project (SWP), Central Valley Project (CVP), and the Mokelumne and Tuolumne watersheds. In 2010, water demand in the region was 1,278,480 acre-feet per year (af/yr)[1]. Demand is projected to grow to 1,680,963 af/yr in a normal year, and 1,666,870 af/yr in a single dry year by 2035.

Some water agencies in the region have imported water from the Sierra Nevada for nearly a century to supply customers. The East Bay Municipal Utility District (EBMUD) and San Francisco Public Utilities Commission (SFPUC) import surface water into the Bay Region from the Mokelumne and Tuolumne rivers via the Mokelumne and Hetch Hetchy aqueducts, respectively. Water from these two rivers accounts for approximately 38 percent of the average annual water supply in the Bay Area. Water from the Sacramento-San Joaquin Delta (Delta), via the federal CVP and the SWP, accounts for another 28 percent. Approximately 31 percent of the average annual water supply in the Bay Area comes from local groundwater and surface water;

[1] One acre-foot of water is equal to approximately 325,851 gallons.

and three percent is from miscellaneous sources such as harvested rainwater, recycled water, and transferred water.

1.4.4.2 Hydrology and Water Quality Impacts

Implementation of proposed Rule 11-18 would reduce health risk associated with emissions of TACs from existing stationary sources in the Bay Area. However, Rule 11-18 could require the installation of additional air pollution control equipment that could require additional water use and wastewater discharge from devices like wet ESPs and wet gas scrubbers. The NOP/IS (see Appendix A) concluded that wet gas scrubbers were not expected to be used to control TACs; therefore, implementation of Rule 11-18 was not expected to result in a substantial increase in water use or wastewater discharge. However, public comments received on the NOP/IS indicated that wet gas scrubbers could be used to control TAC emissions from some sources, such as large refinery equipment. Thus, water demand impacts have been evaluated in Chapter 3.5 of this EIR.

If any stationary sources are shown to exceed threshold limits for toxic air contaminants, it is expected that facility operators could install new, or modify their existing air pollution control equipment in order to reduce TAC emissions under proposed Rule 11-18. Most air pollution control equipment does not use water or generate wastewater. However, additional water demand and wastewater generation impacts are expected to result from the operation of wet gas scrubbers which may be used for control of particulate TAC emissions.

Wet gas scrubbers installed in response to proposed Rule 11-18 were found to be significant for potential future water demand impacts. Thus, mitigation measures are imposed for the operational use of wet gas scrubbers. However, because of the prevalence of drought conditions in California, in spite of implementing the mitigation measures described in Chapter 3.5.5, water demand impacts during operation of the proposed project remain significant, in part because there is currently no guarantee that reclaimed water will be available to all of the affected facilities. Therefore, the proposed project will remain significant after mitigation for water demand. In addition, water demand impacts during operation of the proposed project are also considered to be cumulatively considerable (CEQA Guidelines §15064 (h)(1)).

Water quality impacts associated with installing various types of air pollution control equipment would not exceed applicable water quality significance thresholds and therefore were found to be less than significant.

1.4.5 UTILITIES AND SERVICE SYSTEMS

The NOP/IS found that utilities and service system impacts relating to water demand and wastewater treatment could be potentially significant. These potential impacts have been thoroughly discussed in Chapter 1.4.4 and Chapter 3.5 (hydrology and water quality) of the EIR. Water demand impacts were found to be potentially significant following mitigation and water quality impacts were found to be less than significant.

1.5 EXECUTIVE SUMMARY: CHAPTER 4 – ALTERNATIVES

An EIR is required to describe a reasonable range of feasible alternatives to the proposed project that could feasibly attain most of the basic project objectives and would avoid or substantially lessen any of the significant environmental impacts of the proposed project (CEQA Guidelines §15126.6(a)). As discussed in Chapter 3 of this EIR the proposed project could result in potentially significant impacts to: (1) air quality during construction; (2) GHG emissions; and (3) water demand during implementation of Rule 11-18. An EIR is required to describe a reasonable range of feasible alternatives to the proposed project that could feasibly attain most of the basic project objectives and would avoid or substantially lessen any of the significant environmental impacts of the proposed project (CEQA Guidelines §15126.6(a)).

Alternative 1 is the No Project Alternative. Under the No Project Alternative, proposed Rule 11-18 would not be adopted and, thus, the Air District would not establish initial risk actions levels of 25/M for cancer health risk and 2.5 for both acute and chronic hazard indices[2] and final action levels of 10/M for cancer and 1.0 for hazard indices. Although, portions of the rule could be implemented under the Air District's AB 2588 – Air Toxics "Hot Spots" Program, such as incorporating the new OEHHA health risk assessment protocols and health risk values and conducting health risk screening analyses and health risk assessments. Facilities with a cancer health risk greater than 10/M or an acute or chronic hazard index greater than 1.0[3] would only have to notify all exposed persons of their exposure. Facilities with a cancer risk greater than 100/M or a hazard indices greater than 10 would have to both 1) notify exposed individuals, and 2) reduce the facility health risk below the risk action level in accordance to the Air District AB 2588 Program, California Health and Safety Code, §§44300-44394.[4]

Under Alternative 2, the Air District would establish risk action levels at 25/M for cancer risk and 2.5 for hazard indices instead of 10/M and 1.0 respectively. Further, the significant risk level for the compliance alternative for the application of TBARCT would be set at 5/M for cancer and 0.5 hazard indices or removed.[5] All other aspects of the proposed rule would remain in place, including the provisions for the two compliance options: developing a risk reduction plan or demonstrating that all significant sources of risk are controlled with TBARCT. Under this alternative, the scope of the project would be reduced because the rule would not apply to those facilities with health risks that are less than 25/M for cancer or 2.5 for hazard indices. As a result, the number of facilities affected by the rule would be reduced by from approximately 362 to 36-39 – an order of magnitude reduction. The requirements of the rule would still apply to major sources of risk, such as refineries, cement manufacturing, and waste water treatment facilities; however, the level to which those facilities must reduce their health risk would be

[2] Facilities with risks in excess of 25/M or 2.5 hazard index would be required to reduce those risks below 10/M cancer and 1.0 hazard indices.

[3] Health risks of 10/M cancer and 1.0 hazard indices are current action levels for notification under the Air District's AB 2588 Air Toxics "Hot Spots" Program.

[4] Health risks of 100/M cancer and 10.0 hazard indices are the current action levels for risk reduction under AB 2588. It should be noted that Air District staff did not identify any facilities with a preliminary health risks greater than these action levels.#

[5] Without the TBARCT compliance option, the rule would be, in effect, an implementation of the AB 2588 program with lower risk action levels.

25/M instead of 10/M. Under this alternative, the number of individuals that remain exposed to elevated health risk levels posed by these facilities would be much greater than under the proposed project.

Alternative 1 – No Project Alternative was determined to result in less than significant environmental impacts. The No Project Alternative would not achieve the critical project objective of health risk reductions. It would achieve only Objectives 2 and 4 of the proposed project. Because the current risk action levels established by the Air Toxic "Hot Spots" Program would remain unchanged, this alternative would not result in any facilities having to reduce their health risk nor having to develop a risk reduction plan because preliminary analyses show that there are likely no facilities that would pose a health risk in excess of the current risk action levels of 100/M for cancer and 10 for hazard indices.

Alternative 2 was determined to reduce GHGs to less than significant, but would still result in significant air quality impacts during construction and water demand impacts during operation. Alternative 2 will achieve the critical project objectives of health risk reductions at some of the affected facilities (Objective 1) and expeditiously reduce health risk in impacted communities (Objective 3). This alternative would also achieve the remaining three objectives and is considered the environmentally superior alternative.

The proposed project has been demonstrated to be the most effective approach that achieves all of the project objectives relative to environmental impact generated. Mitigation measures have been developed to minimize the potential increase in construction emissions, GHG emissions and water demand, while providing the greatest public health benefit by reducing health risk from stationary sources to the greatest feasible extent. Therefore, the proposed project is the preferred alternative.

1.6 EXECUTIVE SUMMARY: CHAPTER 5

Chapter 5 provides the references used in the preparation of the EIR.

TABLE 1-1

Summary of Environmental Impacts, Mitigation Measures and Residual Impacts

Impact	Mitigation Measures	Residual Impacts
Air Quality		
The construction activities that may be required to implement Rule 11-18 may result in ROG, NOx, PM10, and PM2.5 emissions that would exceed the significance thresholds resulting in potentially significant air quality impacts.	Develop a Construction Emission Management Plan; to minimize emissions from vehicles and trucks; limit truck idling; maintain construction equipment to manufacturer's recommendations; identify construction areas served by electricity; Use cranes rated 200 hp or greater with Tier 4 engines or equivalent (if available); and use off-road equipment rated 50 to 200 hp with Tier 4 or equivalent engines (if available).	ROG, NOx, PM10, and PM2.5 emissions during construction activities are potentially significant under Rule 11-18 following mitigation, but would cease when construction activities are complete.
Operational activities that may be required to implement Rule 11-18 are expected to result in emissions of ROG, NOx, PM10 and PM2.5 that would be less than significant.	None Required	Operational emissions of ROG, NOx, PM10 and PM2.5 would be less than significant.
TAC emissions associated with implementation of Rule 11-18 are expected to be less than significant.	None Required	Potential TAC emissions under Rule 11-18 are less than significant.
Greenhouse Gas Emissions		
Air pollution control technologies that would most likely be implemented under Rule 11-18 could generate GHG emission impacts that would be considered significant.	None identified but some GHG emissions may be offset under the California Cap and Trade Program. .	GHG emissions are expected to remain significant under Rule 11-18.

TABLE 1-1

Summary of Environmental Impacts, Mitigation Measures and Residual Impacts

Impact	Mitigation Measures	Residual Impacts
Hazards and Hazardous Materials		
Fire or explosion impacts from the use of baghouses under Rule 11-18 are potentially significant.	Mitigation measures include a comprehensive dust control program; ground filter elements; install explosion rupture panels; remove dusts from filters prior to replacing filters; perform hot work away from collectors; do not use power tools in areas with high dust concentrations; and ensure adherence to applicable NFPA standards.	Hazards impacts from the use of baghouses are expected to be less than significant following mitigation.
Fire or explosion impacts from the use of dry ESPs under Rule 11-18 are potentially significant.	Mitigation measures include using CO sensors; digital electronic controls; covering wires with shrouds; and conduct routine inspections.	Hazards associated with the use of dry ESPs are expected to be less than significant following mitigation.
Transportation and use of hazardous materials in WGSs are expected to remain less than significant under Rule 11-18.	None Required	Transportation and use of hazardous materials would remain less than significant.
Hydrology and Water Quality		
The potential water demand created by the need for new air pollution control equipment, particularly refinery wet gas scrubbers, would result in a significant impact on water demand associated with Rule 11-18.	Mitigation measures include the requirement to use recycled water, if available.	Water demand impacts are expected to remain significant as the use of reclaimed water cannot be assured under Rule 11-18.
Wastewater generated from the installation of air pollution control equipment to comply with Rule 11-18 is not expected to exceed any applicable water quality significance thresholds. Therefore, no wastewater impacts are expected.	None required.	Wastewater impacts are expected to remain less than significant.

CHAPTER 2

PROJECT DESCRIPTION

Introduction
Project Location
Project Objectives
Background and Project Description

This page intentionally left blank.

2.0 PROJECT DESCRIPTION

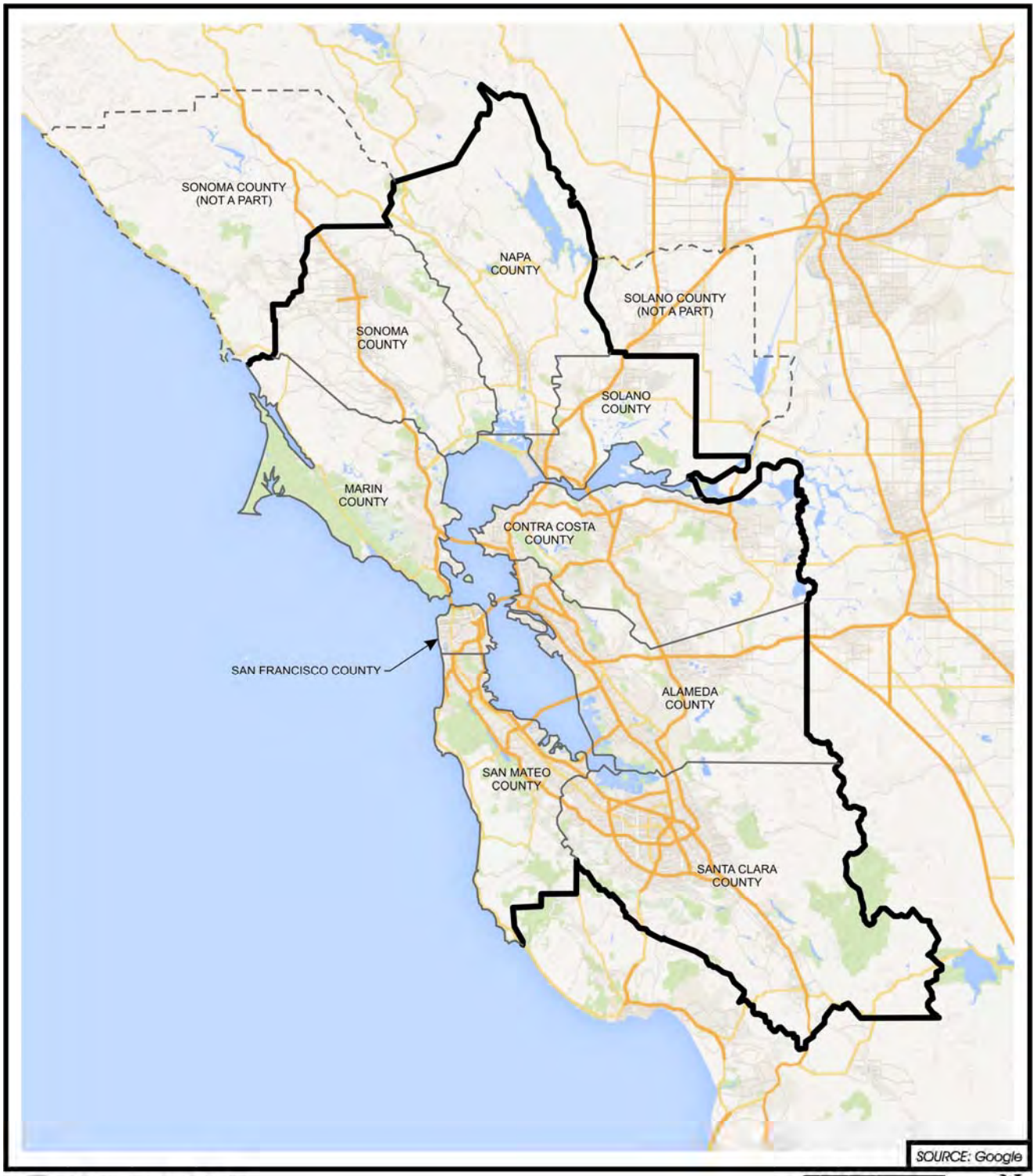
2.1 INTRODUCTION

The Bay Area Air Quality Management District (BAAQMD or Air District) was established in 1955 by the California Legislature to control air pollution in the counties around San Francisco Bay and to attain federal air quality standards by the dates specified in federal law. There have been significant improvements in air quality in the Bay Area over the last several decades. The BAAQMD is also required to meet state standards by the earliest date achievable.

Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18 or "Toxic Risk Reduction Rule) would ensure that emissions of TACs from existing facilities do not pose an unacceptable health risk to people living and working nearby. Rule 11-18 would apply to all facilities in the Bay Area whose emissions of toxic air contaminants (TACs) may result in a significant risk to nearby residents and workers (with several exceptions). The rule would use the most up-to-date assumptions about the risk of compounds and would require the facility to take action to reduce risk below a specified risk threshold if the facility exceeds the risk thresholds. If the facility could not devise a means to reduce the risk below the specified risk level, the facility would be required to install best available retrofit control technology for toxic pollutants (TBARCT) on every significant source of TAC emissions at the facility.

2.2 PROJECT LOCATION

The BAAQMD has jurisdiction of an area encompassing 5,600 square miles. The Air District includes all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties, and portions of southwestern Solano and southern Sonoma counties. The San Francisco Bay Area is characterized by a large, shallow basin surrounded by coastal mountain ranges tapering into sheltered inland valleys. The combined climatic and topographic factors result in increased potential for the accumulation of air pollutants in the inland valleys and reduced potential for buildup of air pollutants along the coast. The Basin is bounded by the Pacific Ocean to the west and includes complex terrain consisting of coastal mountain ranges, inland valleys and bays (see Figure 2.2-1). Proposed Rule 11-18 would affect stationary sources of TAC emissions within the Bay Area.



Project No. 3013

N:\3013\BAAQMD Map.cdr

Figure 2.2-1

2.3 PROJECT OBJECTIVES

The objectives of Toxic Risk Reduction Rule (Rule 11-18) are to:

- Reduce the public's exposure to health risks associated with the emissions of TACs from stationary sources;
- Incorporate the most up-to-date health risk methodologies and health values into the Air District's risk evaluation process for existing stationary sources of TACs;
- Ensure the facilities that impact the most sensitive and overburdened communities reduce their associated health risk in an efficient and expeditious manner;
- Provide the public opportunity to comment on the draft HRAs to provide transparency and clarity to the process; and
- Provide the public opportunity to comment on risk reduction plans as they are drafted by the affected facilities.

2.4 BACKGROUND AND PROJECT DESCRIPTION

2.4.1 BACKGROUND

Air pollutants are categorized based on their properties, and the programs under which they are regulated. Air pollutants include: (1) criteria pollutants, (2) toxic pollutants, and (3) climate pollutants (or GHGs). Additional categories of air contaminants include odorous compounds and visible emissions.

Criteria pollutants are emissions for which Ambient Air Quality Standards (AAQS) have been set and include: (1) carbon monoxide (CO), (2) nitrogen dioxide (NO_2) and NO_X, (3) particulate matter (PM) in two size ranges – aerodynamic diameter of 10 micrometers or less (PM_{10}), and aerodynamic diameter of 2.5 micrometers or less ($PM_{2.5}$), (4) volatile organic compounds (VOC), and (5) sulfur dioxide (SO_2). Other compounds, specifically VOCs, can react in the atmosphere to form ozone and are often regulated along with criteria pollutants. These compounds can have both localized and regional impacts. All of these criteria pollutants are emitted by a variety of stationary sources, as well as mobile sources (automobiles, trucks, locomotive engines, marine vessels, construction equipment, etc.).

TACs are emissions for which AAQS have generally not been established, but may result in human health risks. The State list of TACs currently includes approximately 190 separate chemical compounds and groups of compounds. These compounds tend to have more localized impacts. There are many TACs potentially emitted from industrial sources, as well as mobile sources (e.g., diesel particulate).
GHGs are emissions that include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and three groups of fluorinated compounds (i.e., hydrofluorocarbons (HFCs),

perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6)), and are the major anthropogenic climate pollutants. The impact of these compounds is global in nature and requires a global reduction to result in a beneficial impact on the global climate. GHGs emitted from petroleum refineries include CO_2, CH_4 and N_2O.

Rule 11-18 would affect hundreds of facilities that emit TACs. The Air District has determined that these toxic emissions need to be reduced in order to be more protective of public health. These facilities include data centers, petroleum refineries, a cement kiln, etc., and emit a variety of TACs that can adversely impact public health. TACs include compounds such as diesel particulate matter (DPM), benzene, polycyclic aromatic hydrocarbons (PAHs), and 1,3-butadiene.

2.4.1.1 Regulation 11, Rule 18 Approach

- The Air District would screen all facilities that report toxic emissions. From this screening, the Air District would determine each facility's prioritization score. The Air District would conduct health risk assessments (HRA) for facilities with a cancer risk prioritization score of 10 or greater or a non-cancer prioritization score of 1.0 or greater. The HRAs would incorporate the Office of Environmental Health Hazard Assessment (OEHHA) new protocol and health risk values adopted in March 2015, the Risk Management Guidelines adopted in July 2015 by the California Air Resources Board (CARB) and the California Air Pollution Control Officers Association (CAPCOA), as well as revised Air District HRA guidelines. The Air District would prioritize the development of the HRAs according to priority score and then according to type of facility.

- The implementation of Rule 11-18 would be conducted by tiers. Until January 1, 2020, facilities that pose a cancer risk in excess of 25 per million (25/M) or a chronic or acute hazard index in excess of 2.5 must either:

    - Reduce the facility cancer risk below 10 per million and reduce the chronic and acute hazard indices below 1.0 within five years; or

    - Install TBARCT on all significant sources of toxic emissions.

- Beginning January 1, 2020, all facilities that pose a cancer risk in excess of 10/M or a hazard index in excess of 1.0 must either:

    - Reduce the facility cancer risk below 10 per million and reduce the chronic and acute hazard indices below 1.0 within five years; or

    - Install TBARCT on all significant sources of toxic emissions.

Rule 11-18 includes an exemption for retail gasoline dispensing facilities (gas stations) and facilities for which the only source of TACs is one or more emergency standby engines and if the facility has a priority score that is less than 250.

2.4.2 RULE 11-18 PROJECT DESCRIPTION

Rule 11-18 would require facilities that pose a site-wide health risk in excess of the risk action level threshold to reduce that risk below the threshold through the implementation of a risk reduction plan approved by the Air District or demonstrate that all significant sources of toxic emissions are controlled with TBARCT; a significant source of toxic emission is one that poses a cancer health risk of 1.0 per million or 0.2 hazard index.

2.4.2.1 Administrative Procedures

The Toxic Risk Reduction Rule would utilize the annual toxic emissions inventories reported to the Air District by sources that emit toxic compounds. From the toxic emissions inventory data, Air District would determine each facility's prioritization score. The facility prioritization score or the toxic emissions source type would be used to determine which phase a facility would be placed. In establishing the prioritization level for a facility, the Air District would consider:

- The amount of toxic pollutants emitted from the facility;
- The toxicity of these materials;
- The proximity of the facility to potential receptors; and
- Any other factors that the Air District deems to be important.

The rule would be implemented in four phases based on either a facility's priority score or the toxic emissions source type as illustrated in Table 2.4-1.

TABLE 2.4-1

Implementation Phases

Phase	Criterion	HRAs	Risk Reduction Plans	Plan Implementation
1	Cancer PS(1) > 250 or Non-cancer PS > 2.5	2017 – 2018	2018 – 2019	2019 – 2022
2	Cancer PS > 10 or Non-cancer PS > 1.0	2019 – 2021	2021 – 2022	2022 – 2025

(1) PS = priority score

The Air District would conduct HRAs for facilities in accordance with the OEHHA HRA Guidelines and the CARB/CAPCOA Risk Management Guidelines that were updated in 2015. These Guidelines were updated pursuant to the Children's Environmental Health Protection Act (Senate Bill 25), which required that OEHHA develop health risk

assessment procedures that ensure infants and children are protected from the harmful effects of air pollution. Using the results of the HRAs, the Air District would determine whether a facility would be affected by Rule 11-18. The rule would affect facilities with health risk impacts that exceeded any of the risk action level thresholds, until January 2020, of 25/M ten per million cancer risk or 2.5 hazard index for both chronic and acute risk and, beginning January 2020, 10/M for cancer risk and 1.0 for each hazard index. The Air District would notify facilities of their health risk score. A facility with a risk action level exceeding the threshold(s) would be required to reduce the risk below the threshold(s) by implementing a risk reduction plan within five years of plan approval, or demonstrate that all significant sources of toxic emissions are controlled by TBARCT within the same five-year period; a significant source of toxic emission is one that poses a health risk of 1.0 per million cancer or 0.2 hazard index.

Rule 11-18 would exempt retail gas stations and facilities for which the only source of toxic emissions is one or more emergency standby engines if the facility has a prioritization score that is less than 250.

2.4.2.2 Health Risk Assessments

The Air District uses a variety of tools to determine where air quality health impacts may be occurring in the Bay Area, to assess the relative magnitude of these health impacts compared to other locations, and to determine how to best focus Air District resources in order to reduce these health impacts. HRAs are one of the tools that can be used to assess the relative magnitude of health hazards. HRAs are designed to quantify the potential health impacts that people and communities may be experiencing due to specific sources or facilities or that may occur in the future due to proposed projects or proposed changes at a facility. An HRA consists of four basic steps: 1) hazard identification; 2) exposure assessment; 3) dose response assessment; and 4) risk characterization. The Air District conducts HRAs using standardized methodologies for each of these steps. The Air District HRAs would be prepared in accordance with the most recent guidelines adopted by OEHHA in March 2015.

Air District staff believes that new facility-wide HRAs should be performed including improved emission inventories, updated health effects values, and the most recent HRA methodologies. Rule 11-18 would require that the Air District conduct HRAs utilizing the most recent OEHHA HRA Guidelines along with more refined emissions inventories.

2.4.2.3 Pollutant Coverage

The Toxic Risk Reduction Rule would address TAC emissions from existing stationary sources. TAC emissions from new and modified sources are addressed under Air District Regulation 2, Rule 5. The California Health and Safety Codes §39655 defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of §112 of the federal

act (42 U.S.C. §7412(b)) is a toxic air contaminant." For the purposes of this rule, TACs consists of the substances listed in Air District Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants (Table 2-5-1.)

Some of the key pollutants to be addressed under the Toxic Risk Reduction Rule include the following:

Benzene:

Benzene is carcinogenic and occurs throughout the Bay Area. Most of the benzene emitted in the Bay Area comes from motor vehicles, including evaporative leakage and unburned fuel exhaust. Stationary sources contribute 13 percent of the benzene statewide. The primary stationary sources of benzene emissions include gasoline stations, petroleum refining, electricity generation, and cement production.

1,3 Butadiene:

1,3-butadiene is another carcinogen, with similar origins to benzene, namely primarily from gasoline evaporation and motor vehicle exhaust, biomass burning, petroleum refining and electricity generation.

Polycyclic aromatic hydrocarbons (PAHs):

PAHs are a set of hydrocarbons formed of multiple benzene rings. Several PAHs have been shown to be carcinogenic, the best-studied of which is benzo(a)pyrene. Although PAHs are emitted during petroleum refining, in the Bay Area the vast majority derive from fossil fuel and wood combustion.

Diesel Particulate Matter (DPM):

DPM is the primary source of ambient risk based on risk analysis, followed by benzene and 1,3-butadiene. DPM emissions sources mainly include mobile sources, such as heavy-duty trucks, buses, construction equipment, locomotives, and ships, but also stationary sources such as stationary diesel engines and backup generators.

2.4.2.4 Source Coverage

The Toxic Risk Reduction Rule would apply to all sources of TAC emissions from "stationary sources" in the Bay Area. Stationary sources, as opposed to mobile sources such as trucks and other vehicles, are the sources over which the Air District has regulatory jurisdiction.

The Toxic Risk Reduction Rule would apply to a wide variety of sources and facilities located throughout the Bay Area, including data centers, petroleum refineries, chemical plants, wastewater treatment facilities, foundries, forges, landfill operations, hospitals, crematoria, colleges and universities, military facilities and installations and other

manufacturing. The Air District estimates that hundreds of facilities could be impacted by this rule. Rule 11-18 would exempt retail gas stations and facilities for which the only source of toxic emissions is one or more emergency standby engines and has a prioritization score that is less than 250.

2.5 SOURCES AFFECTED BY RULE 11-18 AND APPLICABLE CONTROL TECHNOLOGIES

As indicated in the project description above, to comply with Rule 11-18 existing affected facilities that pose a health risk in excess of the risk action level threshold, until January 2020, of 25/M ten per million cancer risk or 2.5 hazard index for both chronic and acute risk and, beginning January 2020, of ten per million cancer risk or 1.0 hazard index for both chronic and acute non-cancer risk must reduce that risk below the threshold through the implementation of a risk reduction plan approved by the Air District. To comply with the risk reduction plan requirements, facility operators could reduce operations or, to maintain existing operations, change the nature of the toxic emissions either through modification of stack emission parameters or through toxic emission reductions, or install air pollution control equipment that meets TBARCT requirements.

The NOP/IS for the proposed project identified potentially significant adverse secondary environmental impacts resulting primarily from installing air pollution control technologies. Therefore, the analysis of potentially significant environmental impacts in Chapter 3 is based on secondary impacts from installing air pollution control equipment. To analyze environmental impacts from implementation of Rule 11-18, it is necessary to identify the emission sources that would be subject to the rule's requirements and the most likely types of control technologies anticipated to be used to ensure compliance with Rule 11-18.

It is not specifically known what types of equipment would be affected by Rule 11-18. However, based on the Air District's emissions inventory database, TAC emissions from sources likely to be affected by Rule 11-18 can be identified. The emission sources most likely to be affected by Rule 11-18 are identified and briefly described in the following sections.

2.5.1 SOURCES THAT MAY BE SUBJECT TO REGULATION 11, RULE 18

Proposed Rule 11-18 would apply to a wide range of commercial, industrial, and municipal facilities including data centers, petroleum refineries, chemical plants, wastewater treatment facilities, foundries, forges, landfill operations, hospitals, crematoria, power plants, colleges and universities, military facilities and installations, and manufacturing operations. Table 2.5-1 shows the most likely types of facilities anticipated to be affected by proposed Rule 11-18, TAC emission sources at affected facilities most likely to be affected by the proposed rule and the primary TAC emissions that would be controlled.

Facilities affected by proposed Rule 11-18 operate a wide variety of sources of toxic emissions, including diesel-fueled internal combustion engines, wastewater treatment, combustion sources, evaporative and fugitive emissions, etc. The Air District estimates that hundreds of facilities could potentially be affected by this draft rule. The following subsections briefly describe the most likely facilities and emissions sources affected by proposed Rule 11-18.

2.5.1.1 Refineries

Petroleum refineries convert crude oil into a wide variety of refined products, including gasoline, aviation fuel, diesel and other fuel oils, lubricating oils, and feed stocks for the petrochemical industry. Crude oil consists of a complex mixture of hydrocarbon compounds with smaller amounts of impurities including sulfur, nitrogen, oxygen and metals (e.g., iron, copper, nickel, and vanadium). Crude oil that originates from different geographical locations may vary with respect to its composition, thus, potentially generating different types and amounts of TAC emissions.

Fugitive Emissions Sources: Petroleum refineries include a large number and wide variety of fugitive emissions sources. Fugitive emissions are emissions of gases or vapors from pressurized equipment due to leaks and other unintended or irregular releases of gases during the crude refining process and do not include pollutants vented to an exhaust stack before release to the atmosphere. Generally, any processes or transfer areas where leaks can occur are sources of fugitive emissions. Fugitive emissions sources include, but are not limited to the following: valves, connectors (i.e., flanged, screwed, welded or other joined fittings), pumps, compressors, pressure relief devices, and diaphragms in VOC service. Similarly, tanks storing crude oil or petroleum products also produce fugitive emissions. The primary TACs associated with fugitive emissions sources are benzene and, in the case of gasoline storage, 1,3-butadiene.

TABLE 2.5-1

Summary of Toxic Air Contaminant Emitting Facilities and Sources

Facility	Sources	Primary Risk Driver(s)
Refineries	Fugitive Emissions Stack Emissions Diesel Engines Cooling Towers Wastewater Treatment Operations	Benzene Diesel PM Formaldehyde 1,3-Butadiene Chromium VI Nickel
Data Centers	Stationary Diesel Engines	Diesel PM
Cement Manufacturing	Stack Emissions Fugitive Emissions	Chromium VI
Chemical Plants	Stack Emissions Fugitive Emissions	Formaldehyde Carbon Tetrachloride Sulfuric Acid Mist Diesel PM
Crematoria	Stack Emissions	Chromium VI Mercury
Landfills	Fugitive Emissions Diesel Engines	Vinyl Chloride Hydrogen Sulfide Benzene Diesel PM Acrylonitrile
Foundries and Forges	Fugitive Emissions	Dioxin Manganese Lead Chromium VI Mercury Cadmium Nickel Arsenic PAHs Copper
Sewage Treatment Facilities	Fugitive Emission Stack Emissions	Diesel PM Hydrogen Sulfide Cadmium Mercury
Power Plants	Stack Emissions	Formaldehyde Ammonia Benzene Diesel PM
Military Facilities	Diesel Engines	Diesel PM
Manufacturing	Diesel Engines	Diesel PM

Stack Emissions: There are two primary sources of TAC emissions from exhaust stacks at petroleum refineries, delayed coking units (DCUs) and petroleum coke calciners

(PCCs). These equipment and processes are briefly described in the following paragraphs.

Delayed Coking: Delayed coking is a petroleum refinery process that converts mostly heavy residual oils, also known as residuum or "resid" for short, from vacuum distillation towers into gasoline, light gas oil and heavy gas oil. Petroleum coke is a by-product of the coking process. The resid is fed into a fractionation tower and the bottom fraction (e.g., the heavy components of the resid), is passed through a heater as it makes its way to a coke drum under steam injection. The purpose of the steam injection is to delay coking or the solidification of the hot material until it reaches the drum, hence the name "delayed coker." When heated to high temperatures, the heavy hydrocarbon chains break into smaller, lighter molecules that rise to the top of the coke drum as vapors that are routed back to the fractionation tower for more separation into gas, gasoline, and other higher value liquid products. Even after heating, the heavier components remain in the coke drum. Within approximately 30 minutes to one hour, the material left behind in the drum turns into, petroleum coke, a coal-like substance. At the end of the coking process, the drum is then vented to the atmosphere until the internal pressure of the drum equals ambient pressure. TAC emissions from the DCU primarily include heavy metals.

At the federal level, in 2008, the USEPA promulgated a regulation in Chapter 40, Part 60, Subpart Ja of the Code of Federal Regulations (40 CFR 60 Subpart Ja) - Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction or Modification Commenced after May 14, 2007, specifically applicable to DCU operations that establishes a vent limit of five pounds per square inch, gauge (psig) for coke drums at new or modified DCUs. By depressurizing the coke drum beyond the federal requirement, to two psig for example, for both new and existing DCUs $PM_{2.5}$, and sulfur as H_2S emission reductions can be achieved with the co-benefit of additional VOC and GHG (methane) emission reductions.

Petroleum Coke Calciner: Petroleum coke is processed in a delayed coker unit (described above) to generate a carbonaceous solid referred to as "green coke," a commodity. To improve the quality of the product, if the green coke has a low metals content, it will be sent to a calciner to make calcined petroleum coke. Calcined petroleum coke can be used to make anodes for the aluminum, steel, and titanium smelting industry. If the green coke has a high metals content, it is used as a fuel grade coke by the fuel, cement, steel, calciner and specialty chemicals industries.

The process of making calcined petroleum coke begins when the green coke feed from the delayed coker unit is screened and transported to the calciner unit where it is stored in a covered coke storage barn. The screened and dried green coke is introduced into the top end of a rotary kiln and is tumbled by rotation under high temperatures that range between 2,000 and 2,500 degrees Fahrenheit (^oF). The rotary kiln relies on gravity to move coke through the kiln countercurrent to a hot stream of combustion air produced by the combustion of natural gas or fuel oil. As the green coke flows to the bottom of the kiln, it rests in the kiln for approximately one additional hour to eliminate any remaining moisture, impurities, and hydrocarbons. Once discharged from the kiln, the calcined

coke is dropped into a cooling chamber, where it is quenched with water, treated with de-dusting agents to minimize dust, and carried by conveyors to storage tanks. TAC emissions generated when the green coke is processed under high heat conditions in the rotary kiln are primarily heavy metals.

Stationary Diesel Internal Combustion Engines (ICEs): Stationary diesel ICEs are often used to provide electricity in areas of a refinery that may not have access to electricity power lines from the local electric utility or other onsite sources of electricity, used as a backup source of electricity in the event of a power outage, or as a means of pumping liquids between different refinery equipment. Four-stroke cycle ICEs are more commonly used than two-stroke ICEs. Stationary diesel ICEs operate by drawing air into a cylinder and then injecting fuel after the air has been compressed. Stationary diesel ICEs rely on high temperature alone for ignition. Stationary diesel ICEs are often referred to as compression ignition engines because the high temperature is the result of compressing air above the piston as it travels upward. The power output of a diesel ICE is controlled by varying the amount of fuel injected into the air, thereby, varying the fuel-air ratio. The main advantage of using a diesel engine is its high thermal efficiency[1], which can exceed 50 percent. However, diesel ICE exhaust tends to be high in NOx and particulate emissions, both visible (smoke) and invisible. Diesel particulates were also classified as a TAC by CARB in in 1998.

Cooling Towers: A cooling tower is a heat rejection device, which extracts waste heat from various processes to the atmosphere though the cooling of a water stream to a lower temperature. Cooling towers are open water recirculating devices that use fans or natural draft to draw or force air through the device to cool water by evaporation and direct contact. The type of heat rejection in a cooling tower is termed "evaporative" in that it allows a small portion of the water being cooled to evaporate into a moving air stream to provide significant cooling to the rest of that water stream. The heat from the water stream transferred to the air stream raises the air's temperature and its relative humidity to 100 percent and this air is discharged to the atmosphere. TAC emissions from cooling towers can include hexavalent chromium and fugitive VOCs leaked into the cooling water, including benzene and 1,3-butadiene.

Wastewater Treatment Operations: Wastewater treatment operations provide a means of treating water that has come into contact with petroleum hydrocarbons. The first stage of a typical wastewater treatment process is the American Institute of Petroleum (API) separator, which physically separates the free oil and solids from the water. Gravity allows any oil in the water to rise to the surface of the separator and any solid particles to sink to the bottom. A continually moving scraper system pushes oil to one end and the solids to the other. Both are removed and the recovered oil is sent back to the Refinery for reprocessing. Small suspended oil particles are then typically removed in the Dissolved Air Flotation unit. Wastewater is sent to the activated sludge units, where

[1] Thermal efficiency is defined as the amount of work produced by the engine divided by the amount of chemical energy in the fuel that can be released through combustion. This chemical energy is often referred to as net heating value or heat of combustion of the fuel.

naturally-occurring microorganisms feed on the dissolved organics in the wastewater, and convert them to water, CO_2 and nitrogen gas, which can be safely released into the atmosphere. Finally, wastewater enters the clarifying tanks, where the microorganisms settle to the bottom while the treated wastewater flows away. The primary TAC emission from wastewater treatment systems is benzene.

2.5.1.2 Data Centers

A data center is a facility used to house computer systems and associated components, such as telecommunications and data storage systems. It generally includes redundant or backup power supplies, redundant data communications connections, environmental controls (e.g., air conditioning, fire suppression) and various security devices.

Stationary Diesel ICEs: Because a power outage can badly damage computer telecommunications and storage systems, backup power supplies are essential. Backup power supplies may include backup stationary diesel ICEs to provide electricity. See discussion 2.5.1.1 regarding stationary diesel ICEs and TAC emissions.

2.5.1.3 Cement Manufacturing

Cement manufactured in a cement kiln using a pyroprocess or high temperature reactor that is constructed along a longitudinal axis with segmented rotating cylinders whose connected length is anywhere from 50 to 200 yards in length. The pyroprocess in the kiln consists of three phases during which clinker is produced from raw materials undergoing physical changes and chemical reactions. The first phase in the kiln, the drying and pre-heating zone, operates at a temperature between 1,000 ^oF and 1,600 ^oF and evaporates any remaining water in the raw mix of materials entering the kiln. The second phase, the calcining zone, operates at a temperature between 1,600 ^oF and 1,800 ^oF and converts the calcium carbonate from the limestone in the kiln feed into calcium oxide and releases CO_2. During the third phase, the burning zone operates on average at 2,200 ^oF to 2,700 ^oF (though the flame temperature can at times exceed 3,400 ^oF) during which several reactions and side reactions occur. As the materials move towards the discharge end, the temperature drops and eventually clinker nodules form and volatile constituents, such as sodium, potassium, chlorides, and sulfates, evaporate. The red-hot clinker exits the kiln, is cooled in the clinker cooler, passes through a crusher and is conveyed to storage.

Stack emissions: As indicated above cement manufacturing occurs at high temperatures using several combustion fuels. Fuels that have been used for primary firing include coal, petroleum coke, heavy fuel oil, natural gas, landfill off-gas and oil refinery flare gas. High carbon fuels such as coal are preferred for kiln firing, because they yield a luminous flame. The clinker is brought to its peak temperature mainly by radiant heat transfer, and a bright (i.e. high emissivity) and hot flame is essential for this. Combustion emissions are exhausted through the kiln's stack. The primary TAC emission from cement manufacturing is hexavalent chromium, also referred to as chromium VI.

Fugitive Dust: Relative to cement manufacturing, fugitive dust is wind-driven particulate matter emissions from any disturbed surface work area that are generated by wind action alone. The process of making cement begins with the acquisition of raw materials, predominantly limestone rock (calcium carbonate) and clay, which exist naturally in rocks and sediment on the earth's surface. These and other materials used to manufacture cement are typically mined at nearby quarries and comprise "raw mix." The raw mix is refined by a series of mechanical crushing and grinding operations to segregate and eventually reduce the size of each component to 0.75 inch or smaller before being conveyed to storage. If the ground materials are stored in piles onsite, local windy conditions may produce fugitive hexavalent chromium emissions.

2.5.1.4 Chemical Plants

A chemical plant is any industrial facility engaged in producing chemicals, and/or manufacturing products by chemical processes. The general objective of a chemical plant is to create new material wealth via the chemical or biological transformation and or separation of materials. Chemical plants often use specialized equipment, units, and/or technology used in the manufacturing process. Chemical plants may include, but are not limited to the manufacture of industrial inorganic and organic chemicals; plastic and synthetic resins, synthetic rubber, synthetic fibers, drugs, soap, detergents and cleaning preparations, perfumes, cosmetics and other toilet preparations; paints, varnishes, lacquers, enamels and allied products; agricultural chemicals; safflower and sunflower oil extracts; and re-refining. The primary types of equipment used at chemical plants include, but are not limited to: crushers, mixing tanks, compactors, heaters, etc.

Stack emissions: Mixing equipment that combines chemicals to produce inorganic and organic chemicals; plastic and synthetic resins, synthetic rubber, synthetic and other man-made fibers, etc., may be vented to an exhaust stack. Emissions from chemical plants may include: formaldehyde (used as a raw material in resin, plastic, leather, paper and fiber manufacturing); carbon tetrachloride (used as a cleaner), and sulfuric acid (from sulfur recovery plants). Emissions may also be associated with combustion equipment.

Fugitive Emissions: Fugitive emissions at chemical plants include particulate emissions from chemical handling and uncontrolled product crushing or compressing and emissions that are released through windows, doors, vents, and other general building ventilation or exhaust systems.

2.5.1.5 Crematoria

Cremation is the combustion, vaporization and oxidation of cadavers to gases, ashes and mineral fragments retaining the appearance of dry bone. Cremation occurs in a crematory that is housed within a crematorium and comprises one or more furnaces. A cremator is an industrial furnace that is able to generate temperatures of 1,600 ºF to 1,800 °F to ensure disintegration of the corpse. The chamber where the body is placed is called a retort and is lined with heat-resistant refractory bricks. Refractory bricks are

designed in several layers. The outermost layer is usually simply an insulation material, e.g., mineral wool. Inside is typically a layer of insulation brick, mostly calcium silicate in nature. Modern crematoria fuels may include oil, natural gas, and propane.

Stack Emissions: Combustion emissions from the furnace are vented to an exhaust stack and then may be released to the atmosphere. Mercury from dental amalgam fillings can be emitted through the exhaust stack during the cremation process.

2.5.1.6 Landfills

Landfills, also called sanitary landfills, are locations where non-hazardous waste is deposited, spread in layers, compacted, and covered with earth at the end of each working day. Modern landfills typically include a bottom liner that separates and prevents the buried waste from coming into contact with underlying natural soils and groundwater. The bottom of each landfill is typically designed so that the bottom surface of the landfill is sloped to a low point, called a sump. This is where any liquids that are trapped inside the landfill – known in the waste industry as leachate – are collected and removed from the landfill. The leachate collection system typically consists of a series of perforated pipes, gravel packs and a layer of sand or gravel placed in the bottom of the landfill. Landfill cells are the area in a landfill that have been constructed and approved for disposal of waste each day. Waste material is prepared by placing it in layers or lifts where the waste is then compacted and shredded by heavy landfill compaction machinery. Waste that is placed in a cell is covered daily with either six inches of compacted soil or an alternative daily cover, such as foam or a flame-retardant fiber material.

Fugitive Emissions: Bacteria in the landfill waste break down the trash in the absence of oxygen. This process produces landfill gas, which is approximately 50 percent methane. Landfill gas is collected in a series of pipes that are embedded within the landfill waste materials. This gas, once collected, is typically control-burned. Fugitive landfill TAC emissions may include vinyl chloride, benzene, hydrogen sulfide, and acrylonitrile.

Stationary Diesel ICEs: Because landfills are often located in remote areas away from population centers, they might not be served by electricity power lines from the local electric utility. Stationary diesel ICEs are often used to provide electricity to landfills that may not have access to electricity sources. If electricity is available, they may be used as a backup source of electricity in the event of a power outage. Finally, diesel ICEs may be used to pump liquids, such as leachate, to storage or treatment facilities. See discussion 2.5.1.1 regarding stationary diesel ICEs and TAC emissions.

2.5.1.7 Foundries and Forges

Foundries and forges are industrial operations that create metal products by heat treating and shaping metals. Forging operations include operation of an oven in which metal is heated until it is malleable; it may then undergo hardening, annealing, tempering stamping, pressing, extruding, hammering, and quenching. Foundries operate using a

furnace in which scrap metal, ingots, and/or other forms of metal are charged, melted, and tapped. Metals are melted using a furnace. Types of furnaces include, but are not limited to, cupola, electric arc, pot, induction, blast, crucible, sweat, and reverberatory furnaces. Once a cast metal part has been shaken out and cooled, it undergoes the finishing operations, which address imperfections and assembly in preparation of the final product for the customer. Finishing operations includes shot blasting, grinding, and welding.

Fugitive Emissions: Fugitive emissions at foundries include mold vent gases, equipment leaks, particulate emissions from metal handling and uncontrolled product finishing, and emissions that are released through windows, doors, vents, and other general building ventilation or exhaust systems. TAC emissions from foundries may include dioxins, PAHs, and heavy metals.

Stack Emissions: Combustion emissions from the furnaces are vented to an exhaust stack and then may be released to the atmosphere, before or after air pollution control equipment. Combustion emissions can include various TAC emissions that exhaust through the stack.

2.5.1.8 Sewage Treatment Facilities

Sewage treatment is the process of removing contaminants from wastewater, primarily from household sewage. The process includes physical, chemical, and biological processes to remove these contaminants and produce environmentally safe treated wastewater (or treated effluent). A by-product of sewage treatment is usually a semi-solid waste or slurry, called sewage sludge, that may be required to undergo further treatment before being suitable for disposal or land application.

The following bullet points provide brief summaries of the main steps in treating wastewater.

- *Pretreatment:* Pretreatment is a process that removes all materials that can be easily collected from the raw sewage before they damage or clog the pumps and sewage lines of primary treatment clarifiers. During pretreatment, the influent in sewage water passes through a bar screen to remove all large objects carried in the sewage stream, including, but not limited to: trash, tree limbs, leaves, branches, cans, rags, sticks, plastic packets, etc. This process is most commonly done with an automated mechanically raked bar screen in modern plants serving large populations, while in smaller or less modern plants, a manually cleaned screen may be used.
- *Primary Treatment:* Primary treatment consists of temporarily holding the sewage in a quiescent basin where heavy solids can settle to the bottom while oil, grease, and lighter solids float to the surface. The settled and floating materials are removed and the remaining liquid may be discharged or subjected to secondary treatment. In the primary sedimentation stage, sewage flows through large tanks, commonly called "pre-settling basins," "primary sedimentation tanks," or "primary clarifiers." The

tanks are used to settle sludge while grease and oils rise to the surface and are skimmed off. Primary settling tanks are usually equipped with mechanically driven scrapers that continually drive the collected sludge towards a hopper in the base of the tank where it is pumped to sludge treatment facilities.

- *Secondary Treatment:* Secondary treatment removes dissolved and suspended biological matter. The majority of municipal plants treat the settled sewage liquor using aerobic biological processes. To be effective, the bacteria and protozoa require both oxygen and food to live. These micro-organisms consume biodegradable soluble organic contaminants (e.g. sugars, fats, organic short-chain carbon molecules, etc.) and bind much of the less soluble fractions into floc. Secondary treatment systems are classified as fixed film or suspended-film growth systems. Fixed-film or attached growth systems include, but are not limited to: trickling filters, bio-towers, and rotating biological contactors where the biomass grows on media and the sewage passes over its surface. Suspended-growth systems include activated sludge, where the biomass is mixed with the sewage and can be operated in a smaller space than trickling filters that treat the same amount of water. Secondary treatment may require a separation process to remove the micro-organisms from the treated water prior to discharge or tertiary treatment.
- *Tertiary Treatment:* Tertiary treatment is sometimes defined as anything more than primary and secondary treatment to allow release into a sensitive or fragile ecosystem (estuaries, low-flow rivers, etc.).
- *Disinfection:* Treated water is sometimes disinfected chemically or physically (for example, by lagoons and microfiltration) prior to discharge into a stream, river, bay, lagoon or wetland. If it is sufficiently clean, it can also be used for groundwater recharge or agricultural purposes.

Fugitive Emissions: Wastewater treatment units open to the atmosphere have the potential to generate fugitive emissions. For example, the equalization basin, one of the first parts of the wastewater treatment process, regulates the wastewater flow and pollutant compositions to the remaining treatment units. Equalization basins are typically used during wet weather when influent flow is large so that the plant can equalize the flow to the treatment system. While the equalization basin provides a large area for wastewater contact with ambient air, it more typically holds rain water that is generally low in VOC contaminants. Wastewater then is typically sent to the clarifier using a lift station, which may also be open to the ambient air but is closed at some treatment facilities. Suspended solids are removed in the clarifier and the wastewater then flows, again using a lift station, to the aeration basin where microorganisms act on the organic constituents. The lift station, clarifier, and aeration basin may be open to the atmosphere. Wastewater leaving the aeration basin normally flows through a secondary clarifier for solids removal before it is discharged from the facility (STAPPA/ALAPCO, 1997). The secondary clarifier is also likely to be open to the atmosphere. Fugitive TAC emissions from wastewater treatment include hydrogen sulfide and toxic organic emissions.

Stack Emissions: Sludge that is separated from the wastewater is sent to the sludge digesters. Sludge digesters are used to treat organic sludges produced from various

treatment operations. The two main types of sludge digesters are anaerobic and aerobic. Anaerobic digesters, more commonly used in Bay Area treatment facilities, are enclosed vessels and digester gas is collected from the vessel. aerate the sludge for an extended period of time in an open, unheated tank using conventional air diffusers or surface aeration equipment. In aerobic digestion, the sludge is aerated for an extended period of time in an open, unheated tank using conventional air diffusers or surface aeration equipment. The digestion process may produce a variety of emissions, including methane, which may be sent to an air pollution control unit or combusted. The sludge is then dewatered using belt filter presses, screw presses or centrifuges, while historically dryers were used. Stack emissions may occur from the combustion of digester gas or from the dryer, if used. TAC emissions from wastewater treatment systems' exhaust stacks include hydrogen sulfide.

2.5.1.9 Power Plants

Power plants, also referred to as generating stations or generating plants, are industrial facilities for the generation of electric power. Most power plants contain one or more pieces of equipment used to generate electrical power. The most common equipment used to generate electricity at power plants are gas turbines and/or boilers.

A gas turbine is an internal-combustion engine consisting of at least a compressor, a combustion chamber, and a turbine. The compressor draws air into the engine, pressurizes it, and feeds it to the combustion chamber. The combustion system is typically made up of a ring of fuel injectors that inject a steady stream of fuel into combustion chambers where it mixes with the air. The combustion produces a high temperature, producing a high-pressure gas stream that enters and expands through the turbine section. The turbine is an intricate array of alternate stationary and rotating aerofoil-section blades. As hot combustion gas expands through the turbine, it spins the rotating blades. The rotating blades perform a dual function: they drive the compressor to draw more pressurized air into the combustion section, and they spin a generator to produce electricity (USDOE, 2014).

A boiler is a piece of combustion equipment fired with liquid and/or gaseous fuel, which is primarily used to produce steam. Boilers used to generate electricity are generally less efficient than gas turbines. All boiler designs share a number of common elements. Utility boilers are typically watertube boilers where combustion takes place in an enclosed furnace and heat is transferred from the furnace to water in tubes. In the furnace itself, heat is transferred by radiation from the combustion gases to tubes lining the walls. As gases cool and leave the furnace, the primary heat transfer mechanism becomes convection. A boiler is designed to have specific fixed temperature zones for optimum heat transfer to the watertubes; modification of these designs will affect boiler efficiency. For utility boilers, various types of burners are used to combust the fuel (STAPPA/ALAPCO, 1994).

Stack Emissions: In the case of both gas turbines and boilers, combustion emissions are vented to an exhaust stack and then released to the atmosphere. However, before the exhaust is released to the atmosphere, it is vented to a NOx emission control device to reduce NOx emissions pursuant to Rule 9-9 for gas turbines and Rule 9-10 for power generating boilers. Depending on the combustion fuel used, gas turbines and utility boilers have the potential to emit formaldehyde and benzene if they are not completely combusted in the boiler or gas turbine. In the event of an emergency, Rules 9-9 and 9-11 allow the use of non-gaseous fuels for gas turbines and electric utility boilers, respectively, which has the potential to produce diesel PM emissions. NOx control using selective catalytic reduction (SCR) uses a reducing agent, typically ammonia, to reduce NOx to nitrogen and water. Not all of the ammonia reacts with the NOx molecules and so is vented to the atmosphere, referred to as ammonia slip.

2.5.1.10 Military Facilities

A military facility is a facility servicing military forces and, in the United States, under the jurisdiction of the Secretary of the Military Department. Types of military bases include, but are not limited to, the following: arsenal or armory, which is a military site were arms, ammunition, and other military equipment are stored; a military post is an installation at which a body of troops is stationed; military headquarters is the military installation from which a commander performs the functions of command; etc., (U.S. Dept. of Defense, 2005).

Stationary Diesel ICEs: Because military facilities or their operations may be located in remote areas away from population centers, they might not be served by electricity power lines from the local electric utility. Stationary diesel ICEs may be used to provide electricity to military facilities that may not have access to electricity sources; if electricity is available, may be used as a backup source of electricity in the event of a power outage See discussion 2.5.1.1 regarding stationary diesel ICEs and TAC emissions.

2.5.1.11 Manufacturing Facilities

Facilities most anticipated to be affected by proposed Rule 11-18 are described in Subsections 2.5.1.1 through 2.5.1.10. However, to ensure that other sources of TAC emissions are not overlooked, Air District staff has identified the manufacturing facilities category as a catch-all category. Sources that may be included in this category include, but are not limited to: colleges and universities; airline operations; grocery or convenience stores that refrigerate fresh or frozen foods; food preparation facilities that require chillers or refrigeration, e.g., ice cream manufacturing, breweries, frozen food packaging; research laboratories, etc.

Stationary Diesel ICEs: Manufacturing facilities would likely need backup stationary diesel ICEs to provide power in the event of electricity blackouts to maintain computers, laboratory experiments, refrigeration so foods do not spoil, etc. See discussion in Subsection 2.5.1.1 regarding stationary diesel ICEs and TAC emissions.

2.5.2 TAC EMISSION CONTROL TECHNOLOGIES

Proposed Rule 11-18 would apply to existing facilities and would require preparation of a risk reduction plan for those facilities that pose a health risk in excess of the proposed risk action levels, 10 per million cancer risk level or a 1.0 hazard index. Facilities that exceed the risk action levels must either: implement an Air District-approved risk reduction plan that details how the facility would reduce its health risk below the risk action level in the specified timeframe or demonstrate to the Air District that all significant sources of risk are controlled with TBARCT.

To comply with the risk action levels for those affected facilities that are required to prepare a risk reduction plan, operators could reduce operations or install TBARCT equipment. Risk reduction measures may include the use of emission capture and control technologies that are intended to capture and remove a TAC or to convert a TAC into a less toxic material. However, risk reduction measures may also include use of alternative system designs, products, or technologies that reduce or prevent the emission of the TAC or other measures that reduce the amount of TACs that nearby receptors are exposed to. Examples of potential risk reduction measures are:

- Emission Capture and Control Technologies
  - Add system enclosures or emission capture systems;
  - Add emission control systems or conversion devices;

- Pollution Prevention Measures
  - Limit throughput rates or operating times;
  - Employ alternate technologies;
  - Reformulate or substitute products;
  - Modify production systems or practices;

- Public Exposure Reduction Measures
  - Modify source locations
  - Modify exhaust point locations or orientation
  - Increase stack height

The most appropriate risk reduction measures for a project are dependent on many factors such as:

- project design and operating requirements;
- the physical characteristics and chemical properties of the TACs that will be emitted;
- the concentration of TACs in the exhaust stream;
- exhaust system design parameters such as the exhaust flow rate, temperature, pressure, and stack height;

- the efficiency of the collection and control equipment needed to comply with the requirements of the rule;
- availability of alternative technologies or substitute products; and
- the distances to and locations of nearby receptors.

After the types of appropriate risk reduction measures have been identified for a project, the level of risk reduction needed and the cost of the risk reduction measure are key factors for the final risk reduction measure decision.

The type of emission capture and control technology that may be used depends on the specific type of TAC. Generally, TACs may be classified as inorganic aerosols and particulate matter, inorganic gases, volatile organic compounds (VOCs), and semivolatile organic compounds. Each different type of TAC is likely to need a specific type of control technology. The most common risk reduction measures that are likely to be encountered as a result of the proposed Rule 11-18 are categorized into the following groups and are summarized in Table 2.5-2:

- Enclosures and collection systems for particulate matter TACs;
- Filtration for toxic aerosols and particulate matter;
- Carbon adsorption and adsorption-oxidation systems for VOCs;
- Chemical absorption for VOCs;
- Thermal and catalytic oxidation for inorganic gases (such as hydrogen sulfide) and organic compounds;
- Replace old equipment with newer, more efficient equipment;
- Changes in facilities operations;
- Reduced throughput or operating time for particulate matter TACs and organic compound TACs;
- Alternative technologies; and
- Product substitution.

If it is determined that affected facilities exceed the health risk requirements in Rule 11-18, then engineering would be required to determine the appropriate type and specifications of the equipment, acquire financing, purchase the equipment, complete the permit process, and undergo any necessary environmental analyses.

TABLE 2.5-2

Risk Reduction Measures and Target Substances

Risk Reduction Measure	Substance Group	Control Efficiency
Enclosures	Particulates	Varied
Capture and Collection Systems	VOCs and Particulates	Varied
Diesel Particulate Filter	Particulates	85%
Replace Old Equipment with New Equipment	All	Varied
Baghouse	Particulates	99-99.9%
HEPA filter and pre-filter	Particulates	99.9-99.99%
Carbon Adsorption	VOCs	90-99%
Thermal and Catalytic Oxidizers	VOCs and Inorganic Gases	98-99.9%
Reduced Throughput or Operating Time	VOCS and Particulates	Varied
Alternative Technologies	Particulates	Up to 100%
Product Substitution	VOCs	Up to 100%
Relocate Source or Stack	All TAC Types	Not Applicable
Stack Modifications	All TAC Types	Not Applicable
Enhanced Monitoring	VOCs	Varied

The following subsections briefly describe the most likely types of control technologies that would be used to comply with the risk reduction requirements of proposed Rule 11-18.

2.5.2.1 Enclosures/Capture Systems

Cement plants and concrete batch plants use raw materials that contain toxic metals and crystalline silica. Particulate matter emissions from the storage, handling, and processing of these raw materials contains these TACs and can become airborne or contaminate groundwater if not properly contained. High winds and rain are particular concerns for lose materials. By building an enclosure around these types of materials, the risk of release is greatly reduced. This type of emission control may have minor environmental impacts associated with the construction of the enclosure, but will have no lasting impacts as a result of operation.

Dust and VOC capture systems consist of hoods, ducting, and a blower to collect TACs within a building. These capture systems are typically used in conjunction with an emission control system. Power needs for the blowers are generally low compared to total power use at the facility. Since capture systems are typically contained within existing buildings and used in conjunction with emission control systems, these systems are not expected to have any adverse environmental impacts.

2.5.2.2 Diesel Particulate Filter

The cancer risk related to diesel PM, which accounts for most of the cancer risk from TACs, has declined substantially over the past 15-20 years as a result of ARB regulations and Air District programs to reduce emissions from diesel engines. However, diesel PM still accounts for roughly 60 percent of the total cancer risk related to TACs (BAAQMD, 2017).

To further reduce DPM emissions from stationary diesel ICEs, the ICEs could be retrofitted with DPFs. DPFs allow exhaust gases to pass through the filter medium, but trap DPM before it is released to the atmosphere. Depending on an engine's baseline emissions and emission test method or duty cycle, DPFs can achieve DPM emission reduction efficiencies from the exhaust of 70 to 90 percent. In addition, DPFs can reduce HC emissions by 95 percent and CO emissions by 90 percent. Limited test data indicate that DPFs can also reduce NOx emissions by six to ten percent.

Particulates build up in the traps over time and must be removed by burning because they are mainly carbon. Some designs use electrical resistance heaters to raise the temperature in the trap high enough to burn off the particulates. Others have a burner built into the trap. Currently, the most common regeneration scheme employs "post injection," in which a small amount of fuel is injected into the cylinder late in the expansion stroke. This fuel then burns in the exhaust system, raising the trap temperature to the point where the accumulated particulate matter is readily burned away.

There are both active DPFs and passive DPFs. Active DPFs use heat generated by means other than exhaust gases (e.g., electricity, fuel burners, and additional fuel injection to increase exhaust gas temperatures) to assist in the regeneration process. Passive DPFs, which do not require an external heat source to regenerate, incorporate a catalytic material, typically a platinum group metal, to assist in oxidizing trapped diesel PM.

2.5.2.3 New ICEs

Diesel ICEs are often used to provide electricity in areas with no electricity, used as a backup source of electricity in the event of a power outage from numerous types of facilities (e.g. hospitals). Diesel ICEs emit diesel particulate matter that is often responsible for the largest toxic air pollution health risk concerns from stationary facilities.

Over the past several decades, emission limits for diesel ICEs have been established and modified to provide further control of exhaust pollutants. Initial emission limits for diesel ICEs were for engines referred to as Tier 1 ICEs. Diesel ICEs compliant with current emission limits are known as Tier 4 ICEs. Tier 4 ICEs are more efficient than Tier 1 ICEs and emit less pollutants. Depending on the engine size, replacing older existing diesel ICEs with newer diesel ICEs, would result in an estimated reduction of 59 percent of CO, 86 percent reduction in VOC, 93-96 percent reduction in NOx, and 95-96

percent reduction in PM (40 CFR Part 89 and 1039). Therefore, replacing Tier I ICEs with Tier 4 ICEs is expected to be a common way to reduce health risks under the proposed amendments to Rule 11-18 scenarios.

2.5.2.4 Baghouses with High Efficiency Filters

A baghouse is an air filtration control device designed to remove particulate matter emissions (both PM_{10} and $PM_{2.5}$) from an exhaust gas stream using filter bags, cartridge-type filters, or envelope-type filters. A baghouse consists of the following components: filter medium and support, filter cleaning device, collection hopper, shell, and fan. Most baghouse designs employ long cylindrical tubes (bags) that contain various types of fabric as the filtering medium. When particulate-laden air flows to the inlet of a baghouse, particulates are filtered through the filter bags inside the baghouse and filtered air flows from the outlet of the baghouse. Particulate layers (dust cakes) deposited on the surface of the bags need to be cleaned periodically to prevent excessive increase of pressure drops across the baghouse, which may lead to bag leak resulting in failure of proper baghouse function. Baghouses are generally not used with catalytic cracking units because of the space required and because of the pressure drop they cause in the flue gas stream (STAPPA/ALAPCO, 2006).

The bag material or fabric media is an important part of baghouse design and selection, as it determines the life and effectiveness of the filter bag. Fabric filter media must be compatible both physically and chemically with the gas stream and system conditions. Baghouse filters with polytetrafluoroethylene (PTFE) (also known by the brand name Teflon®) membranes generally have higher control efficiencies than other filter constructions in many applications. Independent testing conducted under the EPA's Environmental Technology Verification (ETV) program has verified that one of the most efficient filters is PTFE membrane filters, which is capable of ultra-high control efficiencies. Tests of PTFE filter bags from several different manufacturers showed particulate matter control efficiencies of 99 to 99.9 percent for particle sizes down to 1.0 or 2.0 μm to less than 1.0 μm when properly operated and maintained (U.S. EPA, 1998). Among its many useful properties, PTFE is hydrophobic, meaning it repels water. Additionally, it has a very low coefficient of friction of 0.05 – 0.10 (meaning substances have a hard time sticking to it and are easily removed) and has a high melting point of approximately 617 ºF (325°C).

Because of the microporous nature of PTFE, air-to-cloth ratios for these applications are lower than with conventional fabrics, requiring more collector area for a given volume flow rate of gas at a higher relative pressure drop. The current trend in bag cleaning is the pulsejet technology, where tubular bags are supported from the inside by metal wire frames. Gas flows across the fabric from the outside inward, exiting at the top of the bags. Periodically, a blast of compressed air from a fixed nozzle located inside the wire frame causes the bag to inflate outward, thus knocking the accumulated dust off the bag exterior and into the baghouse hopper, ready for collection and disposal.

2.5.2.5 Carbon Adsorption

Adsorption is a process by which VOCs are retained on the surface of granular solids. The solid adsorbent particles are highly porous and have very large surface-to-volume ratios. Gas molecules penetrate the pores of the adsorbent and contact the large surface area available for adsorption. Activated carbon is the most common adsorbent for VOC removal. Advantages of carbon adsorption include the recovery of a relatively pure product for recycle and reuse and a high removal efficiency with low inlet concentrations. In addition, if a process stream is already available onsite additional fuel costs are low, the main energy requirement being electrical power to run fan motors.

Fixed, moving, or fluidized-bed regenerative carbon adsorption systems operate in two modes, adsorption and desorption. Adsorption is rapid and removes from 50 to 99 percent of VOCs in the air stream, depending on their composition, concentration, temperature, and bed characteristics. Well-designed and operated systems, however, can usually achieve removal efficiencies in the 90 to 99 percent range. Eventually, the adsorbent becomes saturated with the vapors and system efficiency drops. At this point (called "breakthrough," since the contaminants "break through" the saturated bed), the VOC contaminated stream is directed to another bed containing regenerated adsorbent, and the saturated bed is then regenerated. Although it is possible to operate a non-regenerative adsorption system (i.e., the saturated carbon is disposed of and fresh carbon is placed into the bed), most applications, especially those with high VOC loadings, are regenerative.

2.5.2.6 Catalytic Oxidation

Catalytic oxidation is similar to thermal oxidation in that heat is used to convert VOC contaminants to carbon dioxide and water. However, a catalyst is used to lower the oxidation activation energy, allowing combustion to occur at 600 ^{o}F to 800 ^{o}F, much lower temperatures than those in thermal oxidation. In catalytic oxidation, a preheated gas stream is passed through a catalyst bed, where the catalyst initiates and promotes the oxidation of VOC. Catalyst units have a residence time of at least 0.1 second and a destruction efficiency of 90 to 95 percent. The primary advantage of catalytic oxidation over thermal oxidation is lower fuel cost, depending on the efficiency of the air preheater. Disadvantages include higher capital costs, periodic catalyst replacement, and the inability to handle halogenated organics.

The most common catalyst configuration is the plate-and-frame arrangement, in which blocks of catalyst material are held in place within the oxidizer body by a metal frame. The catalyst consists of a reactive material (such as platinum, platinum alloys, copper chromite, copper oxide, chromium, manganese or nickel) on an inert substrate (such as honeycomb-shaped ceramic). For the catalyst to be effective, the reactive sites upon which the VOC gas molecules react must be accessible. The build-up of polymerized material or reaction with certain metal particulates will prevent contact between reactive sites and the exhaust gas. A catalyst can be reactivated by removing such a coating. Cleaning methods vary with the type of catalyst and include air blowing, steam blowing,

and operating at elevated temperatures in a clean air stream. As with other catalytic processes, oxidation catalyst material can be lost by erosion, attrition, and vaporization at high temperatures (SCAQMD, 2015)

2.5.2.7 Thermal Oxidizers

Thermal oxidizers rely on direct contact between toxic gases and high-temperature flames to disassociate and destroy toxic substances. There are three main categories of thermal oxidizers that could be used to control volatile TAC emissions: afterburners with no heat recovery, thermal oxidizers with recuperative heat recovery, and highly efficient regenerative heat recovery oxidizers. Afterburners with no heat recovery are the most likely types of thermal oxidizer anticipated to control TAC emissions. Thermal oxidizers, or thermal incinerators, are combustion devices that control volatile TAC emissions by combusting them to CO_2 and water.

Three main factors contributing to the effectiveness of thermal oxidizers are temperature, residence time, and turbulence. The temperature needs to be high enough to ignite the waste gas. Most organic compounds ignite at the temperature between 1,094 ºF (590 ºC) and 1,202 ºF (650 ºC). To ensure destruction of hazardous gases, most basic oxidizers are operated at much higher temperature levels. Residence time is important for ensuring that there is enough time for the combustion reaction to occur. The turbulence factor is the mixture of combustion air with the hazardous gases.

2.5.2.8 Wet Gas Scrubber

In wet scrubbing processes, liquid or solid particles are removed from a gas stream by transferring them to a liquid. This addresses only wet scrubbers for control of particulate matter. The liquid most commonly used is water. A wet scrubber's particulate collection efficiency is directly related to the amount of energy expended in contacting the gas stream with the scrubber liquid. Most wet scrubbing systems operate with particulate collection efficiencies over 95 percent (U.S. EPA, 2017).

There are three energy usage levels for wet scrubbers. A low energy wet scrubber is capable of efficiently removing particles greater than about 5-10 micrometers in diameter. A medium energy scrubber is capable of removing micrometer-sized particles, but is not very efficient on sub-micrometer particles. A high-energy scrubber is able to remove sub-micrometer particles.

A spray tower scrubber is a low energy scrubber and is the simplest wet scrubber used for particulate control. It consists of an open vessel with one or more sets of spray nozzles to distribute the scrubbing liquid. Typically, the gas stream enters at the bottom and passes upward through the sprays. The particles are collected when they impact the droplets. This is referred to as counter-current operation. Spray towers can also be operated in a cross-current arrangement. In cross-current scrubbers, the gas flow is horizontal and the

liquid sprays flow downward. Cross-current spray towers are not usually as efficient as counter-current units.

The most common high energy wet scrubber is the venturi, although it can also be operated as a medium energy scrubber. In a fixed-throat venturi, the gas stream enters a converging section where it is accelerated toward the throat section. In the throat section, the high-velocity gas stream strikes liquid streams that are injected at right angles to the gas flow, shattering the liquid into small drops. The particles are collected when they impact the slower moving drops. Following the throat section, the gas stream passes through a diverging section that reduces the velocity.

All wet scrubber designs incorporate mist eliminators or entrainment separators to remove entrained droplets. The process of contacting the gas and liquid streams results in entrained droplets, which contain the contaminants or particulate matter. The most common mist eliminators are chevrons, mesh pads, and cyclones. Chevrons are simply zig-zag baffles that cause the gas stream to turn several times as it passes through the mist eliminator. The liquid droplets are collected on the blades of the chevron and drain back into the scrubber. Mesh pads are made from interlaced fibers that serve as the collection area. A cyclone is typically used for the small droplets generated in a venturi scrubber. The gas stream exiting the venturi enters the bottom of a vertical cylinder tangentially. The droplets are removed by centrifugal force as the gas stream spirals upward to the outlet.

2.5.2.9 Electrostatic Precipitator (ESP)

An ESP is a control device designed to remove particulate matter (both PM_{10} and $PM_{2.5}$) from an exhaust gas stream. ESPs take advantage of the electrical principle that opposites attract. By imparting a high voltage charge to the particles, a high voltage direct current (DC) electrode negatively charges airborne particles in the exhaust stream, while simultaneously ionizing the carrier gas, producing an electrified field. The electric field in an ESP is the result of three contributing factors: the electrostatic component resulting from the application of a voltage in a dual electrode system, the component resulting from the space charge from the ions and free electrons, and the component resulting from the charged particulate. As the exhaust gas passes through this electrified field, the particles are charged. The strength or magnitude of the electric field is an indication of the effectiveness of an ESP. Typically, 20,000 to 70,000 volts are used. The particles, either negatively or positively charged, are attracted to the ESP collecting electrode of the opposite charge. When enough particulates have accumulated, the collectors are shaken to dislodge the dust, causing it to fall by gravity to hoppers below and then removed by a conveyor system for disposal or recycling. ESPs can handle large volumes of exhaust gases and because no filters are used, ESPs can handle hot gases from 350 ºF to 1,300 ºF.

2.5.2.10 Reduced Throughput or Operating Time

Reducing the amount of materials used in a given process is a straightforward way to reduce emissions. Likewise, reducing the overall time the process operates over a given period will lead to similar emission reductions. Facilities could meet the risk thresholds by reducing throughput or operating times. No equipment will be used to meet emission reductions via these methods, thus there will be no adverse environmental impacts.

2.5.2.11 Product Substitution

Another possible risk reduction measure is the use of product substitution. This is a common risk reduction method for coating and solvent projects. Products that emit a TAC that may cause a significant health impact would be replaced by a less toxic product or formulation. The new product would continue to be subject to District requirements, which would ensure that air quality and health impacts for the use of the new product would be less than significant. Typically, the products would be commercially available alternative that have been approved for use by all appropriate agencies. In this case, no adverse environmental impacts are expected from such product substitutions.

2.5.2.12 Stack Modifications

Stack modifications are another common and generally inexpensive risk reduction measure that are often used to reduce risk from back-up generators and soil remediation operations. Changing the direction of a stack (from horizontal to vertical, for example) and increasing the height of a stack to just above the height of nearby buildings will increase the dispersion of the emissions from that stack and will typically result in lower ground level air concentrations at nearby receptors and lower health risks. The District evaluates health risks from a project using the modified stack parameters to ensure that risks to all receptors meet acceptable levels. Stack modifications usually involve extensions of about 2-20 feet. Similarly, a source or stack could be relocated farther away from the highest impacted receptor to reduce health risk. This type of risk reduction measure would not involve any new equipment or processes and would have no adverse environmental impacts.

2.5.2.13 Enhanced Monitoring/Component Replacement

Enhanced monitoring could be used to minimize ROG emissions from fugitive industrial components, such as compressors, pumps, valves, flanges and pressure relief devices. More frequent monitoring would detect leaks more quickly, reducing ROG emissions. If leaks were identified, the equipment would be repaired. If the equipment frequently leaked, then the components could be replaced

Table 2.5-3 identifies the types of facilities affected by the proposed rule, the primary sources of TAC emissions, and the most likely types of control technologies that could be used to reduce risk.

TABLE 2.5-3

Summary of Toxic Air Contaminant Control Equipment

Facility	Sources	Control Equipment
Refineries	Fugitive Emissions	Establish requirements for more frequent inspections, require replacement of non-repairable valves, flanges, pressure relief devices, etc. (similar to or more stringent than Rule 8-18)
	Stack Emissions	Baghouse with high efficiency filter, WGS
	Diesel Engines	Require emission limits based on the most efficient DPF (similar to or more stringent than Rule 11-17)
	Cooling Towers	Tighten requirements in Rule 11-10 for more frequent inspections and shorten time-period to comply once leak is detected (similar to or more stringent than Rule 11-10)
	Wastewater Treatment Operations	Require high collection efficiency of the organic compound recovery system, shorten period between inspections of wastewater collection systems (similar to or more stringent than Rule 8-8)
Data Centers	Stationary Diesel Engines	Require emission limits based on the most efficient DPF, (similar to or more stringent than Rule 11-17)
Cement Manufacturing	Stack Emissions	Require baghouses with high efficiency filters (similar to or more stringent than Rule 9-13)
	Fugitive Emissions	Require enclosed conveyors and storage piles, rumble grates, conveyor skirting, dust curtains, road paving, reducing traffic speed and volume (similar to or more stringent than Rule 9-13)
Chemical Plants	Stack Emissions	Wet gas scrubber
	Fugitive Emissions	Establish requirements for more frequent inspections, require replacement of non-repairable valves, flanges, pressure relief devices, etc. (similar to or more stringent than Rule 8-22)
Crematoria	Stack Emissions	Baghouse with high efficiency filter
Landfills	Fugitive Emissions	Gas collection and control systems under continuous operation and under negative pressure at all times, enclosed thermal oxidizer with a destruction efficiency of 99%
	Diesel Engines	Require emission limits based on the most efficient DPF (similar to or more stringent than Rule 11-17)
Foundries and Forges	Fugitive Emissions	Baghouse with high efficiency filter
Sewage Treatment Facilities	Fugitive Emission	Enclose piping, process units, settling basins, lift stations, etc.

Facility	Sources	Control Equipment
	Stack Emissions	Steam stripping and air stripping off-gases vented to a control or collection device, such as a combustion device (thermal oxidizer) or gas-phase carbon adsorber. Wet gas scrubbers and afterburners to control heavy metals, acid gas.
Power Plants	Stack Emissions	Baghouse with high efficiency filter, WGS
Military Facilities	Diesel Engines	Require emission limits based on the most efficient DPF (similar to or more stringent than Rule 11-17)
Manufacturing	Diesel Engines	Require emission limits based on the most efficient DPF (similar to or more stringent than Rule 11-17)

DOC = diesel oxidation catalyst, DPF = diesel particulate filter

Table 2.5-4 identifies provides an estimate of the number of facilities that may be affected by Rule 11-18 and would need to make modifications to their facility. The impacts associated with these control measures and the potential secondary adverse environmental impacts are evaluated in this EIR in Chapter 3. CEQA recognizes that regulatory requirements consisting of monitoring and inspections, do not typically generate environmental impacts (see for example, CEQA Guidelines §15309).

TABLE 2.5-4

Air Pollution Control Equipment Potentially Installed Under Rule 11-18

Risk Reduction Measure	Number of Facilities Affected
Enclosures	60
Diesel Particulate Filters	100
New ICEs	100
Baghouse with HEPA Filters	12
Carbon Adsorption	5
Catalytic Oxidization	10
Thermal Oxidizers	10
Wet Gas Scrubbers	10
ESPs	5
Process Improvements(1)	30
Product Substitution	10
Enhanced Monitoring/Component Replacement	7

(1) Includes reduced throughput, reduced operating time, and stack modifications.

M:\DBS\30503 BAAQMD Rule 11-18\DEIR\3050 DEIR Ch. 2.docx

CHAPTER 3

ENVIRONMENTAL SETTING, IMPACTS, MITIGATION MEASURES, AND CUMULATIVE IMPACTS

Introduction
Air Quality
Greenhouse Gases
Hazards and Hazardous Materials
Hydrology and Water Quality
Growth Inducing Impacts

Significant Environmental Effects Which Cannot be Avoided
Environmental Effects Not Found to be Significant

This page intentionally left blank.

3.0 ENVIROMENTAL SETTING, IMPACTS, MITIGATION MEASURES AND CUMULATIVE IMPACTS

3.1 INTRODUCTION

This chapter of the ~~Draft~~ Final EIR describes the existing environmental setting in the Bay Area, analyzes the potential environmental impacts of implementing Rule 11-18, and recommends mitigation measures (when significant environmental impacts have been identified). The chapter provides this analysis for each of the environmental areas identified in the original Initial Study prepared by the Air District for Rule 12-16 and Rule 11-18 (BAAQMD, 2015) (see Appendix A). The Initial Study concluded that the approval of Rule 12-16 and Rule 11-18 could potentially result in significant environmental impacts to the following resources:

- Air quality;
- Climate change and greenhouse gas emissions;
- Hazards and Hazardous Materials; and
- Hydrology and water quality.

Some of the impacts identified in the Initial Study were related to Rule 12-16 which is no longer included as part of this project. Nonetheless, the potential impacts identified in the Initial Study prepared for both rules will be evaluated in this EIR. Included for each impact category is a discussion of the: (1) Environmental Setting; (2) Regulatory Setting; (3) Significance Criteria; (4) Environmental Impacts; (5) Mitigation Measures (if necessary and available); and (6) Cumulative Impacts. A description of each subsection follows.

3.1.1 ENVIRONMENTAL SETTING

CEQA Guidelines §15360 (Public Resources Code Section 21060.5) defines "environment" as "the physical conditions that exist within the area which will be affected by a proposed project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance." CEQA Guidelines §15125(a) requires that an EIR include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant. The description of the environmental setting is intended to be no longer than is necessary to gain an understanding of the significant effects of the proposed project and its alternatives.

This Chapter describes the existing environment in the Bay Area as it exists at the time the environmental analysis commenced (2015) to the extent that information is available. The analyses included in this chapter focus on those aspects of the environmental resource areas that could be adversely affected by the implementation of the proposed revisions to District permitting regulations as determined in the original NOP/IS prepared for Rules 12-16 and 11-18 (see Appendix A), and not those environmental resource areas determined to have

no potential adverse impact from the proposed project. The NOP/IS (see Appendix A) determined the air quality, greenhouse gases, hazards and hazardous materials, and hydrology and water quality impacts associated with the proposed amendments were potentially significant and are evaluated in this EIR, even though some of those impacts were associated with Rule 12-16. The District is no longer considering the implementation of Rule 12-16. Nonetheless, the potential impacts identified in the NOP/IS for both Rules 12-16 and 11-18 will be evaluated in this EIR for Rule 11-18 only.

3.1.2 SIGNIFICANCE CRITERIA

This section identifies the criteria used to determine when physical changes to the environment created as a result of the proposed project approval would be considered significant. The levels of significance for each environmental resource were established by identifying significance criteria. These criteria are based upon those presented in the California Environmental Quality Act (CEQA) environmental checklist and the BAAQMD's CEQA Guidelines (BAAQMD, 2017).

The significance determination under each impact analysis is made by comparing the proposed project impacts with the conditions in the environmental setting and comparing the difference to the significance criteria.

3.1.3 ENVIRONMENTAL IMPACTS

The CEQA Guidelines also require the EIR to identify significant environmental effects that may result from a proposed project (CEQA Guidelines §15126.2(a)). Direct and indirect significant effects of a project on the environment must be identified and described, with consideration given to both short- and long-term impacts. The potential impacts associated with each resource are either quantitatively analyzed where possible or qualitatively analyzed where data are insufficient to quantify impacts. The impacts are compared to the significance criteria to determine the level of significance.

The impact sections of this chapter focus on those impacts that are considered potentially significant per the requirements of CEQA. An impact is considered significant if it leads to a "substantial, or potentially substantial, adverse change in the environment." Impacts from the project fall within one of the following categories:

> **Beneficial:** Impacts will have a positive effect on the resource.
>
> **No Impact:** There would be no impact to the identified resource as a result of the project.
>
> **Less than Significant:** Some impacts may result from the project; however, they are judged to be less than significant. Impacts are frequently considered less than significant when the changes are minor relative to the size of the available resource base or would not change an existing resource. A "less than

significant impact" applies where the environmental impact does not exceed the significance threshold.

Potentially Significant but Mitigation Measures Can Reduce Impacts to Less Than Significant: Significant adverse impacts may occur; however, with proper mitigation, the impacts can be reduced to less than significant.

Potentially Significant or Significant Impacts: Adverse impacts may occur that would be significant even after mitigation measures have been applied to minimize their severity. A "potentially significant or significant impacts" applies where the environmental impact exceeds the significance threshold, or information was lacking to make a finding of insignificance.

It is important to note that CEQA will also apply to individual projects at the time any permits are submitted in the future in response to the regulation or regulations that may be approved by the Board and the potential for any control equipment or other design modifications to affected facilities to have secondary adverse environmental impacts will be evaluated at that time. Should projects be subject to applicable permitting requirements because the updated HRA shows that additional risk reduction measures are required, a separate project-specific CEQA analysis will be conducted at the time of permitting to ensure that any significant adverse environmental impacts are identified and mitigated, as necessary, or avoided.

3.1.4 MITIGATION MEASURES

If significant adverse environmental impacts are identified, the CEQA Guidelines require a discussion of measures that could either avoid or substantially reduce any adverse environmental impacts to the greatest extent feasible (CEQA Guidelines §15126.4). The analyses in this chapter describe the potential for significant adverse impacts and identify mitigation measures where appropriate. This section describes feasible mitigation measures that could minimize potentially significant or significant impacts that may result from project approval. CEQA Guidelines (§15370) defines mitigation to include:

- Avoiding the impact altogether by not taking a certain action or parts of an action.
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- Rectifying the impact by repairing, rehabilitating or restoring the impacted environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

- Compensating for the impact by replacing or providing substitute resources or environments.

In accordance with CEQA statutes (§21081.6), a mitigation and monitoring program would be required to be adopted to demonstrate and monitor compliance with any mitigation measures identified in this EIR. The program would identify specific mitigation measures to be undertaken, when the measure would be implemented, and the agency responsible for oversight, implementation and enforcement.

3.1.5 CUMULATIVE IMPACTS

CEQA Guidelines §15130(a) requires an EIR to discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable. An EIR evaluating the environmental impact of air quality regulations essentially evaluates the cumulative impacts associated with a variety of regulatory activities. As such, this EIR evaluates the cumulative environmental impacts associated with implementation of other air quality regulations as outlined in the 2017 Clean Air Plan, the most recent air plan for the Bay Area (BAAQMD, 2017). The area evaluated for cumulative impacts in this EIR is the area within the jurisdiction of the District, an area encompassing 5,600 square miles, which includes all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties, and portions of southwestern Solano and southern Sonoma counties.

CHAPTER 3.2

AIR QUALITY IMPACTS

Introduction
Environmental Setting
Regulatory Setting
Significance Criteria
Air Quality Impacts

This page intentionally left blank.

3.2 AIR QUALITY

This subchapter of the EIR evaluates the potential air quality impacts associated with implementation of Rule 11-18, which would reduce exposure to TAC emissions from a number of stationary sources within the Bay Area, including refineries.

As discussed in the Initial Study, implementation of Rule 11-18 would reduce risk from facilities that emit toxic air contaminants throughout the Bay Area. However, certain risk reduction measures have the potential to increase emissions of other pollutants, such as GHGs and criteria pollutants. The NOP/IS (see Appendix A) determined that air quality impacts of the proposed new rule are potentially significant. Project-specific and cumulative adverse air quality impacts associated with the proposed new rules on air contaminants (including criteria air pollutants and TACs) have been evaluated in Chapter 3.2 of this EIR.

3.2.1 ENVIRONMENTAL SETTING

3.2.1.1 Criteria Pollutants

Ambient Air Quality Standards

It is the responsibility of the Air District to ensure that state and federal ambient air quality standards (AAQS) are achieved and maintained in its geographical jurisdiction. Health-based air quality standards have been established by California and the federal government for the following criteria air pollutants: ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), particulate matter (PM10 and PM2.5), sulfur dioxide (SO_2), and lead (Pb). These standards were established to protect sensitive receptors with a margin of safety from adverse health impacts due to exposure to air pollution. California has also established standards for sulfate, visibility-reducing particles, hydrogen sulfide, and vinyl chloride. The state and national NAAQS for each of these pollutants and their effects on health are summarized in Table 3.2-1.

TABLE 3.2-1

Federal and State Ambient Air Quality Standards

	~~STATE~~ CALIFORNIA STANDARD	~~FEDERAL~~ NATIONAL PRIMARY STANDARD	MOST RELEVANT EFFECTS
AIR POLLUTANT	CONCENTRATION/ AVERAGING TIME	CONCENTRATION/ AVERAGING TIME	
Ozone	0.09 ppm, 1-hr. avg. > 0.070 ppm, 8-hr	No Federal 1-hr standard 0.070 ppm, 8-hr avg. >	(a) Short-term exposures: (1) Pulmonary function decrements and localized lung edema in humans and animals (2) Risk to public health implied by alterations in pulmonary morphology and host defense in animals; (b) Long-term exposures: Risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (c) Vegetation damage; (d) Property damage
Carbon Monoxide	9.0 ppm, 8-hr avg. > 6 ppm, 8-hr avg. (Lake Tahoe) 20 ppm, 1-hr avg. >	9 ppm, 8-hr avg.> 35 ppm, 1-hr avg.>	(a) Aggravation of angina pectoris and other aspects of coronary heart disease; (b) Decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) Impairment of central nervous system functions; (d) Possible increased risk to fetuses
Nitrogen Dioxide	0.030 ppm, annual avg. 0.18 ppm, 1-hr avg. >	0.053 ppm, ann. avg.> 0.100 ppm, 1-hr avg.	(a) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (b) Risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; (c) Contribution to atmospheric discoloration
Sulfur Dioxide	0.04 ppm, 24-hr avg.> 0.25 ppm, 1-hr. avg. >	No Federal 24-hr Standard> 0.075 ppm, 1-hr avg.>	(a) Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma
Suspended Particulate Matter (PM10)	20 $\mu g/m^3$, ann. arithmetic mean > 50 $\mu g/m^3$, 24-hr average>	No Federal annual Standard 150 $\mu g/m^3$, 24-hr avg.>	(a) Excess deaths from short-term exposures and exacerbation of symptoms in sensitive patients with respiratory disease; (b) Excess seasonal declines in pulmonary function, especially in children
Suspended Particulate Matter (PM2.5)	12 $\mu g/m^3$, annual arithmetic mean> No State 24-hr Standard	12 $\mu g/m^3$, annual arithmetic mean> 35 $\mu g/m^3$, 24-hour average>	Decreased lung function from exposures and exacerbation of symptoms in sensitive patients with respiratory disease; elderly; children.
Sulfates	25 $\mu g/m^3$, 24-hr avg. >=	No Federal Standard	(a) Decrease in ventilatory function; (b) Aggravation of asthmatic symptoms; (c) Aggravation of cardio-pulmonary disease; (d) Vegetation damage; (e) Degradation of visibility; (f) Property damage
Lead	1.5 $\mu g/m^3$, 30-day avg. >= No State Calendar Quarter Standard No State 3-Month Rolling Avg. Standard	No Federal 30-day avg. Standard 1.5 $\mu g/m^3$, calendar quarter> 0.15 $\mu g/m^3$ 3-Month Rolling average	(a) Increased body burden; (b) Impairment of blood formation and nerve conduction
Visibility-Reducing Particles	In sufficient amount to give an extinction coefficient >0.23 and >0.07 inverse kilometers for the statewide and Lake Tahoe Air Basin standards, respectively (visual range to less than 10 miles) with relative humidity less than 70%, 8-hour average (10am – 6pm PST)	No Federal Standard	Visibility based standard, not a health based standard. Nephelometry and AISI Tape Sampler; instrumental measurement on days when relative humidity is less than 70 percent

U.S. EPA requires CARB and Air District to measure the ambient levels of air pollution to determine compliance with the NAAQS. To comply with this mandate, the Air District monitors levels of various criteria pollutants at 25 monitoring stations within the San Francisco Bay Area. A summary of the 2015 maximum concentration and number of days exceeding state and federal ambient air standards at the Air District monitoring stations are presented in Table 3.2-2.

TABLE 3.2-2
Bay Area Air Pollution Summary – 2015

MONITORING STATIONS	OZONE						CARBON MONOXIDE			NITROGEN DIOXIDE				SULFUR DIOXIDE				PM 10				PM 2.5				
	Max 1-hr	Cal 1-hr Days	Max 8-hr	Nat 8-Hr Days	Cal 8-hr Days	3-Yr Avg	Max 1-hr	Max 8-hr	Nat/ Cal Days	Max 1-Hr	Ann Avg	Nat 8-hr Days	Cal 8-hr Days	Max 1-hr	Max 24-hr	Nat 1-Hr Days	Cal 24-hr Days	Ann Avg	Max 24-hr	Nat Days	Cal Days	Max 24-hr	Nat 24-hr Days	3-Yr Avg	Ann Avg	3-Yr Avg
North Counties	(ppb)						(ppm)			(ppb)				(ppb)				($\mu g/m^3$)				($\mu g/m^3$)				
Napa*	79	0	69	0	0	61	3.3	1.6	0	43	8	0	0	-	-	-	-	18.6	50	0	0	38.2	1	27	10.6	11.4
San Rafael	81	0	70	0	0	61	1.4	0.9	0	44	11	0	0	-	-	-	-	16.1	42	0	0	36.3	2	26	8.6	10.0
Sebastopol*	68	0	62	0	0	*	1.3	0.9	0	37	5	0	0	-	-	-	-	-	-	-	-	29.9	0	*	6.8	*
Vallejo	85	0	70	0	1	61	2.4	1.9	0	44	8	0	0	5	1.7	0	0	-	-	-	-	41.4	3	29	9.6	9.8
Coast/Central Bay																										
Laney College Fwy*	-	-	-	-	-	-	2.7	1.6	0	106	18	1	0	-	-	-	-	-	-	-	-	37.2	1	*	10.0	*
Oakland	94	0	74	2	2	52	2.4	1.4	0	48	11	0	0	-	-	-	-	-	-	-	-	44.7	1	25	8.3	9.1
Oakland-West*	91	0	64	0	0	49	4.7	2.6	0	57	14	0	0	21.6	3.9	0	0	-	-	-	-	38.7	3	29	10.2	10.8
Richmond	-	-	-	-	-	-	-	-	-	-	-	-		12	2.8	0	0	-	-	-	-	-	-	-	-	-
San Francisco	85	0	67	0	0	48	1.8	1.3	0	71	12	0	0	-	-	-	-	19.2	47	0	0	35.4	0	25	7.6	8.4
San Pablo*	84	0	62	0	0	55	2	1.1	0	46	9	0	0	10.7	2.4	0	0	18.6	43	0	0	33.2	0	27	8.9	10.5
Eastern District																										
Bethel Island	80	0	72	1	2	66	1.1	0.9	0	29	5	0	0	8.8	1.9	0	0	13.6	33	0	0	-	-	-	-	-
Concord	88	0	73	2	4	64	1.4	1.3	0	33	7	0	0	6.7	2	0	0	13.1	24	0	0	31	0	23	8.8	7.7
Crockett	-	-	-	-	-	-	-	-	-	-	-	-	-	20.5	3.7	0	0	-	-	-	-	-	-	-	-	-
Fairfield	84	0	72	1	1	63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Livermore	105	1	81	7	7	73	-	-	-	50	10	0	0	-	-	-	-	-	-	-	-	31.1	0	28	8.8	8.2
Martinez	-	-	-	-	-	-	-	-	-	-	-	-	-	14.7	4.8	0	0	-	-	-	-	-	-	-	-	-
Patterson Pass	99	4	82	5	6	*	-	-	-	19	3	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-
San Ramon	106	1	84	6	6	70	-	-	-	37	6	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-
South Central Bay																										
Hayward	103	2	84	2	2	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Redwood City	86	0	71	1	1	59	3.4	1.6	0	48	11	0	0	-	-	-	-	-	-	-	-	34.6	0	24	5.7	7.8
Santa Clara Valley																										
Gilroy	95	1	78	3	3	67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42.2	2	18	7.2	7.5
Los Gatos	100	1	84	4	5	67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
San Jose	94	0	81	2	2	63	2.4	1.8	0	49	13	0	0	3.1	1.1	0	0	22	58	0	1	49.4	2	30	10.0	10.2
San Jose Freeway*	-	-	-	-	-	-	2.7	2	0	61	18	0	0	-	-	-	-	-	-	-	-	46.9	1	*	8.4	*
San Martin	98	1	83	4	4	70	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-
Total Days over Standard		**7**		**12**	**12**				**0**		**1**	**0**			**0**	**0**				**0**	**1**		**9**			

*Air monitoring at Sebastopol began in January 2014. Therefore, 3-year average statistics for ozone and PM2.5 are not available. The Sebastopol site replaced the Santa Rosa site which closed on December 13, 2013.
Ozone monitoring using the federally accepted method began at Patterson Pass on April 1, 2015. Therefore, 3-year average ozone statistics are not available.
Near-road air monitoring at Laney College Freeway began in February 2014. Therefore, 3-year average PM2.5 statistics are not available.
Near-road air monitoring at San Jose Freeway began in September 2014. Therefore, 3-year average PM2.5 statistics are not available.
(ppb) = parts per billion (ppm) = parts per million, ($\mu g/m^3$) = micrograms per cubic meter

3.2-3

Air quality conditions in the San Francisco Bay Area have improved since the Air District was created in 1955. The long-term trend of ambient concentrations of air pollutants and the number of days on which the region exceeds (AAQS) have generally declined, although some year-to-year variability primarily due to meteorology, causes some short-term increases in the number of exceedance days (see Table 3.2-3). The Air District is in attainment of the State AAQS for CO, NO_2, sulfates, and SO_2. However, the Air District ~~does not comply~~ is not in attainment with the State ~~24-hour~~ PM10, PM2.5, or ozone standards. The Air District is ~~unclassifiable~~ unclassified/attainment for the federal CO, NO_2, SO_2, Pb, annual PM2.5 and PM10 standards. A designation of ~~unclassifiable~~ unclassified/attainment means that EPA has determined to have sufficient evidence to find the area either is attaining or is likely attaining the NAAQS. The Air District is not currently in attainment of the federal ozone and 24-hour PM2.5 standards.

The 2015 air quality data from the Air District monitoring stations are presented in Table 3.2-2. No monitoring stations measured an exceedance of any of the state or federal AAQS for CO, SO_2, and Pb. There was one exceedance of the federal NO_2 AAQS at one monitoring station in 2015, although the area did not violate the NAAQS. All monitoring stations were in compliance with the federal PM10 standards. The California 24-hour PM10 standard was exceeded on one day in 2015, at the San Jose monitoring station (see Table 3.2-2).

The Bay Area is designated as a non-attainment area for the federal and state 8-hour ozone standard and the federal 24-hour PM2.5 standard. The state 8-hour ozone standard was exceeded on 12 days in 2015 at one site or more in the Air District; most frequently in the Eastern District (Livermore, Patterson Pass, and San Ramon) (see Table 3.2-2). The federal 8-hour ozone standard was exceeded on 12 days in 2015. The federal 24-hour PM2.5 standard was exceeded at one or more Bay Area station on nine days in 2015, most frequently at the Vallejo and Oakland-West stations.

TABLE 3.2-3

Bay Area Air Quality Summary
Days over Standards

YEAR	OZONE			CARBON MONOXIDE				NOx		SULFUR DIOXIDE		PM10		PM2.5
	8-Hr	1-Hr	8-Hr	1-Hr		8-Hr		1-Hr		1-Hr	24-Hr	24-Hr*		24-Hr
	Nat	Cal	Cal	Nat	Cal	Nat	Cal	Nat	Cal	Nat	Cal	Nat	Cal	Nat
2006	20	18	22	0	0	0	0	1	0	0	0	0	15	10
2007	8	4	9	0	0	0	0	0	0	0	0	0	4	14
2008	19	9	20	0	0	0	0	0	0	2	0	0	5	12
2009	11	11	13	0	0	0	0	0	0	0	0	0	1	11
2010	11	8	11	0	0	0	0	0	0	0	0	0	2	6
2011	9	5	10	0	0	0	0	0	0	0	0	0	3	8
2012	8	3	8	0	0	0	0	1	0	0	0	0	2	3
2013	3	3	3	0	0	0	0	0	0	0	0	0	6	13
2014	9	3	10	0	0	0	0	0	0	0	0	0	2	3
2015	12	7	12	0	0	0	0	1	0	0	0	0	1	9

NOTE: Nat = National Ambient Air Quality Standard; Cal = California Ambient Air Quality Standard

3.2.1.2 Criteria Pollutant Health Effects

3.2.1.2.1 Ozone

Ozone is not emitted directly from pollution sources. Instead ozone is formed in the atmosphere through complex chemical reactions between hydrocarbons, or reactive organic gases (ROG, also commonly referred to as volatile organic compounds or VOC), and nitrogen oxides (NOx), in the presence of sunlight. ROG and NOx are referred to as ozone precursors.

Ozone, a colorless gas with a sharp odor, is a highly reactive form of oxygen. High ozone concentrations exist naturally in the stratosphere. Some mixing of stratospheric ozone downward through the troposphere to the earth's surface does occur; however, the extent of ozone mixing is limited. At the earth's surface in sites remote from urban areas ozone concentrations are normally very low (0.03-0.05 ppm). While ozone is beneficial in the stratosphere because it filters out skin-cancer-causing ultraviolet radiation, ground level ozone is harmful, is a highly reactive oxidant, which accounts for its damaging effects on human health, plants and materials at the earth's surface.

Ozone is harmful to public health at high concentrations near ground level. Ozone can damage the tissues of the lungs and respiratory tract. High concentrations of ozone irritate the nose, throat, and respiratory system and constrict the airways. Ozone also can aggravate other respiratory conditions such as asthma, bronchitis, and emphysema, causing increased hospital admissions. Repeated exposure to high ozone levels can make people

more susceptible to respiratory infection and lung inflammation and permanently damage lung tissue. Ozone can also have negative cardiovascular impacts, including chronic hardening of the arteries and acute triggering of heart attacks. Children are most at risk as they tend to be active and outdoors in the summer when ozone levels are highest. Seniors and people with respiratory illnesses are also especially sensitive to ozone's effects. Even healthy adults can be affected by working or exercising outdoors during high ozone levels.

The propensity of ozone for reacting with organic materials causes it to be damaging to living cells, and ambient ozone concentrations in the Bay Area are occasionally sufficient to cause health effects. Ozone enters the human body primarily through the respiratory tract and causes respiratory irritation and discomfort, makes breathing more difficult during exercise, reducing the respiratory system's ability to remove inhaled particles and fight infection while long-term exposure damages lung tissue. People with respiratory diseases, children, the elderly, and people who exercise heavily are more susceptible to the effects of ozone.

Plants are sensitive to ozone at concentrations well below the health-based standards and ozone is responsible for significant crop damage. Ozone is also responsible for damage to forests and other ecosystems.

3.2.1.2.2 Volatile Organic Compounds (VOCs)

It should be noted that there are no state or national ambient air quality standards for VOCs because they are not classified as criteria pollutants. VOCs are regulated, however, because VOC emissions contribute to the formation of ozone. They are also transformed into organic aerosols in the atmosphere, contributing to higher PM10 and lower visibility levels.

Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations of VOCs because of interference with oxygen uptake. In general, ambient VOC concentrations in the atmosphere are suspected to cause coughing, sneezing, headaches, weakness, laryngitis, and bronchitis, even at low concentrations. Some hydrocarbon components classified as VOC emissions are thought or known to be hazardous. Benzene, for example, one hydrocarbon component of VOC emissions, is known to be a human carcinogen.

VOC emissions result primarily from incomplete fuel combustion and the evaporation of paints, solvents and fuels. Mobile sources are the largest contributors to VOC emissions. Stationary sources include processes that use solvents (such as manufacturing, degreasing, and coating operations) and petroleum refining, and marketing. Area-wide VOC sources include consumer products, pesticides, aerosol and architectural coatings, asphalt paving and roofing, and other evaporative emissions.

3.2.1.2.3 Carbon Monoxide (CO)

CO is a colorless, odorless, relatively inert gas. It is a trace constituent in the unpolluted troposphere, and is produced by both natural processes and human activities. In remote areas far from human habitation, carbon monoxide occurs in the atmosphere at an average background concentration of 0.04 ppm, primarily as a result of natural processes such as forest fires and the oxidation of methane. Global atmospheric mixing of CO from urban and industrial sources creates higher background concentrations (up to 0.20 ppm) near urban areas. The major source of CO in urban areas is incomplete combustion of carbon-containing fuels, mainly gasoline used in mobile sources. Consequently, CO concentrations are generally highest near major concentrations of vehicular traffic.

CO is a primary pollutant, meaning that it is directly emitted into the air, not formed in the atmosphere by chemical reaction of precursors, as is the case with ozone and other secondary pollutants. Ambient concentrations of CO in the District exhibit large spatial and temporal variations, due to variations in the rate at which CO is emitted, and in the meteorological conditions that govern transport and dilution. Unlike ozone, CO tends to reach high concentrations in the fall and winter months. The highest concentrations frequently occur on weekdays at times consistent with rush hour traffic and late night during the coolest, most stable atmospheric portion of the day.

When CO is inhaled in sufficient concentration, it can displace oxygen and bind with the hemoglobin in the blood, reducing the capacity of the blood to carry oxygen. Individuals most at risk from the effects of CO include heart patients, fetuses (unborn babies), smokers, and people who exercise heavily. Normal healthy individuals are affected at higher concentrations, which may cause impairment of manual dexterity, vision, learning ability, and performance of work. The results of studies concerning the combined effects of CO and other pollutants in animals have shown a synergistic effect after exposure to CO and ozone.

3.2.1.2.4 Particulate Matter (PM10 & PM2.5)

Particulate matter, or PM, consists of microscopically small solid particles or liquid droplets suspended in the air. PM can be emitted directly into the air or it can be formed from secondary reactions involving gaseous pollutants that combine in the atmosphere. Particulate pollution is primarily a problem in winter, accumulating when cold, stagnant weather comes into the Bay Area. PM is usually broken down further into two size distributions, PM10 and PM2.5. Of great concern to public health are the particles small enough to be inhaled into the deepest parts of the lung. Respirable particles (particulate matter less than about 10 micrometers in diameter) can accumulate in the respiratory system and aggravate health problems such as asthma, bronchitis and other lung diseases. Children, the elderly, exercising adults, and those suffering from asthma are especially vulnerable to adverse health effects of PM10 and PM2.5.

A consistent correlation between elevated ambient particulate matter (PM10 and PM2.5) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. Studies have reported an association between long-term exposure to air pollution dominated by fine particles (PM2.5) and increased mortality, reduction in life-span, and an increased mortality from lung cancer.

Daily fluctuations in fine particulate matter concentration levels have also been related to hospital admissions for acute respiratory conditions, to school and kindergarten absences, to a decrease in respiratory function in normal children and to increased medication use in children and adults with asthma. Studies have also shown lung function growth in children is reduced with long-term exposure to particulate matter. The elderly, people with pre-existing respiratory and/or cardiovascular disease and children appear to be more susceptible to the effects of PM10 and PM2.5.

3.2.1.2.5 Nitrogen Dioxide (NO_2)

NO_2 is a reddish-brown gas with a bleach-like odor. Nitric oxide (NO) is a colorless gas, formed from the nitrogen (N_2) and oxygen (O_2) in air under conditions of high temperature and pressure which are generally present during combustion of fuels; NO reacts rapidly with the oxygen in air to form NO_2. NO_2 is responsible for the brownish tinge of polluted air. The two gases, NO and NO_2, are referred to collectively as nitrogen oxides or NOx. In the presence of sunlight, NO_2 reacts to form nitric oxide and an oxygen atom. The oxygen atom can react further to form ozone, via a complex series of chemical reactions involving hydrocarbons. Nitrogen dioxide may also react to form nitric acid (HNO_3) which reacts further to form nitrates, which are a component of PM10.

NO_2 is a respiratory irritant and reduces resistance to respiratory infection. Children and people with respiratory disease are most susceptible to its effects.

3.2.1.2.6 Sulfur Dioxide (SO_2)

SO_2 is a colorless gas with a sharp odor. It reacts in the air to form sulfuric acid (H_2SO_4), which contributes to acid precipitation, and sulfates, which are a component of PM10 and PM2.5. Most of the SO_2 emitted into the atmosphere is produced by the burning of sulfur-containing fuels.

At sufficiently high concentrations, SO_2 affects breathing and the lungs' defenses, and can aggravate respiratory and cardiovascular diseases. Asthmatics and people with chronic lung disease or cardiovascular disease are most sensitive to its effects. SO_2 also causes plant damage, damage to materials, and acidification of lakes and streams.

3.2.1.3 Current Emissions Inventory

An emission inventory is a detailed estimate of air pollutant emissions from a range of sources in a given area, for a specified time period. Future projected emissions incorporate current levels of control on sources, growth in activity in the Air District and implementation of future programs that affect emissions of air pollutants. Table 3.2-4 shows the inventory of the major sources of particulate matter (including PM10 and PM2.5. Note that many of the stationary source combustion emissions in this table are from petroleum refining operations.

3.2.1.3.1 Ozone

NOx and VOC emissions are decreasing state-wide and in the San Francisco Bay Area since 1975 and are projected to continue to decline. VOC emissions result primarily from incomplete fuel combustion and the evaporation of paints, solvents and fuels. Mobile sources are the largest contributors to VOC emissions. Stationary sources include processes that use solvents (such as manufacturing, degreasing, and coating operations) and petroleum refining, and marketing. Area-wide VOC sources include consumer products, pesticides, aerosol and architectural coatings, asphalt paving and roofing, and other evaporative emissions. About 42 percent of anthropogenic ROG emissions in the Bay Area are from mobile source emissions, while 26 percent are from petroleum and solvent evaporation (BAAQMD, 2017).

TABLE 3.2-4

2011 Air Emission Inventory – Annual Average
(tons per day)

SOURCE CATEGORY	ROG	CO	NOx	SO2	PM10	PM2.5
Petroleum Refining Processes	4.2	1.8	0.5	0.8	0.3	0.2
Other Industrial/Commercial Processes	9.8	0.9	1.7	6.9	10	6
Organic Compounds Evaporation	67.1	0	0	0	0	0
Combustion – Stationary Sources	11	113.8	48.3	10.2	17.9	17.3
Off-Road Mobile Sources	45.2	394.1	75.7	1.3	5.1	5.1
Aircraft	4.1	27.1	12.3	1.1	0.3	0.2
On-Road Motor Vehicles	80.8	773.9	176.6	0.9	13.2	7.2
Miscellaneous	51.2	15	0.5	0.1	58.5	9.5
Total Emissions	**273.4**	**1326.6**	**315.6**	**21.3**	**105.3**	**45.5**

Source: Bay Area Emission Inventory Summary Report: Criteria Air Pollutants (BAAQMD, 2014)

Approximately 84 percent of NOx emissions in the Bay Area are produced by the combustion of fuels. Mobile sources of NOx include motor vehicles, aircraft, trains, ships, recreation boats, industrial and construction equipment, farm equipment, off-road

recreational vehicles, and other equipment. NOx and VOC emissions have been reduced for both stationary and mobile sources. Stationary sources of VOC and NOx have been substantially reduced due to stringent District regulations (BAAQMD, 2017).

3.2.1.3.2 Particulate Matter

Particulate matter (both PM10 and PM2.5) is a diverse mixture of suspended particles and liquid droplets (aerosols). PM includes elements such as carbon and metals; compounds such as nitrates, organics, and sulfates; and complex mixtures such as diesel exhaust, wood smoke, and soil. Unlike the other criteria pollutants which are individual chemical compounds, PM includes all particles that are suspended in the air. PM is both directly emitted (referred to as direct PM or primary PM) and also formed in the atmosphere through reactions among different pollutants (this is referred to as indirect or secondary PM).

PM is generally characterized on the basis of particle size. Ultra-fine PM includes particles less than 0.1 microns in diameter. Fine PM (PM2.5) consists of particles 2.5 microns or less in diameter. PM10 consists of particles 10 microns or less in diameter. Total suspended particulates (TSP) includes suspended particles of any size.

Combustion of fossil fuels and biomass, primarily wood, from various sources are the primary contributors of directly-emitted Bay Area PM2.5 (BAAQMD, 2017). Biomass combustion concentrations are about 3-4 times higher in winter than during the other seasons, and its contribution to peak PM2.5 is greater. The increased winter biomass combustion sources reflect increased residential wood-burning during the winter season.

3.2.1.4 Non-Criteria Pollutants Health Effects

Although the primary mandate of the BAAQMD is attaining and maintaining the national and state Ambient Air Quality Standards for criteria pollutants within the BAAQMD jurisdiction, the BAAQMD also has a general responsibility to control, and where possible, reduce public exposure to airborne toxic compounds. TACs are a defined set of airborne pollutants that may pose a present or potential hazard to human health. TACs can be emitted directly and can also be formed in the atmosphere through reactions among different pollutants. The health effects associated with TACs are quite diverse and generally are assessed locally, rather than regionally. TACs can cause long-term health effects such as cancer, birth defects, neurological damage, asthma, bronchitis or genetic damage; or short-term acute affects such as eye watering, respiratory irritation, running nose, throat pain, and headaches. TACs are separated into carcinogens and non-carcinogens based on the nature of the pollutant. Carcinogens are assumed to have no safe threshold below which health impacts would not occur. Non-carcinogenic substances differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is expected to occur. These levels are determined on a pollutant-by-pollutant basis. The air toxics program was established as a separate and complementary program designed to evaluate and reduce adverse health effects resulting from exposure to TACs.

The major elements of the District's air toxics program are outlined below.

- Preconstruction review of new and modified sources for potential health impacts, and the requirement for new/modified sources with TAC emissions that exceed a specified threshold to use BACT.

- The Air Toxics Hot Spots Program, designed to identify industrial and commercial facilities that may result in locally elevated ambient concentrations of TACs, to report significant emissions to the affected public, and to reduce unacceptable health risks. Note that proposed Rule 11-18 is intended to be the next phase of the Air District's Toxic Hot Spots program and would replace some components of that existing program.

- Control measures designed to reduce emissions from source categories of TACs, including rules originating from the state Toxic Air Contaminant Act and the federal Clean Air Act.

- The TAC emissions inventory, a database that contains information concerning routine and predictable emissions of TACs from permitted stationary sources.

- Ambient monitoring of TAC concentrations at a number of sites throughout the Bay Area.

3.2.1.4.1 TAC Health Effects

TACs can cause or contribute to a wide range of health effects. Acute (short-term) health effects may include eye and throat irritation. Chronic (long-term) exposure to TACs may cause more severe effects such as neurological damage, hormone disruption, developmental defects, and cancer. CARB has identified roughly 200 TACs, including diesel particulate matter (diesel PM) and environmental tobacco smoke.

Unlike criteria pollutants which are subject to ambient air quality standards, TACs are primarily regulated at the individual emissions source level based on risk assessment. Human outdoor exposure risk associated with an individual air toxic species is calculated as its ground-level concentration multiplied by an established unit risk factor for that air toxic species. Total risk due to TACs is the sum of the individual risks associated with each air toxic species.

Occupational health studies have shown diesel PM to be a lung carcinogen as well as a respiratory irritant. Benzene, present in gasoline vapors and also a byproduct of combustion, has been classified as a human carcinogen and is associated with leukemia. 1,3-butadiene, produced from motor vehicle exhaust and other combustion sources, has also been associated with leukemia. Reducing 1,3-butadiene also has a co-benefit in reducing the air toxic acrolein.

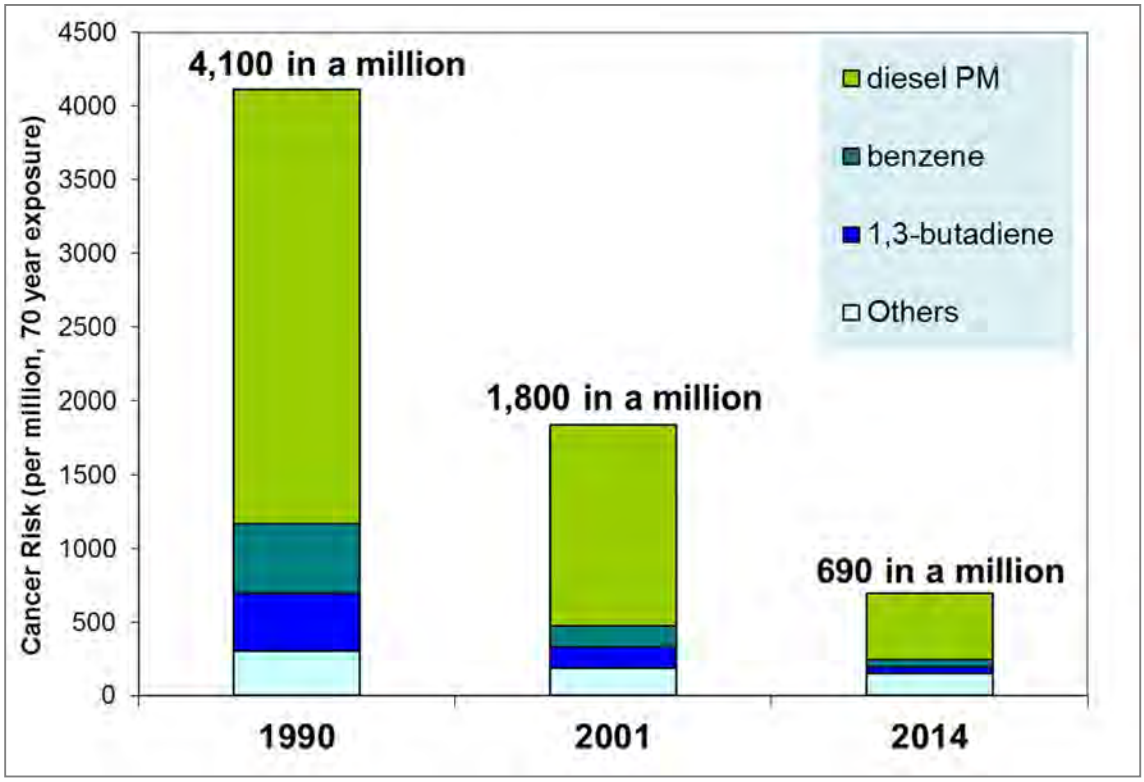
Acetaldehyde and formaldehyde are emitted from fuel combustion and other sources. They are also formed photo-chemically in the atmosphere from other compounds. Both compounds have been found to cause nasal cancers in animal studies and are also associated with skin and respiratory irritation. Human studies for carcinogenic effects of acetaldehyde are sparse but, in combination with animal studies, sufficient to support classification as a probable human carcinogen. Formaldehyde has been associated with nasal sinus cancer and nasopharyngeal cancer, and possibly with leukemia.

The primary health risk of concern due to exposure to TACs is the risk of contracting cancer. The carcinogenic potential of TACs is a particular public health concern because many scientists currently believe that there are not "safe" levels of exposure to carcinogens without some risk to causing cancer. The proportion of cancer deaths attributable to air pollution has not been estimated using epidemiological methods. Based on ambient air quality monitoring, and using OEHHA cancer risk factors,[1] the estimated lifetime cancer risk for Bay Area residents, over a 70-year lifespan from all TACs combined, declined from 4,100 cases per million in 1990 to 690 cases per million people in 2014, as shown in Figure 3.2-1. This represents an 80 percent decrease between 1990 and 2014 (BAAQMD, 2016).

The cancer risk related to diesel PM, which accounts for most of the cancer risk from TACs, has declined substantially over the past 15-20 years as a result of ARB regulations and Air District programs to reduce emissions from diesel engines. However, diesel PM still accounts for roughly 60 percent of the total cancer risk related to TACs.

[1] See CARB's Risk Management Guidance for Stationary Sources of Air Toxics, Discussion Draft, May 27, 2015, https://www.arb.ca.gov/toxics/rma/rma_guidancedraft052715.pdf and the Office Environmental Health Hazard Assessment's toxicity values at http://oehha.ca.gov/media/CPFs042909.pdf. The cancer risk estimates shown in Figure 3.2-1 are higher than the estimates provided in documents such as the Bay Area 2010 Clean Air Plan and the April 2014 CARE report entitled *Improving Air Quality and Health in Bay Area Communities*. It should be emphasized that the higher risk estimates shown in Figure 3.2-1 are due solely to changes in the methodology used to estimate cancer risk, and not to any actual increase in TAC emissions or population exposure to TACs.

FIGURE 3.2-1 Cancer-Risk Weighted Toxics Trends



Source: BAAQMD, 2016

3.2.1.4.2 Air Toxics Emission Inventory

The BAAQMD maintains a database that contains information concerning emissions of TACs from permitted stationary sources in the Bay Area. This inventory, and a similar inventory for mobile and area sources compiled by CARB, is used to plan strategies to reduce public exposure to TACs. The detailed emissions inventory is reported in the BAAQMD, Toxic Air Contaminant Control Program, 2010 Annual Report (BAAQMD, 2015). The 2010 emissions inventory continues to show decreasing emissions of many TACs in the Bay Area.

3.2.1.4.3 Ambient Monitoring Network

Table 3.2-5 contains a summary of average ambient concentrations of TACs measured at monitoring stations in the Bay Area by the District in 2015.

TABLE 3.2-5

Summary of 2014 BAAQMD Ambient Air Toxics Monitoring Data

Compound	Max. Conc. (ppb) [1]	Min. Conc. (ppb) [2]	Mean Conc. (ppb) [3]
1,3-Butadiene	0.376	0.000	0.038
Acetaldehyde[4]	5.71	0.42	1.70
Acetone	26.54	0.156	3.922
Acetonitrile	0.314	0.000	0.015
Acrolein[5]	0.060	0.000	0.077
Acrylonitrile	0.060	0.000	0.000
Benzene	1.169	0.000	0.201
Carbon Tetrachloride	0.130	0.066	0.093
Chloroform	0.147	0.000	0.218
Dichloromethane	3.473	0.000	0.076
Ethyl Alcohol	40.046	0.286	5.570
Ethylbenzene	0.979	0.000	0.076
Ethylene Dibromide	0.000	0.000	0.000
Ethylene Dichloride	0.011	0.000	0.000
Formaldehyde	8.12	1.16	2.78
Freon- 113	9.832	0.048	0.147
Methyl Chloroform	3.776	0.000	0.036
Methyl Ethyl Ketone	0.876	0.000	0.253
Tetrachloroethylene	0.712	0.000	0.036
Toluene	4.006	0.000	0.501
Trichloroethylene	6.370	0.000	0.016
Trichlorofluoromethane	1.835	0.090	0.283
Vinyl Chloride	0.000	0.000	0.000
m/p-Xylene	2.788	0.000	0.264
o-Xylene	1.198	0.000	0.099

Source: BAAQMD, 2017

NOTES: Table 3.2-5 summarizes the results of the Air District gaseous toxic air contaminant monitoring network for the year 2015. These data represent monitoring results at 19 separate sites at which samples were collected.

(1) "Maximum Conc." is the highest daily concentration measured at any of the 19 monitoring sites.

(2) "Minimum Conc." is the lowest daily concentration measured at any of the 19 monitoring sites.

(3) "Mean Conc." is the arithmetic average of the air samples collected in 2014 at the 25 monitoring sites.

(4) Acetaldehyde and formaldehyde concentrations reflect measurements from one monitoring site (San Jose-Jackson).

(5) The Air District discontinued measurements of acrolein after May 6, 2016 due to the instability of 2-propenal in cylinders.

3.2.2 REGULATORY SETTING

3.2.2.1 Criteria Pollutants

Ambient air quality standards in California are the responsibility of, and have been established by, both the U.S. EPA and CARB. These standards have been set at concentrations, which provide margins of safety for the protection of public health and welfare. Federal and state air quality standards are presented in Table 3.2-1. The federal, state, and local air quality regulations are identified below in further detail.

3.2.2.1.1 Federal Regulations

The U.S. EPA is responsible for setting and enforcing the National Ambient Air Quality Standards for oxidants (ozone), CO, NO_2, SO_2, PM10, PM2.5, and lead. The U.S. EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The U.S. EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of the CARB.

The Clean Air Act (CAA) Amendments of 1990 give the U.S. EPA additional authority to require states to reduce emissions of ozone precursors and particulate matter in non-attainment areas. The amendments set attainment deadlines based on the severity of problems. At the state level, CARB has traditionally established state ambient air quality standards, maintained oversight authority in air quality planning, developed programs for reducing emissions from motor vehicles, developed air emission inventories, collected air quality and meteorological data, and approved state implementation plans. At a local level, California's air districts, including the Air District, are responsible for overseeing stationary source emissions, approving permits, maintaining emission inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality-related sections of environmental documents required by CEQA.

Other federal regulations applicable to the Bay Area include Title III of the Clean Air Act, which regulates toxic air contaminants. Title V of the Act establishes a federal permit program for large stationary emission sources. The U.S. EPA also has authority over the Prevention of Significant Deterioration (PSD) program.

3.2.2.1.2 California Regulations

CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the California Clean Air Act and federal Clean Air Act, and for regulating emissions from consumer products and motor vehicles. CARB has established California Ambient Air Quality Standards for all pollutants for which the federal government has established National Ambient Air Quality Standards and also has standards for sulfates, visibility, hydrogen sulfide and vinyl chloride. Federal and state air

quality standards are presented in Table 3.2-1 under Air Quality Environmental Setting. California standards are generally more stringent than the National Ambient Air Quality Standards. CARB has established emission standards for vehicles sold in California and for various types of combustion equipment. CARB also sets fuel specifications to reduce vehicular emissions.

CARB released the Proposed 2016 State Strategy for the State Implementation Strategy on May 17, 2016. The measures contained in the State SIP Strategy reflect a combination of state actions, petitions for federal action, and actions for deployment of cleaner technologies in all sectors. CARB's proposed state SIP Strategy includes control measures for on-road vehicles, locomotives, ocean going vessels, and off-road equipment that are aimed at helping all districts in California to comply with federal and state ambient air quality standards.

California gasoline specifications are governed by both state and federal agencies. During the past two decades, federal and state agencies have imposed numerous requirements on the production and sale of gasoline in California. CARB adopted the Reformulated Gasoline Phase III regulations in 1999, which required, among other things, that California phase out the use of MTBE in gasoline. The CARB Reformulated Gasoline Phase III regulations have been amended several times (the most recent amendments were adopted in 2013) since the original adoption by CARB.

The California Clean Air Act (AB2595) mandates achievement of the maximum degree of emission reductions possible from vehicular and other mobile sources in order to attain the state ambient air quality standards by the earliest practical date.

Assembly Bill 617 was passed by the Legislature and approved by the Governor in 2017. The bill is designed to achieve additional reductions of criteria pollutants and toxic air contaminants at identified significant sources to alleviate health and environmental impacts in adjacent communities. Each air district in non-attainment for any criteria pollutant must implement best available retrofit control technology (BARCT) at the earliest feasible date, but not later than December 31, 2023. This new BARCT requirement applies to each industrial source that is currently subject to the Air Resources Board cap and trade regulation, unless that source has implemented BARCT since 2007. AB 617 also requires emission controls for sources of toxic air contaminants with elevated prioritization scores.

AB 617 also requires the Air Resources Board establish and maintain a statewide clearinghouse that identified best available control technology, and best available retrofit control technology. AB 617 increases maximum penalties for environmental violations, and adjust those maximum penalties with inflation.

In addition, AB 617 requires community air monitoring near sensitive populations, and near disadvantaged communities, including fence-line monitoring of significant sources. Information from community air monitoring will be used to identify sources that require local community emission reduction programs.

3.2.2.1.3 Air District Regulations

The California Legislature created the Air District in 1955. The Air District is responsible for regulating stationary sources of air pollution in the nine counties that surround San Francisco Bay: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, southwestern Solano, and southern Sonoma counties. The District is governed by a 24-member Board of Directors composed of publicly-elected officials apportioned according to the population of the represented counties. The Board has the authority to develop and enforce regulations for the control of air pollution within its jurisdiction. The District is responsible for implementing emissions standards and other requirements of federal and state laws. Numerous regulations have been developed by the District to control emissions sources within its jurisdiction. It is also responsible for developing air quality planning documents required by both federal and state laws.

Bay Area facilities are subject to various air quality regulations that have been adopted by the Air District, CARB and U.S. EPA. These rules contain standards that are expressed in a variety of forms to ensure that emissions are effectively controlled including:

- Requiring the use of specific emission control strategies or equipment (e.g., the use of floating roof tanks for VOC emissions);
- Requiring that emissions generated by a source be controlled by at least a specified percentage (e.g., 95 percent control of VOC emissions from pressure relief devices);
- Requiring that emissions from a source not exceed specific concentration levels (e.g., 100 parts per million (ppm) by volume of VOC for equipment leaks, unless those leaks are repaired within a specific timeframe; 250 ppm by volume SO_2 in exhaust gases from sulfur recovery units; 1,000 ppm by volume SO_2 in exhaust gases from catalytic cracking units);
- Requiring that emissions not exceed certain quantities for a given amount of material processed or fuel used at a source (e.g., 0.033 pounds NOx per million BTU of heat input, on a refinery-wide basis, for boilers, process heaters, and steam generators);
- Requiring that emissions be controlled sufficient to not result in off property air concentrations above specified levels (e.g., 0.03 ppm by volume of hydrogen sulfide (H_2S) in the ambient air);
- Requiring that emissions from a source not exceed specified opacity levels based on visible emissions observations (e.g., no more than 3 minutes in any hour in which emissions are as dark or darker than No. 1 on the Ringelmann chart); and
- Requiring that emissions be minimized by the use of all feasible prevention measures (e.g., flaring prohibited unless it is in accordance with an approved Flare Minimization Plan).
- Requiring that emissions of non-methane organic compounds and methane from the waste decomposition process at solid waste disposal sites be limited.
- Requiring emission limits on precursor organic compounds from valves and flanges as chemical plants.

- Requiring emission limits of nitrogen oxides, particulate matter, and toxic air contaminants from the manufacture of Portland cement.
- Requiring the limitation of emissions of organic compounds from gasoline dispensing facilities.
- Requiring the development of and compliance with Emissions Minimations Plans designed to minimize the fugitive emissions of particulate matter and odorous substances from foundries and forges.

3.2.2.2 Toxic Air Contaminants

The Air District uses three approaches to reduce TAC emissions and to reduce the health impacts resulting from TAC emissions: 1) Specific rules and regulations; 2) Pre-construction review; and, 3) the Air Toxics Hot Spots Program.

3.2.2.2.1 Rules and Regulations

Many of the TACs emitted by stationary sources are also criteria pollutants. For example, benzene and formaldehyde are precursor organic compounds, while arsenic and cadmium can be found in particulate matter. Thus, many regulations that reduce criteria pollutant emissions will also have a co-benefit of reducing toxic air contaminant emissions. In addition, the Air District implements U.S. EPA, CARB, and Air District rules that specifically target toxic air contaminant emissions from sources at petroleum refineries.

3.2.2.2.2 Preconstruction Review

The Air District's Regulation 2, Rule 5 is a preconstruction review requirement for new and modified sources of TACs implemented through the Air District's permitting process. This rule includes health impact thresholds, which require the use of the best available control technology for TAC emissions (TBACT) for new or modified equipment, and health risk limits cannot be exceeded for any proposed project.

3.2.2.2.3 Air Toxics Hot Spots Program

The Air Toxic Hot Spots program, or AB2588 Program, is a statewide program implemented by each individual air district pursuant to the Air Toxic Hot Spots Act of 1987 (Health and Safety Code Section 44300 et. seq.). The Air District uses standardized procedures to identify health impacts resulting from industrial and commercial facilities and encourage risk reductions at these facilities. Health impacts are expressed in terms of cancer risk and non-cancer hazard index. Note that proposed Rule 11-18 is intended to be the next phase of the Air District's Toxic Hot Spots program and would replace some components of this existing program.

Under this program, the Air District uses a prioritization process to identify facilities that warrant further review. This prioritization process uses toxic emissions data, health effects values for TACs, and Air District approved calculation procedures to determine a cancer

risk prioritization score and a non-cancer prioritization score for each site. The District updates the prioritization scores annually based on the most recent toxic emissions inventory data for the facility. Facilities that have a cancer risk prioritization score greater than 10 or a non-cancer prioritization greater than 1 must undergo further review. If emission inventory refinements and other screening procedures indicate that prioritizations scores remain above the thresholds, the Air District will require that the facility perform a comprehensive site-wide HRA.

An Air Toxic Hot Spots Act HRA estimates the health impacts from a site due to stationary source emissions. Hot Spots Act HRAs must be conducted in accordance with statewide HRA Guidelines adopted by OEHHA that include health effects values for each TAC and establish the procedures to follow for modeling TAC transport, calculating public exposure, and estimating the resulting health impacts. OEHHA periodically reviews and updates these HRA Guidelines through a scientific review panel and public comment process. The HRA Guidelines were approved in 2003, but OEHHA proposed major revisions to these HRA Guidelines in June 2014. These proposed HRA Guidelines were adopted in March 2015.

In 1990, the Air District Board of Directors adopted the current risk management thresholds pursuant to the Air Toxic "Hot Spots" Act of 1987. These risk management thresholds, which are summarized in Table 3.2-6 below, set health impact levels that require sites to take further action, such as conducting periodic public notifications about the site's health impacts and implementing mandatory risk reduction measures.

TABLE 3.2-6

Summary of Bay Area Air Toxics Hot Spots Program Risk Management Thresholds

Requirement	Site Wide Cancer Risk	Site Wide Non-Cancer Hazard Index
Public Notification	Greater than 10 in one million	Greater than 1
Mandatory Risk Reduction	Greater than 100 in one million	Greater than 10

A partial list of the air pollution rules and regulations that the Air District implements and enforces at Bay Area facilities (e.g. refineries, cement manufacturing plants, power plants, chemical plants, landfills, sewer treatment facilities, etc.) follows:

- Air District Regulation 1: General Provisions and Definitions
- Air District Regulation 2, Rule 1: Permits, General Requirements
- Air District Regulation 2, Rule 2: New Source Review
- Air District Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants
- Air District Regulation 2, Rule 6: Major Facility Review (Title V)

- Air District Regulation 6, Rule 1: Particulate Matter, General Requirements
- Air District Regulation 6, Rule 2: Miscellaneous Operations
- Air District Regulation 8, Rule 5: Storage of Organic Liquids
- Air District Regulation 8, Rule 6: Terminals and Bulk Plants
- Air District Regulation 8, Rule 7: Gasoline Dispensing Facilities
- Air District Regulation 8, Rule 8: Wastewater (Oil-Water) Separators
- Air District Regulation 8, Rule 9: Vacuum Producing Systems
- Air District Regulation 8, Rule 10: Process Vessel Depressurization
- Air District Regulation 8, Rule 18: Equipment Leaks
- Air District Regulation 8, Rule 22: Valves and Flanges at Chemical Plants
- Air District Regulation 8, Rule 28: Episodic Releases from Pressure Relief Devices at Petroleum Refineries and Chemical Plants
- Air District Regulation 8, Rule 33: Gasoline Bulk Terminals and Gasoline Delivery Vehicles
- Air District Regulation 8, Rule 34: Solid Waste Disposal Sites
- Air District Regulation 8, Rule 37, Natural Gas and Crude Oil Production Facilities
- Air District Regulation 8, Rule 39: Gasoline Bulk Terminals and Gasoline Delivery Vehicles
- Air District Regulation 8, Rule 44: Marine Vessel Loading Terminals
- Air District Regulation 9, Rule 1: Sulfur Dioxide
- Air District Regulation 9, Rule 2: Hydrogen Sulfide
- Air District Regulation 9, Rule 7: Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process HeatersAir District Regulation 9, Rule 8: Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines
- Air District Regulation 9, Rule 9: Nitrogen Oxides and Carbon Monoxide from Stationary Gas Turbines
- Air District Regulation 9, Rule 10: Nitrogen Oxides and Carbon Monoxide from Boilers, Steam Generators and Process Heaters in Petroleum Refineries
- Air District Regulation 9, Rule 11: Nitrogen Oxides And Carbon Monoxide from Utility Electric Power Generating Boilers
- Air District Regulation 9, Rule 13: Nitrogen Oxides, Particulate Matter, and Toxic Air Contaminants from Portland Cement Manufacturing
- Air District Regulation 11, Rule 1: Lead
- Air District Regulation 11, Rule 8: Hexavalent Chromium
- Air District Regulation 12, Rule 11: Flare Monitoring at Petroleum Refineries
- Air District Regulation 12, Rule 12: Flares at Petroleum Refineries
- Air District Regulation 12, Rule 13: Foundry and Forging Operations
- 40 CFR Part 63, Subpart CC: Petroleum Refineries (NESHAP)
- 40 CFR Part 63, Subpart UUU: Petroleum Refineries: Catalytic Cracking, Catalytic Reforming, and Sulfur Plant Units (NESHAP)
- 40 CFR Part 61, Subpart FF: Benzene Waste Operations (NESHAP)
- 40 CFR Part 60, Subpart J: Standards of Performance for Petroleum Refineries (NSPS)

- State Airborne Toxic Control Measure for Stationary Compression Ignition (Diesel) Engines (ATCM)

3.2.3 SIGNIFICANCE CRITERIA

3.2.3.1 Construction Emissions

The Air District published a new version of its 2010 CEQA Guidelines (revised May 2017), to include revisions made to address the Supreme Court's opinion in a case that challenged the Guidelines. The Air District's CEQA Guidelines (revised May 2017) will be used in the current air quality analysis for construction emissions. The daily thresholds for construction-related emissions below appeared in the 2010 Guidelines and were not changed by the May 2017 update.

TABLE 3.2-7

Thresholds of Significance for Construction-Related Criteria Air Pollutants and Precursors

Pollutant/Precursor	Daily Average Emissions (lbs/day)
ROG	54
NOx	54
PM10	82*
PM2.5	54*
PM10/ PM2.5 Fugitive Dust	Best Management Practices

*Applies to construction exhaust emissions only.
Source: BAAQMD, 2017

3.2.3.2 Operational Emissions

The thresholds below, recommended in the Air District's CEQA Guidelines (revised May 2017), will be used in the current air quality impacts analysis. These thresholds appeared in the 2010 Guidelines and were not changed by the May 2017 update.

TABLE 3.2-8

Thresholds of Significance for Operation-Related Criteria Air Pollutants and Precursors

Pollutant/Precursor	Daily Average Emissions (lbs/day)	Maximum Annual Emissions (tons/year)
ROG	54	10
NOx	54	10
PM10	82	15
PM2.5	54	10

*Source: BAAQMD, 2017

3.2.4 ENVIRONMENTAL IMPACTS

Chapter 2 identifies the main types of industrial facilities and their emission sources that would most likely be subject to the risk reduction requirements of Rule 11-18. Chapter 2 also identifies air pollution control technologies that would most likely to be installed on the equipment at affected facilities subject to Rule 11-18 that may require future emissions control (see Table 2.5-4).

It is expected that the direct effects of Rule 11-18 would be reductions in TAC and criteria pollutant emissions. However, construction equipment and activities to install air pollution control equipment has the potential to generate secondary air quality impacts, primarily from exhaust emissions. Further, air pollution control equipment that reduces one or more regulated pollutants has the potential to generate adverse secondary air quality impacts from other sources such as mobile sources or from the air pollution control equipment. For example, some types of air pollution control equipment that use caustic as part of the control process, have the potential to generate emissions of the caustic material that may be considered a TAC.

Potential secondary air quality impacts from construction activities and equipment that may be required under Rule 11-18 are analyzed herein. The analysis identifies construction air quality impacts from air pollution control equipment that could be installed to comply with Rule 11-18 requirements (e.g., baghouse, diesel oxidation catalyst, wet gas scrubber, etc.). Construction and operation air quality impacts are identified and provided in the following subsections.

3.2.4.1 Potential Criteria Pollutant Impacts During Construction

Because there are a wide variety of TACs with different physical or chemical characteristics, different types of control technologies may need to be installed, as necessary, at affected facilities to reduce risk levels to those proposed in Rule 11-18. The potential secondary adverse air quality construction impacts from control equipment

identified in Chapter 2 that may be installed to comply with Rule 11-18 (see Table 2.5-4) have been analyzed in the following subsections.

Rule 11-18 has the potential to affect hundreds of facilities, including data centers, petroleum refineries, a cement kiln, gasoline dispensing facilities, etc. Without further analysis of the health risks from facilities that would be subject to Rule 11-18, it is unclear which facilities would be subject to risk reduction requirements or precisely what types of TAC control equipment would be installed. In spite of the uncertainties, the analysis of construction air quality impacts identifies the most likely emissions sources that would need to be controlled, along with the most appropriate types of air pollution control equipment that would contribute to bringing the affected facility or equipment into compliance with the risk reduction requirements of Rule 11-18. Likely control technologies are those that are considered to be BACT or BARCT for the emissions sources or are representative air pollution control technologies for the affected industrial sources. Once emissions sources and air pollution control technologies have been identified, the most likely types of construction equipment that would be used to install air pollution control equipment are then identified, construction scenarios are developed, and construction emission impacts are calculated.

Construction equipment associated with installing air pollution control technologies would result in VOC, NOx, SOx, CO, PM10, and PM2.5 emissions, although the amount generated by specific types of equipment can vary greatly as shown in Table 3.2-9. As the table shows, different types of equipment can generate construction emissions in much different quantities depending on the type of equipment. For example, the estimated emissions of NOx range from of 0.1 pound per hour (lb/hr) of NOx for a forklift to 1.81 lbs/hr for scrapers. To provide a conservative construction air quality analysis and in the absence of information on the specific construction activities necessary to complete a construction project, a typical construction analysis assumes that, in the absences of specific information, all construction activities would occur for eight hours per day. This is considered a conservative assumption because workers may need to be briefed on daily activities, so construction may start later than their arrival times or the actual construction activities may not require eight hours to complete. However, for some construction projects, specific types of construction equipment and hours of operation have been developed using analyses prepared for other similar types of construction projects or using construction estimator guidelines used by construction contractors when bidding on jobs. As a result, under some construction scenarios hours of equipment operation may be more or less than eight hours.

TABLE 3.2-9

Emission Factors Associated with Typical Construction Equipment(1)

Equipment Type	VOC (lb/hr)	CO (lb/hr)	NOx (lb/hr)	SOx (lb/hr)	PM (lb/hr)
Aerial Lifts- (Man Lifts)	0.00	0.17	0.10	0.00	0.00
Air Compressor	0.06	0.32	0.43	0.00	0.03
Bore/Drill Rig	0.04	0.50	0.57	0.00	0.02
Concrete Pump	0.01	0.04	0.05	0.00	0.00
Concrete Saw	0.07	0.40	0.43	0.00	0.03
Crane	0.06	0.41	0.80	0.00	0.04
Crane – Rough Terrain (120 hp)	0.07	0.40	0.42	0.00	0.02
Excavator	0.03	0.52	0.35	0.00	0.01
Forklift	0.02	0.22	0.19	0.00	0.01
Generator	0.05	0.28	0.41	0.00	0.22
Grader	0.07	0.58	0.93	0.00	0.04
Pavers	0.04	0.50	0.46	0.00	0.02
Paving Equipment	0.03	0.41	0.37	0.00	0.02
Plate Compactor	0.01	0.03	0.03	0.00	0.00
Rollers	0.03	0.39	0.27	0.00	0.02
Rough Terrain Forklifts	0.02	0.45	0.25	0.00	0.01
Rubber Tired Dozers	0.11	0.88	1.45	0.00	0.07
Rubber Tired Loaders	0.05	0.45	0.67	0.00	0.03
Scrapers	0.12	0.84	1.81	0.00	0.07
Skid Steer Loaders	0.01	0.21	0.16	0.00	0.01
Surfacing Equipment	0.03	0.42	0.52	0.00	0.02
Tractors/Loaders/Backhoes	0.03	0.36	0.31	0.00	0.02
Trenchers	0.05	0.44	0.41	0.00	0.03
Forklifts	0.02	0.22	0.19	0.00	0.01
Welders	0.04	0.19	0.21	0.00	0.02

(1) Emission Factors from Off-Road 2011, Model Year 2018. CO emissions from SCAQMD, 2006: http://www.aqmd.gov/ceqa/handbook/offroad/offroadEF07_25.xls.

A range of construction scenarios for installing various types of control equipment was identified to determine whether or not construction air quality impacts would exceed any applicable air quality significance thresholds. To provide a conservative analysis of potential construction air quality impacts, it is assumed that construction of one or more of the control technologies evaluated in the following subsections could overlap. The following subsections identify construction scenarios that may occur for several control technologies and are considered to be a representative range of construction activities and equipment used to install air pollution control equipment. Construction activities range

from installing or retrofitting small-scale air pollution control equipment, which would require few pieces of construction equipment or hours of operation, to installing medium or large-scale air pollution control technologies requiring larger construction crews and a more construction equipment and hours of operation. As shown in the following subsections, construction activities could result in substantial construction air quality impacts.

3.2.4.1.1 Air Pollution Control Equipment with Minor Construction Activities

Diesel ICEs can be major contributors to health risks associated with the operation of stationary sources as they are commonly used and the health risk associated with diesel particulate matter is high. Therefore, it would be expected that this may be a common method to reduce the health risks from facilities affected by Rule 11-18. Construction activities associated with facilities modifications that would involve installing new ICEs or retrofitting existing ICEs with particulate filters are not expected to require substantial construction activities.

Installing New Diesel ICEs: Diesel ICEs are often used to provide electricity in areas with no electricity, used as a backup source of electricity in the event of a power outage from numerous types of facilities (e.g. hospitals). Over the past several decades, emission limits for diesel ICEs have been established and modified to provide further control of exhaust pollutants. Initial emission limits for diesel ICEs were for engines referred to as Tier 1 ICEs. Diesel ICEs compliant with current emission limits are known as Tier 4 ICEs. Tier 4 ICEs are more efficient than Tier 1 ICEs and emit less pollutants.

Construction emissions associated with installing new ICEs would be minor and would involve the transport of the new ICE to the facility and the removal of the existing ICE which is expected to require two one-way truck trips. In this situation, construction would likely require one light-heavy-duty truck trip to deliver new ICEs and one trip to haul away the old ICE, a construction crew of five workers, one forklift, one generator set, one welder, and hand tools (Table 3.2-10). It is also expected that replacement would take one day or less.

TABLE 3.2-10

Construction Equipment Used to Install a Tier 4 ICE

Off- Road Equipment Type	Number	Daily Hours of Use
Forklift	1	2
Generator	1	4
Welder	1	4

Source: Based on SCAQMD, 2008. Assumptions modified for this analysis because it is assumed that one ICE unit would replace the existing ICE, instead of constructing the new ICE unit.

Table 3.2-11 shows construction emissions from installing one Tier 4 ICE. It is possible that more than one Tier 4 ICE could be installed on the same day resulting in overlapping construction emissions, which are also shown in Table 3.2-11. Based on the numbers of facilities subject to Rule 11-18 and the uncertainties regarding the need to reduce health risks, the assumptions that 10 Tier 4 ICEs would be installed on the same day under Rule 11-18 is likely a conservative assumption for the following reasons. According to the staff report for the proposed project, if adopted, Rule 11-18 would require preparation of new, or revisions to existing HRAs at affected facilities using OEHHA's 2015 HRA Guideline Revisions. Depending on the complexity of facility operations and the number of TAC emissions sources that would be subject to Rule 11-18, preparation of new or revisions to existing HRAs would likely be completed, evaluated, and approved over different time periods. However, because hundreds of facilities could be affected by implementing Rule 11-18 and many of these sources have ICEs, it is reasonable to assume that up to 10 ICEs would be replaced on a single day.

TABLE 3.2-11

Construction Emissions from Installing a Tier 4 ICE

	Pollutant					
	ROG	**CO**	**NOx**	**SOx**	**PM10**	**PM2.5**
	ICE Replacement (lbs/day)					
Sub-total Off-road Construction Equipment	0.4	2.32	2.86	<0.01	0.98	0.98
Sub-total On-road (Worker + Haul Truck) [(1)]	0.48	2.41	1.91	<0.01	0.04	0.02
Total - 1 ICE Replacement	0.88	4.73	4.77	<0.01	1.02	1.00
10 Replacements	8.8	47.3	47.7	0.1	10.2	10.0
	ICE Replacement (tons/day)					
10 Replacements	0.004	0.024	0.024	<0.001	0.005	0.005

[(1)] It is assumed that trucks are diesel light-heavy-duty trucks make two one-way trips of 20 miles. See Appendix B for calculation details.

Retrofitting Diesel ICEs: A potential alternative to installing a new diesel ICE is to retrofit an existing engine with a DPF. This scenario is potentially a less costly means of reducing diesel ICE emissions or may be preferable if only minor emission or risk reductions measures are necessary. Retrofitting an existing ICE with a DPF would require one forklift and a crew of four, primarily using hand tools, and would take one day to complete. One two-way truck trip would be necessary to deliver the control equipment to the affected facility. Construction air quality impacts from retrofitting diesel ICEs are shown in Table 3.2-12.

TABLE 3.2-12

Construction Emissions for Retrofitting Diesel ICEs

	Pollutants					
	ROG	CO	NOx	SOx	PM10	PM2.5
	ICE Retrofits (lbs/day)					
Sub-total Off-road Construction Equip	0.08	0.88	0.76	<0.01	0.04	0.04
Sub-total On-road (Worker + Haul Truck) (1)	0.19	0.44	1.60	<0.01	0.04	0.02
Total - 1 ICE Retrofit	0.27	1.32	2.36	<0.01	0.08	0.06
10 Retrofits	2.74	13.17	23.61	0.01	0.80	0.58
	ICE Retrofits (tons/day)					
Both Rules - 10 Retrofits	0.001	0.007	0.012	<0.000	<0.001	<0.001

Reference: SCAQMD 2008.

(1) It is assumed that trucks are diesel light-heavy-duty trucks and make two one-way trips of 20 miles and idle for 60 minutes. See Appendix B for calculation details.

It is possible that more than one diesel ICE could be retrofitted on the same day, resulting in overlapping construction emissions such as those shown in Table 3.2-12. Based on the uncertainties regarding the need to reduce health risks, the same assumptions for installing Tier 4 ICEs were used in this analysis of retrofitting diesel ICEs, that is, 10 ICEs would be retrofitted on the same day under Rule 11-18. As indicated above, these assumptions are likely conservative assumptions for the following reasons. According to the staff report, if adopted, Rule 11-18 would require preparation of new, or revisions to existing HRAs at affected facilities using OEHHA's 2015 HRA Guideline Revisions. Depending on the complexity of facility operations and the number of TAC emissions sources that would be subject to Rule 11-18, preparation of new or revisions to existing HRAs would likely be completed, evaluated, and approved over different time periods. However, because hundreds of facilities could be affected by implementing Rule 11-18 and many of these sources have ICEs, it is reasonable to assume that up to 10 diesel ICEs would be retrofitted on a single day.

3.2.4.1.2 Air Pollution Control Equipment with Medium Construction Activities

The construction of new air pollution control equipment may require a moderate amount of construction activities. Wet gas scrubbers, baghouses and ESPs can be used on a variety of different sources for the control of particulate emissions (including TAC emissions) from chemical plants, sewage treatment facilities, metal plating facilities, power plants, and refineries. Wet gas scrubbers, baghouses and ESPs range in size and are used from small sources (e.g., metal plating facilities) to large industrial sources (e.g., fluid catalytic cracking units at refineries). This section evaluates the potential air quality impacts associated with construction activities for new air pollution control equipment of moderate size including non-refinery wet gas scrubbers, baghouses, and ESPs. Because the sizes are very different, the air quality construction impacts for refinery wet gas scrubbers are evaluated in a separate section.

The construction equipment that would most likely be required for the installation of a non-refinery WGS, baghouse or ESP, during a peak month is provided in Table 3.2-13.

TABLE 3.2-13

Estimated Peak Day Off-Road Construction Emissions from Installing One Wet Gas Scrubber, Baghouse or ESP

Off- Road Equipment Type	Number	Daily Hours of Use
Backhoe	1	4
Crane	1	8
Air Compressor	1	4
Concrete Pump	1	2
Concrete Saw	1	2
Man Lift	1	2
Forklift	1	3
Generator	1	8
Plate compactor	1	4
Welder	2	8

Construction of one WGS, baghouse or ESP would be estimated to require about 40 construction workers and, using worst-case assumptions, it is assumed that construction would require the use of one or more of the following types of construction equipment: backhoes, cranes, man lifts, forklift, forklifts, generators, and diesel welding machines. Other sources of construction emissions could include: equipment delivery, on-site travel (would include fugitive dust associated with travel on paved roads, and fugitive dust associated with construction activities), and construction worker commute trips. Construction estimates associated with constructing one medium sized air pollution control device as well as multiple devices are shown in Table 3.2-14.

TABLE 3.2-14

Estimated Construction Emissions for New Air Pollution Control Equipment[(1)]

ACTIVITY	ROG	CO	NOx	SOx	PM10	PM2.5
Peak Construction Emissions One Wet Gas Scrubber (lbs/day)						
Subtotal Construction Activities for 1 Unit	2.20	13.94	16.31	0.00	2.61	2.40
Sub-total On-road (Worker + Haul Truck) [(2)]	0.76	1.29	1.68	0.10	0.08	0.04
Total Construction Emissions 1 Unit	2.96	15.23	17.99	0.10	2.69	2.44
Total Construction Emissions 10 Units	29.6	152.3	179.9	1.0	26.9	24.4
Total Construction Emissions for WGS/Baghouses/ESPs (tons emitted during construction period)						
Construction Activities for 1 Unit [(3)]	0.14	0.74	0.88	0.00	0.13	0.12
Total Construction Emissions for 10 WGSs/Baghouses/ESPs (tons emitted during construction period)						
Construction Activities for 10 Units	1.44	7.42	8.77	0.05	1.31	1.20

(1) Assumed to be a non-refinery WGS, baghouse, or ESP.
(2) Vehicle trip assumptions include average vehicle ridership of 1.0 and a trip length of 11 miles one way (CAPCOA, 2016).
(3) Construction activities are estimated to occur for a total of 6 to 7 months (130 working days total) with a 40-person work crew.

3.2.4.1.3 Installing a Carbon Adsorption Unit/Thermal Oxidizer/Catalytic Oxidizer

The most likely TAC emission sources that would be subject to Rule 11-18 and that could be controlled using carbon adsorption units are expected to be sewage treatment facilities because various stages of the sewage treatment process produce ROG emissions that may include TAC components. There are approximately 40 wastewater treatment facilities in the Bay Area ranging in size from a facility capacity of over 300 million gallons per day to less than two million gallons per day (ABAG, 2014 and 2017). ~~A survey of wastewater treatment facilities in the Bay Area indicated that there are at least 20 facilities ranging in size from a discharge rate of 0.1 to greater 30 million gallons per day (Pacific Institute, 2009)[2].~~

The construction analysis for installing a carbon adsorption unit is based on a construction emissions analysis from installing air pollution control equipment similar in size to a carbon adsorption unit because no actual carbon adsorption construction scenarios were identified. In addition, it is assumed that the construction of a thermal oxidizer or a catalytic oxidizer would require a similar construction scenario. Construction parameters associated with installing a carbon adsorption unit or thermal oxidizer would occur over a

[2] ~~This number underestimates the total number of wastewater treatment facilities because it only refers to facilities that may be affected a 100-year coastal flood or a 1.4 meter rise in sea level. It does not include, for example, the three wastewater treatment facilities in the City of San Francisco. This information is provided only to show that a relatively large number of carbon adsorption units could be installed as a result of adopting Rule 11-18.~~

timeframe of approximately six to seven months, requiring a total of 130 days of construction and using a crew of 20 construction workers. Table 3.2-15 shows the types of construction equipment and their hours of operation anticipated to be required to install one carbon adsorption unit, one thermal oxidizer, or one catalytic oxidizer.

TABLE 3.2-15

Estimated Peak Day Off-Road Construction Emissions from Installing One Carbon Adsorption Unit, One Thermal Oxidizer, or One Catalytic Oxidation Unit

	Construction Equipment	
Off- Road Equipment Type	**Number**	**Daily Hours of Use**
Backhoe	1	4
Rough Terrane Crane	1	8
Welder	2	8
Air Compressor	1	4
Plate Compactor	1	4
Forklift	1	3
Concrete Pump	1	2
Concrete Saw	1	2
Generator	1	8
Man Lift	1	2

Construction emission estimates for activities associated with installing one carbon adsorption unit, thermal oxidizer, or one catalytic oxidizer are provided in Table 3.2-16. Major demolition activities are not expected to be necessary to install a carbon adsorption unit, thermal oxidizer, or catalytic oxidizer because the units are relatively compact. It is possible that more than a carbon adsorption unit, thermal oxidizer or catalytic oxidizer could be constructed at the same time resulting in overlapping construction emissions such as those shown in Table 3.2-16. Therefore, it is conservatively assumed here that Rule 11-18 has the potential to result in the construction of up to five carbon adsorption, thermal oxidizer, or catalytic oxidization units, as shown in Table 3.2-16.

TABLE 3.2-16

Construction Emissions for a Carbon Adsorption, Thermal Oxidizer, or Catalytic Oxidation Unit

ACTIVITY	ROG	CO	NOx	SOx	PM10	PM2.5
Peak Construction Emissions One Carbon Adsorption Unit or Thermal Oxidizer (lbs/day)						
Subtotal Construction Activities for 1 Unit	2.34	9.76	14.85	0.00	2.14	1.97
Sub-total On-road (Worker + Haul Truck) (1)	0.93	1.08	1.68	0.01	0.08	0.04
Total Construction Emissions (lbs/day)	3.27	10.84	16.53	0.01	2.22	2.01
Total Construction Emissions 5 Units (lbs/day)	16.35	54.20	82.65	0.05	11.1	10.05
Total Construction Emissions for One Carbon Adsorption, Thermal Oxidizer, or Catalytic Oxidation Unit (tons emitted during construction period)						
Construction Activities for 1 Unit (2)	0.16	0.53	0.81	0.00	0.11	0.10
Total Construction Emissions for 5 Carbon Adsorption, Thermal Oxidizers, or Catalytic Oxidation Unit (tons emitted during construction period)						
Construction Activities for 5 Units	0.80	2.64	4.03	0.00	0.54	0.49

(1) Vehicle trip assumptions include average vehicle ridership of 1.0 and a trip length of 11 miles one way (CAPCOA, 2016).
(2) Construction activities are estimated to occur for a total of 6 to 7 months (130 working days total) with a 20-person work crew.

The assumption that construction of five carbon adsorption, thermal oxidizer, or catalytic oxidation units could occur under Rule 11-18 is likely a conservative for the following reasons. According to the staff report, if adopted, Rule 11-18 would require preparation of new, or revisions to existing HRAs at affected facilities using OEHHA's 2015 HRA Guideline Revisions. Depending on the complexity of facility operations and the number of TAC emissions sources, preparation of new, or revisions to existing HRAs would likely be completed, evaluated, and approved over different time periods. If it is determined that affected facilities, primarily sewage treatment facilities, exceed the health risk requirements in Rule 11-18 and a decision is made to install a carbon adsorption unit or thermal oxidizer, then it would likely take months, possibly years, to provide engineering specifications, acquire financing, purchase and deliver the necessary equipment, complete Air District permit evaluations, and undergo any necessary environmental analyses.

3.2.4.1.4 Enclosures

Cement plants and concrete batch plants use raw materials that contain toxic metals and crystalline silica. Particulate matter emissions from the storage, handling, and processing of these raw materials contains these TACs and can become airborne or contaminate groundwater if not properly contained. By building an enclosure around these types of materials, the risk of release of particulate matter is greatly reduced. Table 3.2-17 shows the estimated emissions associated with the construction of enclosures to minimize fugitive dust emissions.

TABLE 3.2-17

Emissions for Construction of Enclosures

ACTIVITY	ROG	CO	NOx	SOx	PM10	PM2.5
Peak Construction Emissions One Enclosure (lbs/Project)						
Construction Equipment for 1 Enclosure(1)	328	2,697	3,578	6.5	216	214
On-road Construction Equipment(1)	45	668	630	3.5	152	73
Total Construction Emissions (lbs/project)	373	3,365	4,208	10	368	287
Total Construction Emissions (lbs/day) (2)	1.56	14.08	17.61	0.04	1.54	1.20
Total Construction Emissions for 3 Enclosures (lbs/day)						
Construction Activities for 3 Enclosures	4.69	42.23	52.82	0.13	4.62	3.60
Total Construction Emissions for 3 Enclosures (tons emitted during construction period)						
Construction Activities for 3 Enclosures	0.56	5.05	6.31	0.01	0.55	0.43

(1) Reported in pounds per project

(2) Assumes 239 work days per project

The assumption that construction of three enclosures could occur concurrently under Rule 11-18 is likely a conservative for the following reasons. According to the staff report, if adopted, Rule 11-18 would require preparation of new, or revisions to existing HRAs at affected facilities using OEHHA's 2015 HRA Guideline Revisions. Depending on the complexity of facility operations and the number of TAC emissions sources, preparation of new, or revisions to existing HRAs would likely be completed, evaluated, and approved over different time periods. If it is determined that affected facilities, exceed the health risk requirements in Rule 11-18 and a decision is made to install enclosures, then it would likely take months, possibly years, to provide engineering specifications, acquire financing, purchase and deliver the necessary materials, complete Air District permit evaluations, and undergo any necessary environmental analyses.

3.2.4.1.5 Air Pollution Control Equipment for Large Construction Activities

WGSs have been used on large scale refinery equipment for the control of particulate matter. Installing a WGS would require more demolition and construction equipment and activities than installing other types of control technologies and, therefore, would provide a "worst-case" construction air quality analysis. Because of its large size, it is expected that installing a WGS would occur over a 17-month period; one month to demolish any nearby existing equipment or structures and 16 months to construct the WGS, which would include: site preparation, assembly and installation of the unit and ancillary support equipment, and tying-in the new WGS to the affected equipment.

The following analysis of the construction impacts associated with installing a WGS is based on an EIR prepared for the installation of a WGS on an FCCU in southern California

(SCAQMD, 2007). These construction emission estimates are appropriate for the construction air quality analysis for the proposed rules because they are based on the construction equipment for the use of one WGS on one refinery FCCU. Rule 11-18 has the potential to require installation of a WGS because it can reduce TAC emissions. Regardless of the location of the construction activities, the amount or types of construction equipment and hours of operation, these parameters would not be expected to change compared to the 2007 analysis. The analysis uses a conservative assumption that equipment would operate for 10 hours per day because the 2007 project was on an aggressive installation schedule. The construction equipment that would most likely be required for the installation of a refinery WGS, for example, during a peak month is provided in Table 3.2-18.

TABLE 3.2-18

Estimated Peak Day Off-Road Construction Emissions from Installing One Refinery Wet Gas Scrubber

Off- Road Equipment Type	Number	Daily Hours of Use
Backhoe	1	10
Crane	2	10
Crane	1	10
Front End Loader	1	10
Man Lift	3	10
Forklift	2	10
Generator	1	10
Demolition Hammer	1	10
Welder	3	10

Reference: SCAQMD 2007

Because of its large size, construction of one WGS would likely require as many as 175 construction workers and, using worst-case assumptions, it is assumed that constructing a WGS would require the use of one or more of the following types of construction equipment: backhoes, cranes, man lifts, forklift, front end loaders generators, diesel welding machines, jack hammers, a medium-duty flatbed truck, a medium-duty dump truck, and a cement mixer. Other sources of construction emissions could include: equipment delivery, on-site travel (would include fugitive dust associated with travel on paved roads, and fugitive dust associated with construction activities), and construction worker commute trips.

Depending on the size and types of equipment or structures that may need to be demolished, a worst-case assumption is that up to 50 construction workers would be required. Demolition activities are assumed to require the use of: one or more of the following types of equipment: crane, front-end loader, forklift, demolition hammer, water truck, and medium-duty flatbed truck. Other sources of demolition emissions could include haul truck trips to dispose of demolition debris, on-site travel (would include fugitive dust

associated with travel on paved roads, fugitive dust associated with demolition activities), and construction worker commute trips.

Construction and demolition emission estimates for activities associated with installing one WGS are provided in Table 3.2-19. It is assumed that Rule 11-18 has the potential to result in the construction of up to three refinery WGS units. Typically, construction activities occur sequentially, that is, demolition must be completed before construction activities begin. To provide a conservative analysis, demolition and construction activities are assumed to overlap. Construction estimates associated with constructing one WGS unit and three WGS units are shown in Table 3.2-19.

TABLE 3.2-19

Estimated Construction Emissions for Wet Gas Scrubbers

ACTIVITY	CO	ROG	NOx	SOx	PM10	PM2.5
Construction Emissions from one WGS on Refinery Units[(1)] (lbs/day)						
Demolition for 1 WGS at Refinery[(1)]	36	6	28	<1	3	2
Construction Activities for 1 Refinery WGS[(1)]	67	17	84	<1	39	23
Total Construction Estimates for one WGS on Refinery Units (tons emitted during construction period)						
Demolition for 1 WGS at Refinery[(2)]	0.36	0.06	0.28	<0.1	0.03	0.02
Construction Activities for 1 WGS at Refinery[(3)]	8.04	2.04	10.08	<0.1	4.68	2.76
Total Construction Emissions per each WGS[(3)]	8.4	2.1	10.4	<0.1	4.7	2.8
Construction Emissions for 3 Large WGS on Refinery Units (tons emitted during construction period)						
Total Construction Emissions 3 WGS Units	25.2	6.3	31.2	<1	14.1	8.4

(1) Reference: SCAQMD 2007
(2) Demolition activities include off-road construction equipment and on-road mobile source emissions and are estimated to occur for one month (20 working days)
(3) Construction activities include off-road construction equipment and on-road mobile source emissions and are estimated to occur for a total of 16 months (20 working days per month), with 8 months at peak construction activities and 8 months at 50 percent of peak construction activities.

The assumption that constructing three refinery WGS units under Rule 11-18 is likely a conservative assumption for the following reasons. According to the staff report, if adopted, Rule 11-18 would require preparation of new, or revisions to existing HRAs at affected facilities using OEHHA's 2015 HRA Guideline Revisions. Depending on the complexity of facility operations and the number of TAC emissions sources, preparation of new, or revisions to existing HRAs would likely be completed, evaluated, and approved over different time periods. If it is determined that affected facilities exceed the health risk requirements in Rule 11-18 and a decision is made to install a WGS, then it would likely take months or years to provide engineering specifications, acquire financing, purchase and

deliver the necessary equipment, complete Air District permit evaluations, and undergo any necessary environmental analyses.

3.2.4.1.4 Summary of Construction Emission Impacts

As demonstrated in the subsections above, construction and installation of some types of air pollution control technologies would not necessarily be expected to result in significant adverse construction air quality impacts. For example, replacing existing diesel ICEs with Tier 4 ICEs or retrofitting diesel ICEs with DPFs would result in few construction activities or related emissions, as construction activities would be limited to a single day. However, the construction of other equipment would require a more substantial amount of construction equipment and generate more construction emissions. Table 3.2-20 summarizes the potential construction emissions and the potential overlap of construction activities. While the actual construction activities that may occur under Rule 11-18, it is reasonable to assume that the construction of a number of facilities would overlap as there are hundreds of facilities that would be affected by Rule 11-18. As shown in Table 3.2-20, construction activities are likely expected to result in potentially significant increases in NOx. It should also be noted, that some facility modifications are not expected to generate any substantial construction emissions, e.g., enhanced inspection/monitoring activities, replacing fugitive components, process improvements, or material substitutions.

TABLE 3.2-20

Worst-Case Construction Emissions Under Rule 11-18

ACTIVITY	ROG	CO	NOx	SOx	PM10	PM2.5
Construction Emissions Per Unit Under Rule 11-18 (lbs/day)						
Diesel ICE Replacements 1 ICEs	0.88	4.73	4.77	<0.01	1.02	1.00
Diesel ICE Retrofits 1 ICEs	0.27	1.32	2.36	<0.01	0.08	0.06
1 Non-Refinery WGS, Baghouse, or ESP	2.96	15.23	17.99	0.10	2.69	2.44
1 Carbon Adsorption Unit or Thermal Oxidizer	3.27	10.84	16.53	0.01	2.22	2.01
1 Enclosure	1.56	14.08	17.61	0.04	1.54	1.20
Refinery WGS	17	67	84	<1	39	23
Potential Overlapping Emissions	25.94	113.2	143.26	1.15	46.55	29.71
Significance Thresholds	54	None	54	None	82	54
Significant?	No	--	**Yes**	--	No	No
Potential Overlapping Construction Emissions Under Rule 11-18 (lbs/day)						
10 Diesel ICE Replacements	8.8	47.3	47.7	0.1	10.02	10.0
10 Diesel ICE Retrofits	2.74	13.2	23.2	0.01	0.80	0.58
10 Non-Refinery WGS, Baghouse, or ESP	29.6	152.3	179.9	1.0	26.9	24.4
5 Carbon Adsorption Unit or Thermal Oxidizer	16.35	54.25	82.65	0.05	11.1	10.05
3 Enclosures	4.68	42.23	52.82	0.13	4.62	3.60
3 Refinery WGSs	51	201	252	1	117	69
Total Potential Overlapping Emissions (lbs/day)	113.71	510.28	638.27	2.29	170.44	117.63
Significance Thresholds	**54**	None	**54**	None	**82**	**54**
Significant?	**Yes**	--	**Yes**	--	**Yes**	**Yes**
Potential Overlapping Construction Emissions Under Rule 11-18 (tons per year)						
10 Diesel ICE Replacements	0.004	0.024	0.024	0	0.005	0.005
10 Diesel ICE Retrofits	0.001	0.007	0.012	0	0.001	0.001
10 Non-Refinery WGS, Baghouse or ESP)	1.44	7.42	8.77	0.05	1.31	1.20
5 Carbon Adsorption Units or Thermal Oxidizers	0.8	2.64	4.03	0	0.54	0.49
3 Enclosures	0.56	5.05	6.31	0.01	0.55	0.43
3 Refinery WGS	6.3	25.2	31.2	<1	14.1	8.4
Total Potential Overlapping Emissions (tons/year)	2.81	15.14	19.15	0.06	2.41	2.13

Conclusion: Based on the construction emissions in Tables 3.2-20, it is concluded that construction air quality impacts associated with ROG, NOx, PM10 and PM2.5 would be significant. Construction emissions, however, are temporary as construction emissions would cease following completion of construction activities. Mitigation measures for construction impacts are addressed in Section 3.2.5

3.2.4.2 Potential Criteria Pollutant Impacts During Operation

The net effect of implementing Rule 11-18 is to reduce cancer and non-cancer health risks by reducing TAC emissions from regulated sources. However, some control technologies have the potential to generate secondary or indirect air quality impacts as part of the control process. Table 3.2-21 lists all the identified air pollution control technologies that may be

used to comply with future regulatory requirements under Rule 11-18, as well as potential secondary or indirect operational air quality impacts associated with some types of air pollution control technologies. Those air pollution control technologies in Table 3.2-21 where no direct or indirect operational air quality impacts were identified are not discussed further. The remaining air pollution control technologies that have the potential to generate secondary or indirect operational air quality impacts will be evaluated further in the following subsections.

TABLE 3.2-21

Potential Operational Air Quality Impacts from Installing Air Pollution Control Equipment

Potential Control Technology	Air Quality Impacts	Analyzed Further?
Enclosures	None identified	**No**
Diesel Particulate Filter	Slight NO_2 increase from regenerating filter	**Yes**
Replace Old Diesel ICEs with New Diesel ICEs	None identified by any sources during technology review	**No**
Baghouse with HEPA Filters	None identified (IFC, 2007 & STAPPA /ALAPCO, 2000)	**No**
Carbon Adsorption	Combustion emissions from regenerating spent carbon	**Yes**
Catalyst Oxidization	None identified by any sources during technology review	**No**
Thermal Oxidizer	Potential increase in combustion emissions	**Yes**
Wet Gas Scrubber	Slight increase in TAC, minor indirect mobile source emission increases	**Yes**
Electrostatic Precipitator (Wet and Dry ESPs)	None identified (STAPPA /ALAPCO, 2000)	**No**
Process Improvements	None identified	**No**
Product Substitution	None identified	**No**
Enhanced Monitoring/Component Replacement	None identified	**No**

The following analyses of potential operational secondary air quality impacts from the proposed project include the following assumption; it is assumed that no additional employees would be needed to operate any new or modified air pollution control equipment, so the existing work force at each affected facility is expected to be sufficient. As such, no workers' commute trip emissions are anticipated for the operation of the new or modified air pollution control equipment.

3.2.4.2.1 Diesel Particulate Filters

Use of DPFs may result in a slight increase in directly emitted NOx during the regeneration of passive DPFs. In response to this undesirable effect, DPF manufacturers have improved their efforts to overcome increased NOx production by using other catalytic formulations or lowering the precious metal content of the traps. One DPF manufacturer has recently developed an improved DPF system capable of reducing PM emissions by at least 85 percent while also limiting NOx emissions to 25 percent compared to NOx emissions without a DPF. Limited test data for newer designs indicate that DPFs can reduce NOx emissions by six to ten percent, so overall there may be a small, but less than significant increase in NOx emissions and with some models there may be a net reduction in NOx emissions from operation of the filter. The net air quality effect of using DPFs is concluded to be neutral.

3.2.4.2.2 New Diesel Internal Combustion Engines (ICEs)

Diesel Internal Combustion Engines (ICEs) are often used to provide electricity in certain areas of a facility, used as a backup source of electricity in the event of a power outage, or to operate equipment in areas of a facility with no other power source. Diesel ICE's can be a substantial source of emissions, including diesel particulate matter emissions (which are carcinogenic TACs) from a facility depending on its age and frequency of use. A common way to reduce TAC emissions from a facility would be to replace existing diesel ICEs with new diesel ICEs. Over the past several decades, emission limits for diesel ICEs have been established and modified. Initial emission limits for ICEs were for engines referred to as Tier 1 ICEs. ICEs compliant with current emission limits are known as Tier 4 ICEs. Tier 4 ICEs are more efficient than Tier 1 ICEs and emit less pollutants. Facilities could comply with Rule 11-18 by replacing older ICEs (e.g., Tier 1) with new Tier 4 ICEs. Table 3.2-22 shows the estimated emission reductions associated with the use of Tier 4 engines as compared to Tier 1 engines.

TABLE 3.2-22

Emission Reductions Associated with New Diesel ICEs
Pounds per Horsepower-Hour(1)

Engine Tier	CO	VOC	NOx	PM
175-750 Hp Diesel ICE				
Tier 1	8.5	1	6.9	0.4
Tier 4	2.6	0.14	0.3	0.015
Reduction	69%	86%	96%	96%
750+ Hp Diesel ICE				
Tier 1	8.5	1	6.9	0.4
Tier 4	2.6	0.14	0.5	0.022
Reduction	69%	86%	93%	95%

(1) Based on 40 CFR Part 89 and 1039

Based on the above information and depending on the engine size, replacing older existing diesel ICEs with newer diesel ICEs, would result in an estimated reduction of 69 percent of CO, 86 percent reduction in VOC, 93-96 percent reduction in NOx, and 95-96 percent reduction in PM. Therefore, replacing existing diesel ICEs with new diesel ICEs is not expected to generate significant adverse operational air quality impacts.

3.2.4.2.3 Carbon Adsorption

Carbon adsorption equipment was identified as one of the control technologies that could be used to reduce cancer and non-cancer health risks by reducing TAC emissions at sewage treatment facilities. The initial control efficiency of carbon adsorption equipment is extremely high, but as the activated carbon becomes saturated with organic material over time, control efficiency drops until breakthrough occurs. When breakthrough occurs, the saturated carbon must be removed and either disposed of or regenerated and the solvent recovered, or removed and destroyed.

Carbon adsorbers (activated carbon) is a form of carbon processed to have small, low-volume pores that increase the surface area available for adsorption or chemical reactions. Adsorption is the attachment or adhesion of atoms, ions and molecules (adsorbates) from a gaseous, liquid or solution medium onto the surface of an adsorbent. Similar to thermal oxidizers, carbon adsorption could be used to control ROG emissions and TACs. Carbon adsorption could generate emissions from regeneration of spent carbon.

Regenerating spent carbon typically requires a combustion source using natural gas as the combustion fuel to heat the regenerant and/or to heat the carbon beds. Only 15 percent of the carbon bed volume collects toxic ROG emissions and a typical carbon bed is sized to reduce ROG emissions by approximately 55 pounds per day. Based on these two characteristics, a typical carbon bed size is assumed to be approximately 400 pounds (55/0.15 = 400). The projected natural gas fuel use is 5.5 standard cubic feet (scf) of natural gas per pound of carbon (SCAQMD, 2016). The carbon bed is assumed to be regenerated one time per day for most facilities. The amount of natural gas required per year is estimated to be 0.0264 million standard cubic feet (mmscf) [(400 lbs C) x (5.5 scf/lb C per regen) x (365 regen/yr) = 803,000 scf/yr].

The operational emissions associated with the installation of 5 carbon adsorption units are summarized in Table 3.2-23.

TABLE 3.2-23

Estimated Operational Emissions Impacts from Carbon Adsorption Regeneration

Pollutant	ROG	CO	NOx	SOx	PM10	PM2.5
Carbon Adsorption Regeneration						
Emission Factor[(1)](lb/mmscf)	7.00	35	130	0.83	7.50	7.50
Annual Fuel Use (mmscf)	0.0264	0.0264	0.0264	0.0264	0.0264	0.0264
Peak Daily Emissions (lbs/day)[(2)]	**0.0154**	**0.0770**	**0.2860**	**0.0018**	**0.0165**	**0.0165**
Annual Emissions (1 unit) (tons/day)	**<0.01**	**<0.01**	**<0.01**	**<0.01**	**<0.01**	**<0.01**
Daily Emissions 5 Units (lbs/day)	**0.77**	**0.385**	**1.43**	**0.009**	**0.083**	**0.083**
Annual Emissions 5 units (tons/ year)	**0.14**	**0.07**	**0.26**	**<0.01**	**0.02**	**0.02**

(1) Default SCAQMD AER Emission factors for external natural gas fired source. No additional BAAQMD Rule restriction on CO and NOx emissions since the regeneration could take place out of state.

(2) Assumes 1 regen in the peak day.

As shown in Table 3.2-23, regenerating spent carbon used in carbon adsorption units would result in a net increase in criteria pollutant emissions. Since it is expected that carbon adsorption units would operate every day, daily and annual emissions from all units would be additive.

3.2.4.2.4 Thermal Oxidizers

It is expected that thermal oxidizers could be used to control TAC emissions primarily at landfills and sewage treatment facilities. It is unlikely that landfills, also referred to as solid waste disposal sites, would install additional control such as thermal oxidizers because they are currently stringently regulated by Rule 8-34. Similarly, it is unlikely refinery operators would have to install additional controls for their wastewater collection systems because they are stringently regulated pursuant to Rule 8-8. Therefore, it is assumed that installation of thermal oxidizers would occur at sewage treatment facilities.

To quantify air quality impacts from the operation of thermal oxidizers, it is assumed they operate using three million British thermal unit (mmBtu) natural gas burners. The operational emissions associated with operation of one thermal oxidizer are summarized in Table 3.2-24.

TABLE 3.2-24

Potential Operational Air Quality Impacts from Thermal Oxidizers

Pollutant	ROG	CO[(1)]	NOx [(2)]	SOx	PM10	PM2.5
Emission factor in lb/mmscf [(3)]	7.00	0.30	0.04	0.60	7.50	7.50
Heater Duty mmbtu/hr	3.00	3.00	3.00	3.00	3.00	3.00
Heating Value (btu/scf)	1,050	1,050	1,050	1,050	1,050	1,050
Operational time hr/day	8.0	8.0	8.0	8.0	8.0	8.0
Daily Emissions lb/day	0.16	7.10	0.88	0.01	0.17	0.17
Emissions tons/yr	0.03	1.30	0.16	0.00	0.03	0.03
10 Facilities Emissions lb/day	1.6	71.0	8.80	0.1	1.7	1.7
10 Facilities Emissions tons/yr	0.29	12.96	1.61	0.02	0.31	0.31

Source: Detailed calculations can be found in BAAQMD, 2016, Appendix A.
(1) Based on 400 ppm
(2) Based on 30 ppm
(3) Default emission factors for natural gas combustion for external combustion sources. SCAQMD Annual Emissions Reporting.

As shown in Table 3.2-24, operating thermal oxidizers would create criteria pollutant emissions during operation. Since it is expected that thermal oxidizers would operate every day at sewage treatment facilities, daily and annual emissions from all units would be additive.

3.2.4.2.5 Wet Gas Scrubbers

Although the main effect of installing air pollution control equipment is reducing emissions, some types of control equipment require delivery of materials that are a necessary part of the pollution control process. For example, WGS operations require a delivery of fresh catalyst and caustic solution on a daily basis. Therefore, indirect emissions occur from trucks delivering supplies (i.e., fresh catalyst and caustic solution to refill the storage tanks) on a regular basis is expected.

Depending on the size and configuration of the WGS, the sodium hydroxide (NaOH) caustic solution used in the WGS would likely need to be delivered one time per week or a little over 50 additional delivery truck trips per year per unit. For example, catalyst and caustic solutions are typically used in relatively small amounts per day. The use of NaOH (50 percent solution, by weight) caustic in a WGS unit could occur at facilities that already use and store NAOH caustic for other purposes, typically in one 10,000-gallon storage tank. Otherwise, the facility operator would need to construct a new NAOH caustic storage tank and ancillary piping and other associated equipment.

Truck trips transporting the catalyst/caustic or ammonia solutions would occur relatively infrequently. Further, a single truck's emissions while delivering caustic solutions from

San Jose to Benicia[3], for example, would be very low, a few pounds per day at most. As shown in Table 3.2-25, indirect mobile source emissions from transporting the catalyst/caustic would be low.

TABLE 3.2-25

Delivery Truck Emissions

Material	Number of Truck Trips	Estimated Trip Length (round-trip miles)	Pollutants					
			CO	ROG	NOx	SOx	PM10	PM2.5
Operational Emissions Per Facility (lbs/day)								
Caustic/Catalyst for WGS Unit	2	120	0.26	0.06	1.84	0.02	0.04	0.02
Operational Emissions Per Facility (Tons/year)								
Caustic/catalyst for WGS Unit	104	120	0.01	0.003	0.10	0.00	0.002	0.001
Peak Operational Emissions Multiple Facilities (lbs/day)								
Caustic/catalyst for 13 WGS Units	26	120	3.38	0.78	23.92	0.26	0.52	0.26
Peak Operational Emissions Multiple Facilities (Tons/year)								
Caustic/catalyst for 13 WGS Units	1,352	120	0.13	0.04	1.3	0.01	0.03	0.01

3.2.4.2.6 Conclusion

As can be seen in Table 3.2-26, adopting Rule 11-18 would not produce operational emissions that exceed either the Air District's daily or annual criteria pollutant significance thresholds. ROG, NOx, PM10 and PM2.5 emissions would be less than the applicable significance threshold and, therefore, are concluded to be less than significant.

It should be noted that in addition to the estimated emission increases associated with the operation of new air pollution control equipment under Rule 11-18, reduction in air emissions would also be expected. Some of those reductions would be large, for example, a WGS, baghouse, or ESP would be expected to result in PM10/PM2.5 and TAC emission reductions. However, it is not possible to estimate those emission reductions at this point until the sources that will be controlled are known, the type of air pollution control device has been identified, appropriate engineering analyses have been completed and so forth. Nonetheless the potential emission increases are expected to be either wholly or partially offset with emission decreases.

[3] Review of caustic suppliers located a chemical supplier in San Jose. The haul truck trip from San Jose to the Valero Refining Company in Benicia would likely represent a conservative trip length assumption because trip lengths to all other affected facilities would be shorter.

TABLE 3.2-26

Worst-Case Operational Emissions Under Rule 11-18

ACTIVITY	ROG	CO	NOx	SOx	PM10	PM2.5
Peak Operational Emissions Per Facility Under Rule 11-18 (lbs/day)						
Regenerating Spent Carbon	0.02	0.08	0.29	<0.01	0.02	0.02
Thermal Oxidizer	0.16	7.10	0.88	0.01	0.17	0.17
Caustic/Catalyst for WGS Unit Truck Trips	0.06	0.26	1.84	0.02	0.04	0.02
Total Potential Overlapping Emissions	0.24	7.44	3.01	0.03	0.23	0.21
Significance Thresholds	54	None	54	None	82	54
Significant?	No	--	No	--	No	No
Peak Operational Emissions for Multiple Facilities Under Rule 11-18 (lbs/day)						
Regenerating Spent Carbon	0.77	0.40	1.43	0.01	0.08	0.08
Thermal Oxidizer	1.6	71.0	8.80	0.1	1.7	1.7
Caustic/Catalyst for WGS Unit Truck Trips	0.04	0.13	23.96	0.26	0.52	0.26
Total Potential Overlapping Emissions	2.41	71.23	34.19	0.37	2.3	2.04
Significance Thresholds	54	None	54	None	82	54
Significant?	No	--	No	--	No	No
Annual Operational Emissions for 1 Facility (tons per year)						
Regenerating Spent Carbon	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thermal Oxidizer	0.03	1.30	0.16	0.00	0.03	0.03
Caustic/Catalyst for WGS Unit Truck Trips	0.003	0.01	0.10	0.00	<0.01	<0.01
Total Potential Overlapping Emissions	0.33	1.31	0.26	0	0.03	0.03
Worst-case Annual Operational Emissions for Multiple Facilities (tons per year)						
Regenerating Spent Carbon (5 Units)	0.14	0.07	0.26	<0.01	0.02	0.02
Thermal Oxidizers (10 Units)	0.29	12.96	1.61	0.02	0.31	0.31
Caustic/Catalyst for WGS Truck Trips (13 Units)	0.04	0.13	1.3	0.01	0.03	0.01
Total Potential Overlapping Emissions	0.47	13.16	3.17	0.04	0.37	0.34
Significance Thresholds tons/year	10	None	10	None	15	10
Significant?	No	--	No	--	No	No

3.2.4.3 Potential Toxic Air Contaminant Impacts

To comply with the risk or emission reduction requirements of Rule 11-18, WGS may be used. For example, caustic is used in the operation of a WGS. There are several types of caustic solutions that can be used in WGS operations, but NaOH (50 percent solution, by weight) is the one most commonly used. NaOH is a TAC that is a non-cancerous, but an acutely hazardous substance (i.e., an acute reference exposure level has been established by the OEHHA). NaOH emissions typically occur as a result of filling loss and the working loss of each NaOH tank, resulting in relatively low NaOH emissions. Vapor balancing is expected to be used between the NaOH tank and the delivery truck to reduce filling losses. There would likely be a small incremental increase in risk because of the increased throughput of caustic through existing storage tanks but no expected change to the acute 1-hour exposure. However, if new storage tanks are needed there is a potential for a new TAC source at existing facilities.

The size of a new NaOH storage tank would vary depending on the size of the wet gas scrubber (i.e., the larger the wet gas scrubber the larger the storage tank). The distance at which the groundlevel concentration would equal the acute reference exposure level for NaOH was determined to be approximately 33-53 feet from the NaOH tank depending on the size of the tank (the evaluation used 500 gallon and 10,000 gallon tanks, see Appendix B). Any NaOH storage tanks would likely be located in the operating portions of facilities. Thus, the distance to the nearest sensitive receptor would likely be greater than 53 feet away such that substantial dispersion of any NaOH emission would occur and the acute reference exposure level would not be exceeded.

Since it is likely that only one tank would be used to store the NaOH solution at each affected facility, working loss concentrations would not overlap. As such, even with multiple NaOH storage tanks, it is not expected that working loss emissions would exceed the acute hazard indices.

Further, an alternative to using NaOH as the caustic solution is sodium carbonate (Na_2CO_3) which is commonly known as soda ash, a non-toxic, non-cancerous, and nonhazardous substance. This caustic does not have the potential to generate significant adverse TAC emission impacts. For these reasons, it is unlikely that NaOH emissions would create significant adverse acute hazard impacts to any nearby sensitive receptors.

It should be noted that in addition to the estimated TAC emission increases associated with the operation of new air pollution control equipment under Rule 11-18, a reduction in TAC emissions would also be expected. However, it is not possible to estimate those emission reductions at this point until the sources that will be controlled are known, the type of air pollution control device has been identified, appropriate engineering analyses have been completed and so forth. Nonetheless, air pollution control equipment installed to control TAC emissions as a result of the proposed rules is expected to result in a reduction in TAC emissions from affected facilities.

3.2.4.4 Conclusion

Based on the evaluation of those air pollution control technologies that would most likely be the used to reduce TAC emissions from affected facilities if required pursuant to Rule 11-18, construction activities could generate ROG, NOx, PM10 and PM2.5 emissions that exceed the Air District's construction significance threshold. Therefore, construction air quality impacts are concluded to be significant. The operation of air pollution control equipment and methodologies to control TAC emissions under Rule 11-18 are expected to be less than significant for NOx, ROG, PM10, PM2.5 and TAC emissions.

3.2.5 MITIGATION MEASURES

3.2.5.1 Construction Mitigation Measures

The proposed project is expected to have significant adverse air quality impacts during the construction phase. Therefore, the following mitigation measures could be imposed through local land use permits for future projects comprised of installing air pollution control equipment that require local permits.

A-1 Develop a Construction Emission Management Plan for each affected facility to minimize emissions from vehicles including, but not limited to: consolidating truck deliveries; scheduling deliveries to avoid peak hour traffic conditions; describing truck routing; describing deliveries including logging delivery times; describing entry/exit points; identifying locations of parking; identifying construction schedule; and prohibiting truck idling in excess of five consecutive minutes or another timeframe as allowed by the California Code of Regulations, Title 13 §2485 - CARB's Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. The Construction Emission Management Plan shall be submitted to Air District staff for approval prior to the start of construction. At a minimum, the Construction Emission Management Plan would include the following types of mitigation measures.

On-Road Mobile Sources:

A-2 The Emission Management Plan shall include measures to minimize emissions from vehicles including, but not limited to, consolidating truck deliveries, prohibiting truck idling in excess of five minutes as contract conditions with carriers and by posting signs onsite, specifying truck routing to minimize congestion emissions, specifying hours of delivery to avoid peak rush-hour traffic, allowing ingress/egress only at specified entry/exit points to avoid heavily congested traffic intersections and streets, and specifying allowable locations of onsite parking.

Off-Road Mobile Sources:

A-3 Prohibit construction equipment from idling longer than five minutes at the facility under consideration as contract conditions with construction companies and by posting signs onsite.

A-4 Maintain construction equipment tuned up and with two- to four-degree retard diesel engine timing or tuned to manufacturer's recommended specifications that optimize emissions without nullifying engine warranties.

A-5 The facility operator shall survey and document the locations of construction areas and identify all construction areas that are served by electricity. This

documentation shall be provided as part of the Construction Emissions Management Plan. Electric welders shall be used in all construction areas that are demonstrated to be served by electricity.

A-6 The facility operator shall survey and document the locations of construction areas and identify all construction areas that are served by electricity. This documentation shall be provided as part of the Construction Emissions Management Plan. Onsite electricity rather than temporary power generators shall be used in all construction areas that are demonstrated to be served by electricity.

A-7 If cranes are required for construction, cranes rated 200 hp or greater equipped with Tier 4 or equivalent engines shall be used. Engines equivalent to Tier 4 may consist of Tier 3 engines retrofitted with diesel particulate filters and oxidation catalysts, selective catalytic reduction, or other equivalent NOx control equipment. Retrofitting cranes rated 200 hp or greater with PM and NOx control devices must occur before the start of construction. If cranes rated 200 hp or greater equipped with Tier 4 engines are not available or cannot be retrofitted with PM and NOx control devices, the facility operator shall use cranes rated 200 hp or greater equipped with Tier 3 or equivalent engines. The facility operator shall provide documentation in the Construction Emissions Management Plan or associated subsequent status reports as information becomes available that cranes rated 200 hp or greater equipped with Tier 4 or equivalent engines are not available.

A-8 For off-road construction equipment rated 50 to 200 hp that will be operating for eight hours or more, the facility operator shall use equipment rated 50 to 200 hp equipped with Tier 4 or equivalent engines. Engines equivalent to Tier 4 may consist of Tier 3 engines retrofitted with diesel particulate filters and oxidation catalysts, selective catalytic reduction, or other equivalent NOx control equipment. Retrofitting equipment rated 50 to 200 hp with PM and NOx control devices must occur before the start of construction. If equipment rated 50 to 200 hp equipped with Tier 4 engines is not available or cannot be retrofitted with PM and NOx control devices, the facility operator shall use equipment rated 50 to 200 hp equipped with Tier 3 or equivalent engines. The facility operator shall provide documentation in the Construction Emissions Management Plan or associated subsequent status reports as information becomes available that equipment rated 50 to 200 hp equipped with Tier 4 or equivalent engines are not available.

3.2.5.1.1 Remaining Construction Impacts

In spite of implementing the construction air quality mitigation measures above, it is concluded that the installation of two or more types of air pollution control equipment concurrently would continue to exceed the applicable construction air quality significance thresholds and, therefore, remain significant.

3.2.5.2 Operation Mitigation Measures

Air quality impacts during operation are considered to be less than significant, therefore, no mitigation measures are required.

3.2.6 CUMULATIVE IMPACTS

Pursuant to CEQA Guidelines §15130(a), "An EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable, as defined in section 15065 (a)(3). Where a lead agency is examining a project with an incremental effect that is not "cumulatively considerable," a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable. Further, CEQA Guidelines §15130 requires that an EIR reflect the severity of the cumulative impacts from a proposed project and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness. Cumulative impacts are defined by CEQA as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines, §15355). Cumulative impacts are further described as follows:

- The individual effects may be changes resulting from a single project or a number of separate projects. (State CEQA Guidelines §15355(a).

- The cumulative impacts from several projects are the changes in the environment which result from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (CEQA Guidelines, §15355(b)).

- A "cumulative impact" consists of an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. An EIR should not discuss impacts which do not result in part from the project evaluated in the EIR. (CEQA Guidelines, §15130(a)(1)).

With regard to related projects or projects with related environmental impacts, because the proposed project consists of promulgating Rule 11-18, related projects would consist of other past, present, and probable future District rules and regulations, as well as implementing control measures in the 2017 Clean Air Plan control measures.

3.2.6.1 Criteria Air Pollutants

3.2.6.1.1 Construction Air Quality Impacts

In the analysis of construction air quality impacts, it was concluded that air quality impacts from construction activities would be significant from implementing the proposed project because the potential overlap in construction activities for moderately-sized pieces of air pollution control equipment would likely exceed the applicable NOx significance thresholds for construction air quality impacts. Further, it was concluded that, even after implementing mitigation measures, construction air quality impacts would continue to exceed the applicable significance thresholds for construction. Thus, the ROG, NOx, PM10 and PM2.5 air quality impacts due to construction are considered to be cumulatively considerable pursuant to CEQA Guidelines §15064 (h)(1) and therefore, generate significant adverse cumulative construction air quality impacts. It should be noted, however, that the air quality analysis is a conservative, "worst-case" analysis so the actual construction impacts are not expected to be as great as estimated here. Further, the construction activities are temporary and would be terminated once any future construction activities are completed.

3.2.6.1.2 Operational Air Quality Impacts

As noted above, implementing Rule 11-18 is not expected to generate significant adverse project-specific air quality impacts. As a result, air quality impacts from Rule 11-18 are not considered to be cumulatively considerable pursuant to CEQA Guidelines §15064 (h)(1). As discussed above, in addition to the estimated emission increases associated with the operation of new air pollution control equipment under Rule 11-18, reductions in air emissions would also be expected, some of which are potentially large. However, it is not possible to estimate those emission reductions at this point until the sources that will be controlled are known, the type of air pollution control device has been identified, appropriate engineering analyses have been completed and so forth. Nonetheless the potential emission increases are expected to be either wholly or partially offset with emission decreases.

As described in the EIR for the Clean Air Plan (BAAQMD, 2017), air quality within the Bay Area has improved since 1955 when the Air District was created and is projected to continue to improve. This improvement is mainly due to lower-polluting on-road motor vehicles, more stringent regulation of industrial sources, and the implementation of emission reduction strategies by the Air District. This trend towards cleaner air has occurred in spite of continued population growth. The Air District is in attainment of the State and federal ambient air quality standards for CO, NOx, and SO_2.

However, the Bay Area is designated as a non-attainment area for the federal and state 8-hour ozone standard. The State 8-hour standard was exceeded on 12 days in 2015 in the Air District, most frequently in the Eastern District (Livermore, Patterson Pass, and San Ramon) (see Table 3.2-2). The federal 8-hour standard was exceeded on 12 days in 2015. The Air District is unclassified for the federal 24-hour PM10 standard and is non-

attainment with the State 24-hour PM10 standard. Since the District is not in attainment for the federal and state ozone standard, the state 24-hour PM10 standard, and the federal 24-hour PM2.5 standard, past projects and activities have contributed to the nonattainment air quality impacts that are cumulatively significant.

The 2017 Clean Air Plan contains numerous control measures that the District intends to impose to improve overall air quality in the District. Control measures in the 2017 Clean Air Plan included Rule 11-18 as well as a number of other control measures to control emissions from stationary sources. The 2017 Clean Air Plan is expected to result in overall reductions in VOC, NOx, SOx, and PM emissions, providing an air quality benefit (BAAQMD, 2017). As reported in the Final EIR for the 2017 Air Plan, large emission reductions are expected from implementation of the 2017 Plan including reductions in ROG emissions of 1,596 tons/year; NOx emissions of 2,929 tons/year, SOx emissions of 2,590 tons/year, and PM2.5 emissions of 503 tons/year (see Table 3.2-21 of the Final EIR, BAAQMD 2017). These emission reductions are expected to help the Bay Area come into compliance or attainment with the federal and state 8-hour ozone standard, the federal and state PM10 standards, the federal 24-hour PM2.5 standards, and the state 24-hour PM2.5 standard, providing both air quality and public health benefits. The proposed Rule 11-18 is not expected to result in a cumulatively considerable contribution to the existing air quality. Emission reductions from the 2017 Plan are expected to far outweigh any potential secondary emission increases associated with implementation of the control measures in the 2017 Plan (including Rule 11-18), providing a beneficial impact on air quality and public health.

3.2.6.2 Toxic Air Contaminants

It was concluded for the analysis of TAC air quality impacts, that TAC emissions from operation of WGS units would be minor and less than significant. Because operational TAC emissions do not exceed the applicable cancer and non-cancer health risk significance thresholds, they are not considered to be cumulatively considerable (CEQA Guidelines §15064 (h)(1)) and, therefore are not expected to generate significant adverse cumulative cancer and non-cancer health risk impacts. In addition, reductions in TAC emissions would be expected due to implementation of Rule 11-18, but those emission reductions and the related health risk benefits cannot be estimated at this time.

CHAPTER 3.3

GREENHOUSE GAS EMISSIONS

Introduction
Environmental Setting
Regulatory Setting
Significance Criteria
Greenhouse Gas Emission Impacts
Mitigation Measures

This page intentionally left blank

3.3 GREENHOUSE GAS EMISSIONS

This subchapter of the EIR evaluates the potential greenhouse gas (GHG) impacts associated with implementation of Rule 11-18, which would reduce exposure to TAC emissions from a number of stationary sources within the Bay Area.

As discussed in the Initial Study, implementation of Rule 11-18 would reduce risk from facilities that emit toxic air contaminants throughout the Bay Area. However, certain risk reduction measures have the potential to increase emissions of other pollutants, such as GHGs and criteria pollutants. Adverse impacts include increased GHG emissions associated with construction activities and combustion sources from certain types of air pollution control equipment. The NOP/IS (see Appendix A) determined that potential GHG impacts associated with implementation of the proposed new rules are potentially significant. Project-specific and cumulative adverse GHG impacts associated with the proposed new rules have been evaluated in Chapter 3.3 of this EIR.

Global climate change refers to changes in average climatic conditions on the earth as a whole, including: temperature, wind patterns, precipitation and storms. Global warming, a related concept, is the observed increase in the average temperature of the earth's surface and atmosphere. One identified cause of global warming is an increase of GHGs in the atmosphere. The six major GHGs identified by the Kyoto Protocol are CO_2, methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), haloalkanes (HFCs), and perfluorocarbons (PFCs). Although not included among the Kyoto Six GHGs, black carbon, a key component of fine PM, has been identified as a potent agent of climate change. Black carbon is the third largest GHG in the Bay Area on a carbon dioxide equivalence (CO2e) basis. Diesel engines and wood-burning are key sources of black carbon in the Bay Area.

The GHGs absorb longwave radiant energy reflected by the earth, which warms the atmosphere. GHGs also radiate longwave radiation both upward to space and back down toward the surface of the earth. The downward part of this longwave radiation absorbed by the atmosphere is known as the "greenhouse effect."

While the cumulative impact of GHG emissions is global, the geographic scope of this cumulative impact analysis is the State of California. The analysis of GHG emissions is a different analysis than for criteria pollutants for the following reasons. For criteria pollutants, significance thresholds are based on daily emissions because attainment or non-attainment is typically based on daily exceedances of applicable ambient air quality standards. Further, the ambient air quality standards for criteria pollutants are based on relatively short-term exposure effects to human health, e.g., one-hour and eight-hour. Using the half-life of CO_2, 100 years, for example, the effects of GHGs are longer-term, affecting the global climate over a relatively long time frame.

It is the increased accumulation of GHGs in the atmosphere that may result in global climate change. Climate change involves complex interactions and changing likelihoods of diverse impacts. Due to the complexity of conditions and interactions affecting global climate change, it

is not possible to predict the specific impact, if any, attributable to GHG emissions associated with a single project, which is why GHG emission impacts are considered to be a cumulative impact.

Emissions of GHGs, especially combustion of fossil fuels for energy, transportation, and manufacturing, contribute to warming of the atmosphere that may cause rapid changes in the way a number different types of ecosystems typically function. For example, in some regions, changing precipitation or acceleration of melting snow and ice are altering hydrological systems, affecting water resources in terms of quantity and quality. Melting glaciers and polar ice sheets are expected to contribute to sea level rise. Rising sea levels are expected to contribute to an increase in coastal flooding events.

A warmer atmosphere could also contribute to chemical reactions increasing the formation of ground-level ozone. Ozone is a well-known lung irritant and a major trigger of respiratory problems like asthma attacks. Local changes in temperature and rainfall could alter the distribution of some waterborne illnesses and disease vectors. For example, warmer freshwater makes it easier for pathogens to grow and contaminate drinking water.

Potential health effects from global climate change may arise from temperature increases, climate-sensitive diseases, extreme events, and air quality. There may be direct temperature effects through increases in average temperature leading to more extreme heat waves and less extreme cold spells. Those living in warmer climates are likely to experience more stress and heat-related problems (i.e., heat rash and heat stroke). In addition, climate sensitive diseases may increase, such as those spread by mosquitoes and other disease carrying insects. Those diseases include malaria, dengue fever, yellow fever, and encephalitis. Extreme events such as flooding and hurricanes can displace people and agriculture, which would have negative consequences. Drought in some areas may increase, which would decrease water and food availability. Global climate change may also exacerbate air quality problems from increased frequency of exceeding criteria pollutant ambient air quality standards.

This chapter analyzes how implementation of Rule 11-18 may contribute to global climate change through increased GHG emissions.

3.3.1 ENVIRONMENTAL SETTING

There are dozens of GHGs, but a subset of these gases are the primary agents of climate change. The six major GHGs identified by the Kyoto Protocol plus black carbon are the GHGs considered in this EIR.

> **Carbon Dioxide** (CO_2) is released to the atmosphere when fossil fuels (oil, gasoline, diesel, natural gas, and coal), solid waste, and wood or wood products are burned.
>
> **Methane** (CH_4) is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from the decomposition of organic waste in municipal solid waste landfills and the raising of livestock.

Nitrous oxide (N_2O) is emitted during agricultural and industrial activities, as well as during combustion of solid waste and fossil fuels.

Hydrofluorocarbons (HFCs), **perfluorocarbons** (PFCs), and **sulfur hexafluoride** (SF_6), are generated by a variety of industrial processes. Emissions of these fluorinated gases (F-gases) are small on a mass basis, but they are potent agents of climate change on a per unit basis.

Black Carbon: Although not included among the Kyoto Six GHGs, black carbon is a key component of fine particulate matter and has been identified as a potent agent of climate change. Black carbon is the third largest GHG in the Bay Area on a CO_2-equivalent basis. Diesel engines and wood-burning are key sources of black carbon in the Bay Area. Since exposure to fine PM has a wide range of health impacts, reducing emissions of black carbon will provide important public health co-benefits.

Table 3.3-1 shows atmospheric lifespan, 20-year and 100-year GWP values, and key emission sources for the GHGs.

An emissions inventory is a detailed estimate of the amount of air pollutants discharged into the atmosphere of a given area by various emission sources during a specific time period. The emission inventory in Table 3.3-2 focuses on GHG emissions due to human activities in the State of California. In 2015, total GHG emissions were 440.4 million metric tons of CO2 equivalent (MMTCO2e), a decrease of 5.7 MMTCO2e compared to 2010.

TABLE 3.3-1

Greenhouse Gases Addressed in the 2016 Plan

Greenhouse Gas	Atmospheric Lifespan	GWP * (20-year timeframe)	GWP * (100-year timeframe)	Key Emissions Sources
Carbon dioxide (CO_2)	20-200 years	1	1	Fossil fuel combustion
Nitrous oxide (N_2O)	114 years	268	298	Motor vehicles, agriculture, water treatment, composting
Methane (CH_4)	12 years	86	34	Natural gas production & distribution, solid waste disposal, ranching, dairies
Hydrofluorocarbons (HFCs)	1.5 to 264 years	506 to 6,940	138 to 8,060	Refrigeration, air conditioning
Perfluorocarbons (PFCs)	3,000 years or more	6,500	6,500	Semiconductor manufacturing
Sulfur Hexafluoride (SF_6)	3,200 years	17,500	23,500	Electricity grid losses
Black Carbon**	Days to weeks	3,235	900	Diesel engines, wood-burning

* The GWP values in Table 3.3-1 are taken from the IPCC 5th Assessment Report (AR5), with the exception of black carbon.
** The black carbon values are based on from US EPA report on black carbon: https://www3.epa.gov/blackcarbon/2012report/Chapter2.pdf

TABLE 3.3-2

California Greenhouse Gas Emission and Sinks Summary
(million metric tons CO2e)

Categories Included in the Inventory	2004	2010	2014
ENERGY	**427.7**	**379.1**	**365.60**
Fuel Combustion Activities	**420.32**	**371.19**	**356.88**
Energy Industries	172.76	144.85	132.93
Manufacturing Industries & Construction	19.52	18.72	19.98
Transport	181.67	162.07	163.64
Other Sectors	46.37	45.55	40.33
Fugitive Emissions from Fuels	**7.36**	**7.87**	**8.68**
Solid Fuels	0.04	0.02	0.01
Oil and Natural Gas	6.10	6.68	7.51
Geothermal Energy Production	1.12	1.10	1.15
Pollution Control Devices	0.11	0.06	0.00
INDUSTRIAL PROCESSES & PRODUCT USE	**21.3**	**23.5**	**32.5**
Mineral Industry	6.11	3.49	5.23
Chemical Industry	0.05	0.05	0.03
Metal Industry	0.07	0.07	0.05
Non-Energy Products from Fuels & Solvent Use	2.06	1.91	1.90
Electronics Industry	0.35	0.20	0.26
Product Uses as Substitutes for Ozone Depleting Substances	7.95	13.20	18.37
Other Product Manufacture & Use Other	1.39	1.20	1.39
Other	3.31	3.36	5.26
AGRICULTURE, FORESTRY, & OTHER LAND USE	**30.7**	**33.2**	**31.7**
Livestock	20.81	24.00	23.25
Aggregate Sources & Non-CO_2 Emissions Sources on Land	9.84	9.23	8.42
WASTE	**9.5**	**10.3**	**10.6**
Solid Waste Disposal	7.42	8.11	8.40
Biological Treatment of Solid Waste	0.18	0.26	0.33
Wastewater Treatment & Discharge	1.91	1.93	1.90
Included California Emissions	**489.1**	**446.1**	**440.4**

Source: 2017 Edition California GHG Inventory for 2000-2015 by IPCC (CARB, 2017)

Table 3.3-3 presents the GHG emission inventory by major source categories in calendar year 2015, as identified in the Air District's 2017 Air Plan (BAAQMD, 2017). Transportation sources generate approximately 40 percent of the total GHG emissions in the District. The remaining 60 percent of the total District GHG emissions are from stationary and area sources.

TABLE 3.3-3

2015 BAAQMD Greenhouse Gas Emission Inventory
(metric tons of CO2e)

Source Category	CO2, CH4, N2O, HFC/PFC, SF6	Black Carbon	Total Emissions (CO2e)
Transportation	**35,040,000**	**770,000**	**35,810,000**
On-road	30,480,000	310,000	30,790,000
Off-road	4,560,000	460,000	5,020,000
Electricity/Co-Generation	**15,790,000**	**130,000**	**15,920,000**
Co-Generation	6,790,000	90,000	6,880,000
Electricity Generation	6,210,000	40,000	6,250,000
Electricity Imports	2,790,000	-	2,790,000
Buildings	**9,870,000**	**400,000**	**10,270,000**
Residential Fuel Usage	6,460,000	220,000	6,680,000
Commercial Fuel Usage	3,410,000	180,000	3,590,000
Stationary Sources	**20,840,000**	**340,000**	**21,180,000**
Oil Refineries	14,240,000	210,000	14,450,000
General Fuel Usage	5,880,000	130,000	6,010,000
Fugitive/Process Emissions	720,000	4,000	724,000
Waste Management	**2,480,000**	**23,000**	**2,503,000**
Landfills	2,050,000	22,000	2,072,000
Composting/POTWs	430,000	1,000	431,000
High-GWP Gases	**2,790,000**	**-**	**2,790,000**
HFCs and PFCs	2,740,000	-	2,740,000
SF6	50,000	-	50,000
Agriculture	**1,180,000**	**170,000**	**1,350,000**
Agricultural Equipment	180,000	43,000	223,000
Animal Waste	720,000	16,000	736,000
Soil Management	270,000	1,000	271,000
Biomass Burning	10,000	110,000	120,000
Total Emissions	**87,990,000**	**1,833,000**	**89,823,000**

Source: BAAQMD, 2017

The emission inventory in Table 3.3-3 focuses on GHG emissions projections due to human activities only, and compiles emission estimates that result from industrial, commercial, transportation, domestic, forestry, and agriculture activities in the San Francisco Bay Area region of California. The GHG emission inventory reports direct emissions generated from sources within the District. The report does not include indirect emissions, for example, a source using electricity has no direct emissions because emissions are emitted at the power plants. Emissions

of CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6 are estimated using the most current activity and emission factor data from various sources. Emission factor data was obtained from the U.S. Department of Energy's (DOE's) Energy Information Administration (EIA), the CEC, and CARB.

Under "business as usual" conditions, GHG emissions are expected to grow in the future due to population growth and economic expansion. Table 3.3-4 shows emissions trends by major sources for the period 1990 to 2020.

TABLE 3.3-4

Bay Area GHG Emission Trends by Major Sources
(Million metric Tons CO_2 - Equivalent)

Category	1990	2008	2011	2014	2017	2020
Transportation	28.6	34.8	34.3	33.9	32.5	30.4
Industry/Commercial	21	28.9	31	32.6	34.3	36
Electricity/Co-Gen.	8.4	13.9	12.1	12.9	12.6	12.3
Residential Fuel	7	6.5	6.6	6.7	6.8	6.9
Off-Road Equipment	0.9	1.4	1.3	1.3	1.4	1.3
Agriculture	1.2	1.3	1.3	1.3	1.3	1.3
Total	67.1	86.8	86.6	88.7	88.8	88.2

Source: Bay Area Emission Inventory Summary Report: Greenhouse Gases. (BAAQMD, 2015)

Greenhouse gas emissions in Table 3.3-4 are projected based on estimated growth in various source categories. For example, CARB's EMFAC2011 and OFFROAD2007 computer models were utilized to project GHG emissions from transportation sources. In these models, fuel consumption estimates were based on the anticipated change of fleet mix and the growth of various types of on-road and off-road vehicles. Growth in vehicle miles traveled is based on the MTC's Regional Transportation Plan (RTP2030). For aircraft categories, the fleet mix, activity, and growth data are based on information from the Bay Area airports in combination with the MTC's Regional Airport System Planning Analysis: 2011 Update and the Federal Aviation Administration's (FAA's) 2010 Terminal Area Forecast reports (BAAQMD 2015).

The GHG projections from other major sources such as landfills, natural gas fuel distribution, and cement manufacturing were estimated by using 2009 Association of Bay Area Government's employment and population data. California Integrated Waste Management data were also considered in the landfill projection process. This GHG emission inventory will be updated as additional information about activity data, emission factors and other inputs becomes available (BAAQMD, 2015).

3.3.2 REGULATORY SETTING

3.3.2.1 Federal Regulations

Greenhouse Gas Endangerment Findings: On December 7, 2009, the U.S. EPA Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the CAA. The Endangerment Finding stated that CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6 taken in combination endanger both the public health and the public welfare of current and future generations. The Cause or Contribute Finding stated that the combined emissions from motor vehicles and motor vehicle engines contribute to the GHG emissions that endangers public health and welfare. These findings were a prerequisite for implementing GHG standards for vehicles. The U.S. EPA and the National Highway Traffic Safety Administration (NHTSA) finalized emission standards for light-duty vehicles in May 2010 and for heavy-duty vehicles in August of 2011.

Renewable Fuel Standard: The RFS program was established under the Energy Policy Act (EPAct) of 2005, and required 7.5 billion gallons of renewable-fuel to be blended into gasoline by 2012. Under the Energy Independence and Security Act (EISA) of 2007, the RFS program was expanded to include diesel, required the volume of renewable fuel blended into transportation fuel be increased from nine billion gallons in 2008 to 36 billion gallons by 2022, established new categories of renewable fuel and required the U.S. EPA to apply lifecycle GHG performance threshold standards so that each category of renewable fuel emits fewer greenhouse gases than the petroleum fuel it replaces. The RFS is expected to reduce greenhouse gas emissions by 138 million metric tons, about the annual emissions of 27 million passenger vehicles, replacing about seven percent of expected annual diesel consumption and decreasing oil imports by $41.5 billion.

GHG Tailoring Rule: On May 13, 2010, U.S. EPA finalized the Tailoring Rule to phase in the applicability of the PSD and Title V operating permit programs for GHGs. The rule was tailored to include the largest GHG emitters, while excluding smaller sources (restaurants, commercial facilities and small farms). The first step (January 2, 2011 to June 30, 2011) addressed the largest sources that contributed 65 percent of the stationary GHG sources. Title V GHG requirements were triggered only when affected facility owners/operators were applying, renewing or revising their permits for non-GHG pollutants. PSD GHG requirements were applicable only if sources were undergoing permitting actions for other non-GHG pollutants and the permitted action would increase GHG emission by 75,000 metric tons of CO2e per year or more.

On June 23, 2014, the U.S. Supreme Court issued its decision in Utility Air Regulatory Group v. EPA, 134 S.Ct. 2427 (2014). The Court held that U.S. EPA may not treat GHGs as an air pollutant for purposes of determining whether a source is a major source required to obtain a PSD or Title V permit. The Court also held that PSD permits that are otherwise required to be subject to PSD (based on emissions of other pollutants) may continue to require limitations on GHG emissions based on the application of BACT. In accordance with the Supreme Court decision, on April 10, 2015, the D.C. Circuit issued an amended judgment in Coalition for

Responsible Regulation, Inc. v. Environmental Protection Agency, Nos. 09-1322, 10-073, 10-1092 and 10-1167 (D.C. Cir. April 10, 2015), which, among other things, vacated the PSD and Title V regulations under review in that case to the extent that they require a stationary source to obtain a PSD or Title V permit solely because the source emits or has the potential to emit GHGs above the applicable major source thresholds.

GHG Reporting Program: U.S. EPA issued the Mandatory Reporting of Greenhouse Gases Rule (40 CFR Part 98) under the 2008 Consolidated Appropriations Act. The Mandatory Reporting of Greenhouse Gases Rule requires reporting of GHG data from large sources and suppliers under the Greenhouse Gas Reporting Program. Suppliers of certain products that would result in GHG emissions if released, combusted or oxidized; direct emitting source categories; and facilities that inject CO_2 underground for geologic sequestration or any purpose other than geologic sequestration are included. Facilities that emit 25,000 metric tons or more per year of GHGs in CO_2 equivalents (CO2e) are required to submit annual reports to U.S. EPA. For the 2014 calendar year, there were over 8,000 entities that reported 3.20 billion metric tons of GHG emissions under this program. CO_2 emissions accounted for the largest share of direct emissions with 91.5 percent, followed by methane with seven percent, and nitrous oxide and fluorinated gases representing the remaining 1.5 percent (U.S. EPA, 2016).

National Program to Improve Fuel Economy: On September 15, 2009, the NHTSA and U.S. EPA announced a proposed joint rule that would explicitly tie fuel economy to GHG emissions reductions requirements. The proposed new corporate average fuel economy (CAFÉ) Standards would cover automobiles for model years 2012 through 2016, and would require passenger cars and light trucks to meet a combined, per mile, carbon dioxide emissions level. It was estimated that by 2016, this GHG emissions limit could equate to an overall light-duty vehicle fleet average fuel economy of as much as 35.5 miles per gallon. The proposed standards required model year 2016 vehicles to meet an estimated combined average emission level of 250 grams of carbon dioxide per mile under EPA's GHG program. On November 16, 2011, EPA and NHTSA issued a joint proposal to extend the national program of harmonized GHG and fuel economy standards to model year 2017 through 2025 passenger vehicles. In August 2012, the President of the United States finalized standards that will increase fuel economy to the equivalent of 54.5 mpg for cars and light-duty trucks by Model Year 2025.

Clean Power Plan: On August 3, 2015, the President of the United States and the U.S. EPA announced the Clean Power Plan. The Clean Power Plan sets achievable standards to reduce carbon dioxide emissions by 32 percent from 2005 levels by 2030. This Plan establishes final emissions guidelines for states to follow in developing plans to reduce GHG emissions from existing fossil fuel-fired electric generating units (EGUs). Specifically, the U.S. EPA established: (1) carbon dioxide emission performance rates representing the best system of emission reduction (BSER) for two subcategories of existing fossil fuel-fired EGUs, fossil fuel-fired electric utility steam generating units and stationary combustion turbines; (2) state-specific carbon dioxide goals reflecting the carbon dioxide emission performance rates; and (3) guidelines for the development, submittal and implementation of state plans that establish emission standards or other measures to implement the carbon dioxide emission performance rates, which may be accomplished by meeting the state goals. This final rule will continue

progress already under way to reduce carbon dioxide emissions from the utility power sector in the U.S. In February 2016, the U.S. Supreme Court issued a stay of this rule pending final determination on litigation challenging the rule.

Planning for Federal Sustainability in the Next Decade: Published June 10, 2015, Executive Order 13693, *Planning for Federal Sustainability in the Next Decade*, revokes multiple prior Executive Orders and memorandum. The Executive Order outlines goals for federal agencies in the areas of energy, climate change, water use, vehicle fleets, construction, and acquisition. The goal is to maintain federal leadership in sustainability and GHG emission reductions. Federal agencies shall, where life-cycle cost-effective, beginning in fiscal year 2016:

- Reduce agency building energy intensity as measured in Btu/ft2 by 2.5 percent annually through 2025.
- Improve data center energy efficiency at agency buildings.
- Ensure a minimum percentage of total building electric and thermal energy shall be from clean energy sources.
- Improve agency water use efficiency and management (including stormwater management).
- Improve agency fleet and vehicle efficiency and management by achieving minimum percentage GHG emission reductions.

3.3.2.2 State Regulations

Executive Order S-3-05: In June 2005, then Governor Schwarzenegger signed Executive Order S-3-05, which established GHG emission reduction targets. The goals would reduce GHG emissions to 2000 levels by 2010, then to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

AB 32: Global Warming Solutions Act: On September 27, 2006, Governor Schwarzenegger signed AB 32, the California Global Warming Solutions Act of 2006. AB 32 expanded on Executive Order S-3-05. The legislation stated that "global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California." AB 32 established a program to limit GHG emissions from major industries that includes penalties for non-compliance. While acknowledging that national and international actions will be necessary to fully address the issue of global warming, AB 32 laid the groundwork for a comprehensive program to inventory and reduce GHG emissions in California and from power generating facilities located outside the state that serve California residents and businesses.

AB 32 also authorized CARB to establish a market-based "Cap and Trade" program as one of several strategies that California uses to reduce GHG emissions. CARB adopted the California Cap and Trade program regulations on October 2011, and amended the regulations on September 2012, and held the first auction for GHG allowances in November 2012. Funds received from the program are deposited into the Greenhouse Gas Reduction Fund and appropriated by the Legislature. To help achieve the goals in AB32, the Cap and Trade program established a GHG

emissions limit that will decrease by two percent each year until 2015, and then three percent from 2015 to 2020. The program initially applied to large electric power plants and large industrial plants; fuel distributors were added in 2015. Sources covered by the program encompass 85 percent of all of California's GHG emissions.

In July 2017, Governor Brown signed AB 398 to renew and amend the Cap and Trade Program, as described below.

AB 398: In July 2017, Governor Brown signed AB 398 to reauthorize and extend the Cap and Trade program through December 31, 2030. The legislation also amended the program by strengthening Legislative oversight of the program, placing limits on the allocation and use of emission offset credits, creating a Compliance Offsets Protocol Task Force to ensure that the program provides direct environmental benefits within California, and directing CARB to establish parameters for pricing of emission credits. In addition, AB 398 also prohibits local air quality districts from adopting or implementing regulations to reduce carbon dioxide emissions from any stationary source of emissions that is subject to the provisions of the Cap and Trade program.

SB 97 - CEQA: Greenhouse Gas Emissions: On August 24, 2007, Governor Schwarzenegger signed into law Senate Bill (SB) 97 – CEQA: Greenhouse Gas Emissions stating, "This bill advances a coordinated policy for reducing greenhouse gas emissions by directing the Office of Planning and Research (OPR) and the Resources Agency to develop CEQA guidelines on how state and local agencies should analyze, and when necessary, mitigate greenhouse gas emissions." OPR's amendments provided guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in draft CEQA documents. The amendments did not establish a threshold for significance for GHG emissions. The amendments became effective on March 18, 2010.

Office of Planning and Research Technical Advisory on CEQA and Climate Change: Consistent with SB 97, on June 19, 2008, OPR released its "Technical Advisory on CEQA and Climate Change," which was developed in cooperation with the Resources Agency, Cal/EPA, and CARB. According to OPR, the "Technical Advisory" offers informal interim guidance regarding the steps lead agencies should take to address climate change in their CEQA documents, until CEQA guidelines are developed pursuant to SB 97 on how state and local agencies should analyze, and when necessary, mitigate greenhouse gas emissions.

According to OPR, lead agencies should determine whether greenhouse gases may be generated by a proposed project, and if so, quantify or estimate the GHG emissions by type and source. Second, the lead agency must assess whether those emissions are individually or cumulatively significant. When assessing whether a project's effects on climate change are "cumulatively considerable" even though the GHG contribution of the project may be individually limited, the lead agency must consider the impact of the project when viewed in connection with the effects of past, current, and probable future projects. Finally, if the lead agency determines that the GHG emissions from the project as proposed are potentially significant, it must investigate and implement ways to avoid, reduce, or otherwise mitigate the impacts of those emissions.

AB 1493 Vehicular Emissions: Carbon Dioxide: Prior to the U.S. EPA and NHTSA joint rulemaking, the Governor signed AB 1493 (2002). AB 1493 requires that CARB develop and adopt, by January 1, 2005, regulations that achieve "the maximum feasible reduction of greenhouse gases emitted by passenger vehicles and light-duty trucks and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the state."

CARB originally approved regulations to reduce GHGs from passenger vehicles in September 2004, with the regulations that apply to 2009 and later model year vehicles. California's first request to the U.S. EPA to implement GHG standards for passenger vehicles was made in December 2005 and denied in March 2008. The U.S. EPA then granted California the authority to implement GHG emission reduction standards for new passenger cars, pickup trucks and sport utility vehicles on June 30, 2009.

On April 1, 2010, CARB filed amended regulations for passenger vehicles as part of California's commitment toward the National Program to reduce new passenger vehicle GHGs from 2012 through 2016. The amendments will prepare California to harmonize its rules with the federal Light-Duty Vehicle GHG Standards and CAFÉ Standards (discussed above).

Senate Bill 1368 (2006): SB 1368 is the companion bill of AB 32 and was signed by Governor Schwarzenegger in September 2006. SB 1368 required the California Public Utilities Commission (PUC) to establish a greenhouse gas emission performance standard for baseload generation from investor owned utilities by February 1, 2007. The California Energy Commission (CEC) was required to establish a similar standard for local publicly owned utilities by June 30, 2007. These standards cannot exceed the greenhouse gas emission rate from a baseload combined-cycle natural gas fired plant. The legislation further requires that all electricity provided to California, including imported electricity, must be generated from plants that meet the standards set by the PUC and CEC.

Executive Order S-1-07 (2007): Governor Schwarzenegger signed Executive Order S-1-07 in 2007 which finds that the transportation sector is the main source of GHG emissions in California. The executive order proclaims the transportation sector accounts for over 40 percent of statewide GHG emissions. The executive order also establishes a goal to reduce the carbon intensity of transportation fuels sold in California by a minimum of 10 percent by 2020.

In particular, the executive order established a Low-Carbon Fuel Standard (LCFS) and directed the Secretary for Environmental Protection to coordinate the actions of the CEC, CARB, University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. This analysis supporting development of the protocols was included in the State Implementation Plan for alternative fuels (State Alternative Fuels Plan adopted by CEC on December 24, 2007) and was submitted to CARB for consideration as an "early action" item under AB 32. CARB adopted the LCFS on April 23, 2009.

Senate Bill 375 (2008): SB 375, signed in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS) which prescribes land use allocation in that MPO's Regional Transportation Plan (RTP). CARB, in consultation with MPOs, is required to provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned GHG emission reduction targets. CARB set the following reduction targets for ABAG/MTC region: reduce per capita seven percent of GHG emissions below 2005 levels by 2020 and 15 percent below 2005 levels by 2035.

Executive Order S-13-08 (2008): Governor Schwarzenegger signed Executive Order S-13-08 on November 14, 2008 which directs California to develop methods for adapting to climate change through preparation of a statewide plan. The executive order directs OPR, in cooperation with the Resources Agency, to provide land use planning guidance related to sea level rise and other climate change impacts.

Senate Bills 1078 and 107 and Executive Order S-14-08 (2008): SB 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010. In November 2008, then Governor Schwarzenegger signed Executive Order S-14-08, which expands the state's Renewable Portfolio Standard to 33 percent renewable power by 2020.

SB X-1-2 and the Clean Energy and Pollution Reduction Act of 2015: SB X-1-2, signed by Governor Edmund G. Brown, Jr. in April 2011, created a new Renewables Portfolio Standard (RPS), which preempted CARB's 33 percent Renewable Electricity Standard. The new RPS applies to all electricity retailers in the state including publicly owned utilities (POUs), investor-owned utilities, electricity service providers, and community choice aggregators. These entities must adopt the new RPS goals of 20 percent of retail sales from renewables by the end of 2013, 25 percent by the end of 2016, and the 33 percent requirements by the end of 2020.

Clean Energy and Pollution Reduction Act of 2015, SB 350 (Chapter 547, Statutes of 2015) was approved by Governor Brown on October 7, 2015. SB 350 will: (1) increase the standards of the California RPS program by requiring that the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources be increased to 50 percent by December 31, 2030; (2) require the State Energy Resources Conservation and Development Commission to establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas final end uses of retail customers by January 1, 2030; (3) provide for the evolution of the Independent System Operator (ISO) into a regional organization; and (4) require the state to reimburse local agencies and school districts for certain costs mandated by the state through procedures established by statutory provisions. Among other objectives, the

Legislature intends to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.

SB 862: In June 2014, SB 862 (Chapter 36, Statutes of 2014) established long-term funding programs from the Cap and Trade program for transit, sustainable communities and affordable housing, and high speed rail. SB 862 allocates 60 percent of ongoing Cap and Trade revenues, beginning in 2015–2016, to these programs. The remaining 40 percent is to be determined by future legislatures. A minimum of 25 percent of Cap and Trade dollars must go to projects that provide benefits to disadvantaged communities, and a minimum of 10 percent must go to projects located within those disadvantaged communities. In addition, this bill established the CalRecycle Greenhouse Gas Reduction Revolving Loan Program and Fund.

In July 2017, Governor Brown signed AB 398 to renew and amend the Cap and Trade Program, as described below.

AB 398: In July 2017, Governor Brown signed AB 398 to reauthorize and extend the Cap and Trade program through December 31, 2030. The legislation also amended the program by strengthening Legislative oversight of the program, placing limits on the allocation and use of emission offset credits, creating a Compliance Offsets Protocol Task Force to ensure that the program provides direct environmental benefits within California, and directing CARB to establish parameters for pricing of emission credits. In addition, AB 398 also prohibits local air quality districts from adopting or implementing regulations to reduce carbon dioxide emissions from any stationary source of emissions that is subject to the provisions of the Cap and Trade program.

Senate Bills 32 and 350 and Executive Order B-30-15 (2015): Governor Brown signed Executive Order B-30-15 in 2015 to reduce GHG emissions by 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing GHG emissions to 80 percent of 1990 levels by 2050. In particular, the Executive Order commissioned CARB to update the Climate Change Scoping Plan and the California Natural Resources Agency to update the state climate adaption strategy, Safeguarding California, every three years. The Safeguarding California Plan will identify vulnerabilities to climate change by sector and regions, including, at a minimum, the following sectors: water, energy, transportation, public health, agriculture, emergency services, forestry, biodiversity and habitat, and ocean and coastal resources; outline primary risks to residents, property, communities and natural systems from these vulnerabilities, and identify priority actions needed to reduce these risks; and identify a lead agency or group of agencies to lead adaptation efforts in each sector.

Assembly Bill 197: State Air Resources Board: Greenhouse Gases: AB 197 provides additional direction to CARB on the following areas related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 meant to provide easier public access to air emissions data that are collected by CARB was posted in December 2016. AB 197 requires annual posting of GHG, criteria, and toxic air contaminant data throughout the State, organized by local and sub-county level for stationary sources and by at least a county level for mobile sources. AB197 also requires that when adopting rules and regulations to achieve emissions

reductions to protect the State's most affected and disadvantaged communities, CARB shall consider the social costs of the emissions of GHGs, and prioritize emission reduction rules and regulations that result in direct emission reductions at large stationary sources of GHG emissions and direct emission reductions from mobile sources.

3.3.2.3 Local Regulations

The Air District established a climate protection program in 2005 to explicitly acknowledge the link between climate change and air quality. In November 2013, the Air District's Board of Directors adopted a resolution outlining greenhouse gas reduction goals of achieving an 80 percent reduction in GHG below 1990 levels and making a commitment to develop a regional climate protection strategy. The Air District regularly prepares inventories of GHG, criteria pollutants and toxic air contaminants to support planning, regulatory and other programs.

The District adopted a 10-point Climate Action Work Program in March 2014. The work program outlines the District's priorities in reducing GHG emissions that include: (1) establishing the goal of reducing GHG emissions 80 percent below 1990 levels by 2050; (2) updating the District's regional GHG emission inventory; (2) implementing GHG emissions monitoring; (4) developing a regional climate action strategy to meet the 2050 GHG emission reduction goal; (5) supporting and enhancing local actions through enhanced technical assistance to local governments in preparing local Climate Action Plans; (6) initiating rule development to enhance GHG reductions from sources subject to Air District regulations; (7) expanding enforcement of statewide regulations to reduce GHG emissions; (8) launching climate change and public health impacts initiative; (9) reporting progress to the public toward the 2050 goals and related performance objectives; and (10) exploring the Bay Area's energy future, including trends in fossil fuel demand and productions and exploring opportunities to promote the development of clean energy options.

In 2015, the Air District launched a GHG measurement program to provide the scientific basis that supports rulemaking and policy development for reducing GHG emissions. The program started monitoring GHGs in 2016 and includes a long-term fixed-site GHG monitoring network that measures concentrations of carbon dioxide, methane, and carbon monoxide at four sites. A dedicated mobile GHG monitoring research van also provides assistance in identifying emission hot spots and enhancing the regional emissions inventory.

Finally, the recently release 2017 Air Plan identifies control measures that include potential rules, programs, and strategies that the Air District can pursue to reduce GHG emissions in the Bay Area in support of the goals of reducing GHG emissions to 90 percent below 1990 levels by 2050.

3.3.3 THRESHOLDS OF SIGNIFICANCE

The project level GHG threshold for stationary source projects is 10,000 metric tons of carbon dioxide equivalent (CO_2eq) emissions per year under the BAAQMD CEQA Guidelines (revised May 2017). This threshold is expected to capture approximately 95 percent of all GHG

emissions from new permit applications from stationary sources within the jurisdiction of the Air District. The threshold level was calculated as an average of the combined CO_2 emissions from all stationary source permit applications submitted to the Air District during the three-year analysis period (BAAQMD, 2017). The project-level GHG significance thresholds of 10,000 MT CO_2eq per year will be used to evaluate the cumulative GHG impacts.

3.3.4 ENVIRONMENTAL IMPACTS

GHG impacts occur as a result of increased accumulation of GHGs in the atmosphere that may result in global climate change. Due to the complexity of conditions and interactions affecting global climate change, it is not possible to predict the specific impact, if any, attributable to GHG emissions associated with a single project. Although the geographic scope of this GHG emissions impact analysis in this EIR is the State of California, it is the cumulative effects of all global GHG emissions sources that have the potential result in global climate change. For this reason, GHG emission impacts contributing to global climate change are considered a cumulative impact analysis rather than a project-specific analysis.

With regard to potential GHG emission impacts, most GHG emissions sources at facilities that would be regulated by Rule 11-18 would include equipment or processes, primarily combustion sources that are part of the facilities' operations. Though the proposed project may include combustion processes that could generate GHG emissions such as CO_2, CH_4, and N_2O, the proposed project does not affect equipment or operations that have the potential to emit other GHGs such as sulfur hexafluoride (SF6), hydrofluorocarbon (HFC) or perfluorocarbon (PFC). GHGs could be emitted during construction activities to install air pollution control equipment from sources such as off-road construction equipment, which could be comprised of off-road mobile sources, e.g., bull dozers, cranes, forklifts, etc. GHGs could also be emitted during construction from on-road mobile sources such as haul trucks delivering products used in the pollution control process and construction worker commute trips. During operation, GHG emission impacts could occur from air pollution control equipment that uses combustion as part of the control process. GHG emissions from existing facilities subject to Rule 11-18 are part of the existing setting. Further, GHG emissions from larger stationary sources are subject to the GHG emission reductions as part of the AB 32 Cap and Trade program. Therefore, existing sources of GHG emissions are not included as part of the GHG impacts analyzed in the following sections.

3.3.4.1 Potential GHG Emission Impacts During Construction

GHG emissions sources during construction to install air pollution control equipment would generally be the same types of sources as described in the construction criteria pollutant emission sources discussion in Section 3.2.4.1. Similar to the construction air quality impacts in Section 3.2.4.1, the analysis of potential GHG construction air quality impacts focuses on those types of air pollution control equipment that would produce the greatest construction emissions. Construction activities and equipment to install most other types of air pollution control equipment would tend to be substantially less than those identified in the following subsections.

Rule 11-18 has the potential to affect hundreds of facilities, including data centers, petroleum refineries, a cement kiln, gasoline dispensing facilities, etc. Without further analysis of the health risks from facilities that would be subject to Rule 11-18, it is unclear which facilities would be subject to risk reduction requirements or precisely what types of TAC control equipment would be installed. In spite of the uncertainties, the analysis of construction GHG impacts identifies the most likely emissions sources that would need to be controlled, along with the most appropriate types of air pollution control equipment that would contribute to bringing the affected facility or equipment into compliance with the risk reduction requirements of Rule 11-18.

Construction activities associated with installing air pollution control technologies would result in GHG emissions, although the amount generated by specific types of equipment can vary greatly as shown in Table 3.3-5. The estimated emissions for construction equipment operating on a typical eight-hour day are also provided in Table 3.3-5.

Discussions of GHG emission impacts described in the following subsections generally follow the format of construction emission impacts in Section 3.2.4.1, that is, by type of control technology. The following analyses of potential GHG use the same construction assumptions and scenarios. Detailed emission calculations are provided in Appendix B.

TABLE 3.3-5

GHG Emission Estimates for Typical Construction Equipment Assuming an 8-Hour Operational Day [(1)]

Equipment Type	CO_2e (MT/hr)	CO_2e (MT/8-hr day)
Aerial Lifts (Man Lifts)	0.01	0.09
Air Compressor	0.02	0.16
Bore/Drill Rigs	0.06	0.47
Concrete Pump	0.003	0.02
Concrete Saw	0.02	0.16
Crane	0.04	0.028
Excavator	0.03	0.26
Forklift	0.01	0.08
Generator	0.02	0.16
Grader	0.04	0.33
Pavers	0.03	0.23
Paving Equipment	0.02	0.2
Rollers	0.02	0.13
Rough Terrain Forklifts	0.02	0.17
Rubber Tired Dozers	0.05	0.42
Rubber Tired Loaders	0.04	0.31
Scrapers	0.09	0.75
Skid Steer Loaders	0.01	0.10
Surfacing Equipment	0.04	0.34
Tractors/Loaders/Backhoes	0.02	0.15
Trenchers	0.02	0.17
Welders	0.01	0.08

(1) Emission Factors from Off-Road 2011, Model Year 2018.

3.3.4.1.1 Air Pollution Control Equipment with Minor Construction Activities

As indicated in Section 3.2.4.1.1, most facilities that would be subject to Rule 11-18 have diesel ICEs that are used as a backup source of electricity in the event of a power outage or used in areas with no electricity. Operators generally have two options for reducing diesel ICE emissions, replacing a Tier 1 ICE with a new Tier 4 ICE or retrofitting the existing diesel ICE with a DPF. Table 3.3-6 estimates GHG emissions from replacing Tier 1 ICEs with Tier 4 ICEs. An estimated 100 Tier 1 diesel engines are expected to be replaced under Rule 11-18. Table 3.3-7 estimates GHG emissions from retrofitting diesel ICEs with DPFs. An estimated 100 diesel engines are expected to be retrofitting with DPFs under Rule 11-18.

TABLE 3.3-6

GHG Emissions During Construction Associated with Replacing ICEs

Activity	CO_2e MT/day [1]
Sub-total Off-road Construction Equipment	0.14
Sub-total On-road (Worker + Haul Truck) [2]	0.23
Total - 1 ICE Replacement	0.37
Rule 11-18 - 100 Replacements	37

[1] Results are in metric tons per day because construction is assumed to last one day.
[2] See Appendix B for calculation details. Haul trucks are heavy heavy-duty diesel trucks.

TABLE 3.3-7

GHG Emissions During Construction Associated with Retrofitting ICEs

Activity	CO_2e MT/day [1]
Sub-total Off-road Construction Equipment	1.81E-05
Sub-total On-road (Worker + Haul Truck) [2]	0.22
Total - 1 ICE Retrofit	0.22
Rule 11-18 - 100 Retrofit	22

[1] Results are in metric tons per day because construction is assumed to last one day.
[2] See Appendix B for calculation details. Haul trucks are heavy heavy-duty diesel trucks.

3.3.4.1.2 Air Pollution Control Equipment with Medium Construction Activities

The construction of new air pollution control equipment may require a moderate amount of construction activities. Wet gas scrubbers, baghouses, and ESPs can be used on a variety of different sources for the control of particulate emissions (including TAC emissions) including chemical plants, sewage treatment facilities, metal plating facilities, power plants, and refineries. Wet gas scrubbers, baghouses, and ESPs range in size and are used from small sources (e.g., metal plating facilities) to large industrial sources (e.g., fluid catalytic cracking units at

refineries). This section evaluates the potential GHG impacts associated with construction activities for new air pollution control equipment of moderate size including non-refinery wet gas scrubbers, baghouses, and ESPs. Under Rule 11-18, an estimated 10 WGS, 12 baghouses and five ESPs could be installed. Because the sizes are very different the air quality construction impacts for refinery wet gas scrubbers are evaluated in a Section 3.3.4.1.5.

Construction of one WGS, baghouse, or ESP would be estimated to require about 40 construction workers and, using worst-case assumptions, it is assumed that construction would require the use of one or more of the following types of construction equipment: backhoes, cranes, man lifts, forklift, forklifts, generators, and diesel welding machines. Other sources of construction emissions could include: equipment delivery, on-site travel (would include fugitive dust associated with travel on paved roads, and fugitive dust associated with construction activities), and construction worker commute trips. Construction GHG emission estimates associated with constructing one WGS, baghouse, or ESP unit, along with the GHG construction emissions associated with the construction of up to 27 WGS, baghouses, and ESPs, are shown in Table 3.3-8.

TABLE 3.3-8

GHG Emissions During Construction of Medium Sized Air Pollution Control Equipment(1)

Activity	CO_2e MT(1)
Sub-total Off-road Construction Equipment	56.55
Sub-total On-road (Worker + Haul Truck) (2)	32.57
Total - 1 WGS/Baghouses/ESPs	89.12
Total for 27 WGS/Baghouses/ESPs	2,406

(1) See Appendix B for calculation details.
(2) Construction emissions in metric tons (MT) are based on emissions during the entire construction period.
(3) Haul trucks are heavy heavy-duty diesel trucks.

3.3.4.1.3 Installing a Carbon Adsorption Unit/Thermal Oxidizer/Catalytic Oxidization Unit

As indicated in Section 3.2.4.1, the most likely TAC emission sources that would be subject to Rule 11-18 and that could be controlled using carbon adsorption units are expected to be sewage treatment facilities because various stages of the sewage treatment process produce ROG emissions that may include TAC components. The GHG construction air quality analysis for installing a carbon adsorption unit is based on a construction emissions analysis from installing air pollution control equipment similar in size to a carbon adsorption unit because no actual carbon adsorption construction scenarios were identified. In addition, it is assumed that the construction of a thermal oxidizer or a catalytic oxidization unit would require a similar construction scenario. Construction assumptions and parameters associated with installing a carbon adsorption unit, thermal oxidizer, or catalytic oxidization unit are the same as those used in Subsection 3.2.4.1.4. Table 3.3-9 shows the expected construction GHG emissions from installing carbon adsorption units, thermal oxidizers or catalytic oxidation unit.

TABLE 3.3-9

GHG Emissions During Construction of Carbon Adsorption Units/Thermal Oxidizer/Catalytic Oxidation Unit(1)

Activity	CO_2e MT (2)
Sub-total Off-road Construction Equipment	72
Sub-total On-road (Worker + Trucks)(3)	76
Construction Emissions for 1 Carbon Adsorption Unit/Thermal Oxidizer/ Catalytic Oxidization Unit	148
Construction Emissions for 25 Carbon Adsorption Units/Thermal Oxidizer/Catalytic Oxidation Units	3,700

(1) See Appendix B for calculation details.
(2) MT values include construction and demolition emissions and are based on emissions during the entire construction period.
(3) Haul trucks are heavy heavy-duty diesel trucks.

3.3.4.1.4 Installing Enclosures

The GHG construction air quality analysis for installing enclosures is based on a construction emissions analysis are the same as those used in Subsection 3.2.4.1.4. Table 3.3-10 shows the expected construction GHG emissions from the construction of enclosures under Rule 11-18. An estimated 60 enclosures may be required to control TACs under Rule 11-18.

TABLE 3.3-10

GHG Emissions During Construction of Enclosures(1)

Activity	CO_2e MT (2)
Sub-total Off-road Construction Equipment	157
Sub-total On-road (Worker + Trucks)	162
Construction Emissions for 1 Enclosure	319
Construction Emissions for 60 Enclosures	19,140

(1) See Appendix B for calculation details.
#

3.3.4.1.5 Air Pollution Control Equipment for Large Construction Activities

As described in Section 3.2.4, construction GHG emissions to install a WGS on a refinery unit, one of the largest types of air pollution control equipment that could be installed to comply with Rule 11-18, would occur over an 18-month period; one month to demolish any nearby existing equipment or structures and 17 months to construct the WGS. Demolition activities were assumed to require a construction crew of 50 workers and the use of one or more of the following types of equipment: crane, front-end loader, forklift, demolition hammer, water truck, medium-duty flatbed truck, etc. Constructing a WGS was assumed to require a construction

crew of 175 workers and the use of one or more of the following types of construction equipment: backhoes, cranes, man lifts, forklift, front end loaders generators, diesel welding machines, jack hammers, a medium-duty flatbed truck, a medium-duty dump truck, a cement mixer, etc. GHG emissions from installing a WGS are shown in Table 3.3-11.

TABLE 3.3-11

GHG Emissions from Installing Refinery Wet Gas Scrubbers(1)

Activity	CO_2e MT(2)
Sub-total Off-road Construction Equipment Emissions	880
Sub-total On-road Construction Emissions (Worker + Haul Truck)(3)	382
Total Construction Emissions for 1 Refinery WGS	1,262
Total Construction Emissions for 3 Refinery WGS	3,786

(1) See Appendix B for calculation details.
(2) Construction emissions in metric tons (MT) are based on emissions during the entire construction period.
(3) Haul trucks are heavy heavy-duty diesel trucks.

3.3.4.1.6 Summary of Construction GHG Emission Impacts

As demonstrated in the subsections above, construction and installation of some types of air pollution control technologies would not necessarily be expected to result in substantial GHG air quality impacts during construction. For example, replacing existing diesel ICEs with Tier 4 ICEs or retrofitting diesel ICEs with DPFs could occur if Rule 11-18 is adopted. GHG emissions for the installation of new ICEs or the retrofit of existing diesel ICEs with DPFs would be relatively low and would only be expected to occur on a single day (see Table 3.3-6 and 3.3-7).

Construction activities for medium-sized air pollution control equipment such as WGS, baghouses, and ESPs that may be installed under Rule 11-18, would generate moderate levels of GHG emissions. Construction activities for air pollution control equipment such as carbon adsorption units, thermal oxidizers and catalytic oxidation units would be low on an individual basis. As summarized in Table 3.2-12, Rule 11-18 could produce GHGs during construction activities.

The Air District does not have an adopted threshold of significance for construction-related GHG emissions. However, since GHG emissions are cumulative and construction emission are short-lived, the total construction GHG emissions are amortized over 30 years to create an annual emission rate that is combined with the operational GHG emissions for determining significance. The operational GHG emission analysis and significance determination are presented in the following sections.

TABLE 3.3-12

Worst-Case Construction GHG Emissions Under Rule 11-18

Activity	CO_2e MT
Peak Construction GHG Emissions Under Rule 11-18	
Total Construction Emissions for 100 Diesel ICE Replacement	37
Total Construction Emissions for 100 Diesel ICE Retrofit	22
Total Construction Emissions for 27 Non-Refinery WGS, Baghouses, ESPs	2,406
Total Construction Emissions for 25 Carbon Adsorption Units, Thermal Oxidizers or Catalytic Oxidization Units	3,700
Total Construction Emissions for 60 Enclosures	19,140
Construction Emissions for 3 Refinery WGS	3,786
Total Potential GHG Emissions	29,091
Total Potential GHG Emissions (Amortized)(1)	970

(1) Amortized over 30 years. MT/yr

3.3.4.2 Potential GHG Emission Impacts During Operation

The analysis of operational GHG emission impacts from the proposed project would include direct GHG emissions from air pollution control equipment and indirect emissions, e.g., haul truck emissions from transporting fresh supplies of caustic. Table 3.3-13 shows air pollution control technologies that would be the most likely technologies installed at affected facilities to reduce TAC emissions under Rule 11-18 that may have the potential to generate direct or indirect GHG emission impacts during operation. The subsections below evaluate those air pollution control technologies identified in Table 3.3-13 that have the potential to generate adverse direct or indirect operational GHG emission impacts. Air pollution control technologies where no direct or indirect operational GHG emission impacts were identified will not be discussed further.

TABLE 3.3-13

Potential Operational GHG Impacts from Installing Air Pollution Control Equipment Under Rule 11-18

Potential Control Technology	GHG Impacts	Analyzed Further?
Enclosures	None Identified	No
Diesel Particulate Filter	None identified	No
New Diesel ICEs	None identified	No
Baghouse with HEPA Filters	None identified	No
Carbon Adsorption	Combustion emissions from regenerating spent carbon	**Yes**
Catalytic Oxidation	None identified	No
Thermal Oxidizers	Potential increase in combustion emissions	**Yes**
Wet Gas Scrubber	Indirect mobile source emission increases. Increased electricity.	**Yes**
ESPs	Increased electricity	**Yes**
Process Improvements	None Identified	No
Product Substitution	None Identified	No
Enhanced Monitoring/Component Replacement	None Identified	No

3.3.4.2.1 GHG Emissions from Regenerating Spent Carbon

As indicated in Table 3.3-13, a carbon adsorption unit is one type of control technology that has the potential to generate GHG emissions. Chapter 3, Subsection 3.2.4.2.1 describes the operation of carbon adsorption units and notes that, once the bed of activated carbon becomes saturated, it is typically regenerated by raising the temperature of the carbon, evacuating the bed, or both. Regenerating spent carbon typically requires a combustion source using natural gas as the combustion fuel to heat the regenerant and/or to heat the carbon beds. This process of regenerating spent carbon is the point where GHG emissions would be generated.

Only 15 percent of the carbon bed volume collects toxic ROG emissions and a typical carbon bed is sized to reduce ROG emissions by approximately 55 pounds per day. Based on these two characteristics, a typical carbon bed size is assumed to be approximately 400 pounds (55/0.15 = 400). The projected natural gas fuel use is 5.5 standard cubic feet (scf) of natural gas per pound of carbon (SCAQMD, 2016). The carbon bed is assumed to be regenerated one time per month for most facilities. The amount of natural gas required per year is estimated to be 0.0264 million standard cubic feet (mmscf) [(400 lbs C) x (5.5 scf/lb C per regen) x (12 regen/yr) = 26,400 scf/yr].

The direct operational GHG emissions associated with the installation of one carbon adsorber is 1.44 metric tons per year. The direct operational GHG emission associated with the installation of 80 carbon adsorbers is approximately 115 metric tons per year. The emissions are based on

emission factors for natural gas combustion for an external fired source in U.S. EPA AP-42 Table 1.4-2 as follows: 1.44 metric tons per year = 0.0264 mmsfc per year x 120,246.7 lb of CO2e per mmscf / 2204.6 metric tons per lb. Where 120246.7 lb of CO2e per mmscf = 120000 lb of CO_2 per mmscf + 21 x 2.3 lb of CH_4 per mmscf + 310 x 0.64 lb of N_2O per mmscf. Table 3.3-14 summarizes the annual GHG emission impacts from regenerating spent carbon.

TABLE 3.3-14

Potential Direct GHG Emission Impacts Associated with Carbon Adsorption Units

Control Equipment	CO_2e (MT/year)
Carbon Adsorption Unit	1.44
Carbon Adsorption (5 units)	7.2

3.3.4.2.2 GHG Emissions from Thermal Oxidizers

As indicated in Chapter 3.2, Subsection 3.2.4.2.3, it is expected that thermal oxidizers would be used to control TAC emissions primarily at landfills and sewage treatment facilities. The direct operational GHG emissions associated with the installation of one 3 mmBtu/hr thermal oxidizer is 455 metric tons per year. The direct operational GHG emission associated with the installation of 80, 3 mmBtu/hr thermal oxidizers is approximately 36,404 metric tons per year (see Table 3.3-15). The emissions are based on emission factors for natural gas combustion for the thermal oxidizer in U.S. EPA AP-42 Table 1.4-2 as follows: 455 metric tons per year = 3 mmbtu/hr x 8 hours per day x 365 days per year / 1050 mmbtu/mmscf x 120246.7 lb of CO2e per mmscf / 2204.6 metric tons per lb. Where 120246.7 lb of CO2e per mmscf = 120000 lb of CO_2 per mmscf + 21 x 2.3 lb of CH_4 per mmscf + 310 x 0.64 lb of N_2O per mmscf. Table 3.3-15 summarizes the annual GHG emission impacts associated with the use of thermal oxidizers.

TABLE 3.3-15

Potential Direct GHG Emission Impacts Associated with Thermal Oxidizers

Control Equipment	CO_2e (MT/year)
Thermal Oxidizer	455
Thermal Oxidizer (10 units)	4,550

3.3.4.2.3 Indirect Mobile Source Emissions

Several types of air pollution control devices identified in Table 3.3-13 use specific substances to assist with the emission reduction process. WGS units use NaOH as a caustic solution to reduce emissions. Caustic solutions are typically used in relatively small amounts per day. Indirect emission impacts could also occur from haul trucks associated with delivering supplies (i.e., caustic solution to refill the storage tanks) on a regular basis. Depending on the size and configuration of the WGS, the NaOH caustic solution used in the WGS would likely need to be delivered one time per week or a little over 50 additional delivery truck trips per year.

Haul truck trips transporting NaOH caustic would occur relatively infrequently and it is not likely that all affected facilities would transport materials on the same day. However, GHG emissions are quantified on an annual basis so all truck trips would contribute to GHG emission impacts. GHG emission impacts from truck transport trips carrying materials for 10 non-refinery and 3 refinery WGS units are shown in Table 3.3-16.

TABLE 3.3-16

Annual GHG Emissions from Delivery Truck Trips

Material	Number of Truck Trips	Trip Length (Roundtrip miles	CO2e
Peak Operational Emissions One Facility (Metric Tons/Day)			
Caustic/Catalyst for 1 Unit	2	120	0.23
Peak Operational Emissions One Facility (Metric Tons/year)			
Caustic/Catalyst for WGS Unit	104	120	24
Peak Operational Emissions Multiple Facilities (Metric Tons/year)			
Caustic/Catalyst for 13 Units	1,352	120	314

See Appendix B for detailed emission calculations.

3.3.4.2.4 Indirect Emissions from Electricity Generation

Electricity is often used as the power source to operate various components of add-on control equipment, such as ventilation systems, fan motors, vapor recovery systems, etc. Increased demand for electrical energy may require generation of additional electricity, which in turn could result in increased GHG emissions in the Bay Area and in other portions of California. For example, installing WGS may increase pressure drop in the flue gas system. Similarly, installing ESPs also requires additional electricity. The production of electricity to operate the WGS units and ESPs would generate GHG emissions. The estimated GHG emission increase associated with increased electricity use for WGS units and ESPs is shown in Table 3.3-17.

The estimated energy use for a refinery WGS is based on an estimated 715 kilowatts (kw) per hour of electricity for the WGS installed at the ConocoPhillips Wilmington Plant (SCAQMD, 2007). A non-refinery WGS is estimated to be about half the size and would use about 358 kw. An ESP is estimated to use about 35 kw per hour of electricity (SCAQMD, 2014).

TABLE 3.3-17

GHG Emissions from Electricity Use at Wet Gas Scrubbers

Control Equipment	Number of Units	Potential Increased Electricity Demand (MWhr/day)	Emission Factor (lb/MWhr)[1]	Emissions ($CO2_e$ MT/yr)
Refinery WGS[2]	3	51.48	644	5,500
Non-Refinery WGS	10	85.8	644	9,148
ESPs[3]	5	4.2	644	447
			Total:	15,095

(1) CAPCOA, 2016. Based on PG&E emission factors from CalEEMod.
(2) SCAQMD, 2007.
(3) SCAQMD, 2014.

3.3.4.2.5 Summary of Operational GHG Emissions

Based on the evaluation of those air pollution control technologies that would most likely be the used to reduce TAC emissions from affected facilities if required pursuant to Rule 11-18, potential operational GHG impacts from the proposed project could occur, driven primarily by installation of WGS units, carbon adsorption units, and thermal oxidizers. Some indirect mobile sources from delivering materials necessary for the pollution control process would also occur. Table 3.3-18 summarizes the GHG emission impacts expected under Rule 11-18.

TABLE 3.3-18

Predicted Operational GHG Emissions Rule 11-18

Activity	CO_2e MT/Year
Total Amortized Construction Emissions	970
Total Operational Emissions for 5 Carbon Adsorption Units	7
Total Operational Emissions 10 Thermal Oxidizers	4,550
Total Haul Truck Emissions for 13 WGS Units	314
Total Electrical Emissions for 13 WGS Units and 5 ESPs	15,095
Total Potential Overlapping GHG Emissions	20,936
Significance Threshold	10,000 MT/yr
Significant?	**Yes**

3.3.4.3 Potential Conflicts With State GHG Compliance Plans

The NOP/IS for the proposed project noted that CARB's Cap and Trade program allows covered facilities to buy and sell GHG emissions credits, while formerly proposed Rule 12-16 would not have allowed Bay Area refineries to purchase GHG credits to demonstrate compliance with the refinery-wide GHG limit. Rule 11-18 would not regulate GHG emissions and is not expected to generate substantial GHG emissions at any one facility that would interfere with the facility's

ability to comply with CARB's Cap and Trade requirements. Since there is no specific information as to where control equipment would be required, it would be speculative to assume that GHG emissions would be offset under Cap and Trade. However, GHG emission increases at facilities that are covered under CARB's Cap and Trade program (e.g., refineries, power plants, manufacturing facilities, etc.) would be required to offset under the Cap and Trade Program. Therefore, a portion of the GHG emission increases under Rule 11-18 are expected to be offset.

3.3.4.4 Conclusion

Evaluation of those air pollution control technologies that would most likely be used to reduce TAC emissions from affected facilities pursuant to Rule 11-18, indicates that Rule 11-18 could generate direct and indirect GHG emission impacts that exceed the Air District's operational GHG emissions significance threshold of 10,000 $MTCO_2e$/yr. Therefore, because the analysis of GHG emission impacts is by definition a cumulative impact analysis, cumulative operational GHG emission impacts for Rule 11-18 are concluded to be significant.

3.3.5 MITIGATION MEASURES

Measures to mitigate operational GHG emission impacts typically rely on energy efficiency measures at this time. Improving energy efficiency is equipment- and operation-specific, so each affected facility operator would have to perform a facility-wide evaluation to determine appropriate energy efficiency measures. Such an analysis is outside the scope of the environmental analysis for the proposed project. However, there are programs in California designed to reduce GHG emissions statewide. For example, CARB has designed a California Cap and Trade program that is enforceable and meets the requirements of AB 32. The program began on January 1, 2012, with an enforceable compliance obligation beginning with the 2013 GHG emissions inventory. The facilities subject to the requirements of the AB32 Cap and Trade Program and have a GHG allocation based on current GHG emissions levels. The AB32 Cap and Trade Program has divided allocations into sectors. Sectors that are subject to the Cap and Trade program include large industrial facilities emitting 25,000 $MTCO_2e$ in the following sectors: petroleum refining, petroleum and natural gas systems, hydrogen production iron and steel production, in-state electricity generators, etc.

Under the Cap and Trade program, individual facilities do not receive individual facility-wide caps, but industrial sectors receive allowances. An allowance is a tradable permit to emit one metric ton of a carbon dioxide equivalent GHG emissions. Allowances are distributed among facilities based on their complexity and energy efficiency. The more energy efficient a facility is, the greater the allocation it receives. Further, the AB32 Cap and Trade Program requires that the facilities subject to the program to offset any GHG emissions in excess of the total allowance obtained through the program. As the emissions cap is gradually reduced over time, and as additional sources are brought under the cap to include the vast majority of GHG emissions in the State, the program will ensure that California remains on track to continually reduce GHG emissions and meet the 2020 limit, as well as the recently adopted 2030 limit. Operational GHG emission increases would be offset if they occurred at facilities that are included in the Cap and

Trade Program. However, since there is no specific information as to where the air pollution control equipment would occur it would be speculative to assume that GHG emissions would be offset under the AB 32 Cap and Trade Program at this time. Nonetheless, some or all of the GHG emissions that may be generated to comply with Regulations 11-18 would be offset under the Cap and Trade Program.

3.3.5.2 Remaining Operational Impacts

Since the GHG emissions reductions expected from implementing AB 32 are speculative, cumulative GHG emission impacts are expected to remain significant for implementing Rule 11-18.

CHAPTER 3.4

HAZARDS AND HAZARDOUS MATERIALS

Introduction
Environmental Setting
Regulatory Setting
Significance Thresholds
Environmental Impacts
Mitigation Measures
Cumulative Impacts

This page intentionally left blank

3.4 HAZARDS AND HAZARDOUS MATERIALS

This subchapter of the EIR evaluates the potential hazards and hazardous material impacts associated with implementation of proposed Rule 11-18. Rule 11-18 would reduce exposure to TAC emissions from many stationary sources within the Bay Area, including refineries.

As discussed in the Initial Study, implementation of Rule 11-18 would reduce risk from facilities that emit toxic air contaminants throughout the Bay Area. Risk reduction measures are expected to be limited to new air pollution control equipment and construction of enclosures. The NOP/IS concluded that wet gas scrubbers were not expected to be used to control TACs; therefore, implementation of Rule 11-18 was not expected to result in a substantial hazard and hazardous material impacts. However, public comments received on the NOP/IS indicated that wet gas scrubbers could be used to control TAC emissions for certain facilities and refineries. Thus, potential hazards and hazardous material impacts are included in this EIR for proposed Rule 11-18.

3.4.1 ENVIRONMENTAL SETTING

The potential for hazards exist in the production, use, storage and transportation of hazardous materials. Hazardous materials may be found at industrial production and processing facilities. Some facilities produce hazardous materials as their end product, while others use such materials as an input to their production process. Examples of hazardous materials used as consumer products include gasoline, solvents, and coatings/paints. Hazardous materials are stored at facilities that produce such materials and at facilities where hazardous materials are a part of the production process. Specifically, storage refers to the bulk handling of hazardous materials before and after they are transported to the general geographical area of use. Currently, hazardous materials are transported throughout the Air District in great quantities via all modes of transportation including rail, highway, water, air, and pipeline.

The potential hazards associated with industrial activities are a function of the materials being processed, processing systems, and procedures used to operate and maintain the facility. The hazards that are likely to exist are identified by the physical and chemical properties of the materials being handled and their process conditions, including the following events:

- **Toxic gas clouds:** Toxic gas clouds are releases of volatile chemicals (e.g., anhydrous ammonia, chlorine, and hydrogen sulfide) that could form a cloud and migrate off-site, thus exposing individuals. "Worst-case" conditions tend to arise when very low wind speeds coincide with an accidental release, which can allow the chemicals to accumulate rather than disperse.

- **Torch fires (gas and liquefied gas releases), flash fires (liquefied gas releases), pool fires, and vapor cloud explosions (gas and liquefied gas releases):** The rupture of a storage tank or vessel containing a flammable gaseous material (like propane or gasoline), without immediate ignition, can result in a vapor cloud explosion. The "worst-case" upset would be a release that produces a large aerosol cloud with flammable properties. If the flammable

cloud does not ignite after dispersion, the cloud would simply dissipate. If the flammable cloud were to ignite during the release, a flash fire or vapor cloud explosion could occur. If the flammable cloud were to ignite immediately upon release, a torch fire would ensue.

- **Thermal Radiation:** Thermal radiation is the heat generated by a fire and the potential impacts associated with exposure. Exposure to thermal radiation would result in burns, the severity of which would depend on the intensity of the fire, the duration of exposure, and the distance of an individual to the fire.

- **Explosion/Overpressure:** Process vessels containing flammable explosive vapors and potential ignition sources are present at industrial facilities, e.g., refineries and chemical plants. Explosions may occur if the flammable/explosive vapors came into contact with an ignition source. An explosion could cause impacts to individuals and structures in the area due to overpressure.

3.4.1.1 Hazardous Materials Incidents

The Department of Transportation, Office of Pipeline and Hazardous Materials Safety Administration (PHMSA) utilizes a post incident reporting system that collects data on incidents involving accidents. Information on accidental releases of hazardous materials are reported to PHMSA. PHMSA provides access to retrieve data from the Incident Reports Database, which also includes non-pipeline incidents, e.g., truck and rail events. Incident data and summary statistics, e.g., release date geographical location (state and county) and type of material released, are available online from the Hazmat Incident Database and are summarized in yearly incident summary reports (PHMSA, 2017).

The California Hazardous Materials Incident Reporting System (CHMIRS) is a post incident reporting system to collect data on incidents involving the accidental release of hazardous materials. Information on accidental releases of hazardous materials are reported to and maintained by the California Governor's Office of Emergency Services (Cal OES). While information on accidental releases is reported to Cal OES, Cal OES no longer conducts statistical evaluations of the releases.

Table 3.4-1 provides a summary of the reported hazardous materials incidents in the nine counties within the Bay Area. In 2016, there were a total of 1,397 incidents reported in the nine counties regulated by the BAAQMD (see Table 3.4-1), with the most incidents (321) reported in Alameda County, followed by Contra Costa County (274).

TABLE 3.4-1

Hazardous Materials Incidents 2016 by County

COUNTY	REPORTED INCIDENTS
Alameda	321
Contra Costa	274
Marin	87
Napa	47
San Francisco	88
San Mateo	128
Santa Clara	191
Solano*	109
Sonoma*	152
Total No. of Reported Incidents	**1397**

Source: OES, 2017

* Not all of Solano or Sonoma Counties are within the jurisdiction of BAAQMD

The location of the spills varies (see Table 3.4-2). In the nine counties that comprise the Air District, hazardous materials incidents during transportation, at commercial facilities, and at waterways were the most common locations, respectively, for hazardous materials incidents. About 19 percent of the hazardous materials incidents that occurred within California occurred within the nine counties that comprise the Bay Area, with spills in waterways being the most common (30 percent), followed by commercial facilities and residential areas (24 percent each).

TABLE 3.4-2

Hazardous Materials Incidents 2016

Spill Site	BAAQMD	Statewide	Percent of State Total
Waterways	222	742	30%
Transportation	440	2899	15%
Industrial	11	135	8%
Commercial	328	1372	24%
Residential	208	879	24%
Utilities	32	183	17%
Military	2	66	3%
Other	154	1182	13%
Total	**1397**	**7458**	**19%**

Source: OES, 2017

3.4.1.2 Potential Hazards Associated with Air Pollution Control Equipment

The BAAQMD has evaluated the hazards associated with previous air plans (2017 Clean Air Plan) and proposed BAAQMD rules. The analyses covered a range of potential air pollution control technologies and equipment. EIRs prepared for the previous rules and air plans have specifically evaluated hazard impacts from add-on pollution control equipment. Add on pollution control technologies include carbon adsorption, incineration, post-combustion flue-gas treatment, scrubbers, bag filters and electrostatic precipitators. The use of add-on pollution control equipment may concentrate or utilize hazardous materials. A malfunction or accident when using add-on pollution control equipment could potentially expose people to hazardous materials, explosions, or fires. The transport, use, and storage of hazardous materials are evaluated herein.

3.4.2 REGULATORY SETTING

There are many federal and state rules and regulations for handling hazardous materials, which serve to minimize the potential impacts associated with hazards.

3.4.2.1 Federal Regulations

The U.S. EPA is the primary federal agency charged with protecting human health and with safeguarding the natural environment from pollution into air, water, and land. The U.S. EPA works to develop and enforce regulations that implement environmental laws enacted by Congress. The U.S. EPA is responsible for researching and setting national standards for a variety of environmental programs, and delegates to states and Indian tribes the responsibility for issuing permits and for monitoring and enforcing compliance. Since 1970, Congress has enacted numerous environmental laws that pertain to hazardous materials, for the U.S. EPA to implement as well as to other agencies at the federal, state and local level, as described in the following subsections.

3.4.2.1.1 Hazardous Materials and Waste Regulations

Resource Conservation and Recovery Act: The Resource Conservation and Recovery Act (RCRA) of 1976 authorizes the U.S. EPA to control the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA considers materials and waste to be hazardous based on four characteristics: ignitability, corrosivity, reactivity, and toxicity. Under RCRA regulations, hazardous wastes must be tracked from the time of generation to the point of disposal. In 1984, RCRA was amended with the addition of the Hazardous and Solid Waste Amendments, which authorized increased enforcement by the U.S. EPA, stricter hazardous waste standards, and a comprehensive underground storage tank program. Likewise, the Hazardous and Solid Waste Amendments focused on waste reduction and corrective action for hazardous releases. The use of certain techniques for the disposal of some hazardous wastes was specifically prohibited by the Hazardous and Solid Waste Amendments. Individual states may implement their own hazardous waste programs under RCRA, with approval by the U.S. EPA.

California has been delegated authority to operate its own hazardous waste management program.

Comprehensive Environmental Response, Compensation and Liability Act: The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), which is often commonly referred to as Superfund, is a federal statute that was enacted in 1980 to address abandoned sites containing hazardous waste and/or contamination. CERCLA was amended in 1986 by the Superfund Amendments and Reauthorization Act, and by the Small Business Liability Relief and Brownfields Revitalization Act of 2002.

CERCLA contains prohibitions and requirements concerning closed and abandoned hazardous waste sites; establishes liability of persons responsible for releases of hazardous waste at these sites; and establishes a trust fund to provide for cleanup when no responsible party can be identified. The trust fund is funded largely by a tax on the chemical and petroleum industries. CERCLA also provides federal jurisdiction to respond directly to releases or impending releases of hazardous substances that may endanger public health or the environment.

CERCLA also enabled the revision of the National Contingency Plan (NCP) which provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The NCP also established the National Priorities List, which identifies hazardous waste sites eligible for long-term remedial action financed under the federal Superfund program.

Prevention of Accidental Releases and Risk Management Programs: Requirements pertaining to the prevention of accidental releases are promulgated in §112 (r) of the CAA Amendments of 1990 [42 U.S.C. §7401 et. seq.]. The objective of these requirements was to prevent the accidental release and to minimize the consequences of any such release of a hazardous substances. Under these provisions, facilities that produce, process, handle or store hazardous substances have a duty to: 1) identify hazards which may result from releases using hazard assessment techniques; 2) design and maintain a safe facility and take steps necessary to prevent releases; and, 3) minimize the consequence of accidental releases that occur.

In accordance with the requirements in §112 (r), U.S. EPA adopted implementing guidelines in 40 CFR Part 68. Under this part, stationary sources with more than a threshold quantity of a regulated substance shall be evaluated to determine the potential for and impacts of accidental releases from any processes subject to the federal risk management requirements. Under certain conditions, the owner or operator of a stationary source may be required to develop and submit a Risk Management Plan (RMP). RMPs consist of three main elements: a hazard assessment that includes off-site consequences analyses and a five-year accident history, a prevention program, and an emergency response program. At the local level, RMPs are implemented by the local fire departments.

3.4.2.1.2 Emergency Planning and Community Right-to-Know Act

The Emergency Planning and Community Right-to-Know Act (EPCRA) is a federal law adopted by Congress in 1986 that is designed to help communities plan for emergencies involving

hazardous substances. EPCRA establishes requirements for federal, state and local governments, Indian tribes, and industry regarding emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals. The Community Right-to-Know provisions help increase the public's knowledge and access to information on chemicals at individual facilities, their uses, and releases into the environment. States and communities, working with facilities, can use the information to improve chemical safety and protect public health and the environment. There are four major provisions of EPCRA:

1. Emergency Planning (§§301 – 303) requires local governments to prepare chemical emergency response plans, and to review plans at least annually. These sections also require state governments to oversee and coordinate local planning efforts. Facilities that maintain Extremely Hazardous Substances (EHS) onsite (see 40 CFR Part 355 for the list of EHS chemicals) in quantities greater than corresponding "Threshold Planning Quantities" must cooperate in the preparation of the emergency plan.

2. Emergency Release Notification (§304) requires facilities to immediately report accidental releases of EHS chemicals and hazardous substances in quantities greater than corresponding Reportable Quantities (RQs) as defined under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) to state and local officials. Information about accidental chemical releases must be made available to the public.

3. Hazardous Chemical Storage Reporting (§§311 – 312) requires facilities that manufacture, process, or store designated hazardous chemicals to make Safety Data Sheets (SDSs, formerly referred to as material safety data sheets or MSDSs) describing the properties and health effects of these chemicals available to state and local officials and local fire departments. These sections also require facilities to report to state and local officials and local fire departments, inventories of all onsite chemicals for which SDSs exist. Lastly, information about chemical inventories at facilities and SDSs must be available to the public.

4. Toxic Chemical Release Inventory (§313) requires facilities to annually complete and submit a Toxic Chemical Release Inventory Form for each Toxic Release Inventory (TRI) chemical that are manufactured or otherwise used above the applicable threshold quantities.

Implementation of EPCRA has been delegated to the State of California. The California Emergency Management Agency requires facilities to develop a Hazardous Materials Business Plan if they handle hazardous materials in quantities equal to or greater than 55 gallons, 500 pounds, or 200 cubic feet of gas or extremely hazardous substances above the threshold planning quantity. The Hazardous Materials Business Plan is provided to state and local emergency response agencies and includes inventories of hazardous materials, an emergency plan, and implements a training program for employees.

3.4.2.1.3 Hazardous Materials Transportation Act

The Hazardous Material Transportation Act (HMTA), adopted in 1975 (see 49 U.S.C. §§5101 – 5127), gave the Secretary of Transportation the regulatory and enforcement authority to provide adequate protection against the risks to life and property inherent in the transportation of hazardous materials in commerce. The U.S. DOT (see 49 CFR Parts 171-180) oversees the movement of hazardous materials at the federal level. The HMTA requires that carriers report accidental releases of hazardous materials to U.S. DOT at the earliest practical moment. Other incidents that must be reported include deaths, injuries requiring hospitalization, and property damage exceeding $50,000. The hazardous material regulations also contain emergency response provisions which include incident reporting requirements. Reports of major incidents go to the National Response Center, which in turn is linked with CHEMTREC, a public service hotline established by the chemical manufacturing industry for emergency responders to obtain information and assistance for emergency incidents involving chemicals and hazardous materials.

Hazardous materials regulations are implemented by the Research and Special Programs Administration (RSPA) branch of the U.S. DOT. The regulations cover the definition and classification of hazardous materials, communication of hazards to workers and the public, packaging and labeling requirements, operational rules for shippers, and training. These regulations apply to interstate, intrastate, and foreign commerce by air, rail, ships, and motor vehicles, and also cover hazardous waste shipments. The Federal Aviation Administration Office of Hazardous Materials Safety is responsible for overseeing the safe handling of hazardous materials aboard aircraft. The Federal Railroad Administration oversees the transportation of hazardous materials by rail. The U.S. Coast Guard regulates the bulk transport of hazardous materials by sea. The Federal Highway Administration (FHWA) is responsible for highway routing of hazardous materials and issuing highway safety permits.

3.4.2.1.4 Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) was enacted by Congress in 1976 (see 15 U.S.C. §2601 et seq.) and gave the U.S. EPA the authority to protect the public from unreasonable risk of injury to health or the environment by regulating the manufacture, sale, and use of chemicals currently produced or imported into the United States. The TSCA, however, does not address wastes produced as byproducts of manufacturing. The types of chemicals regulated by the act fall into two categories: existing and new. New chemicals are defined as "any chemical substance which is not included in the chemical substance list compiled and published under [TSCA] section 8(b)." This list included all of chemical substances manufactured or imported into the U.S. prior to December 1979. Existing chemicals include any chemical currently listed under section 8 (b). The distinction between existing and new chemicals is necessary as the act regulates each category of chemicals in different ways. The U.S. EPA repeatedly screens both new and existing chemicals and can require reporting or testing of those that may pose an environmental or human-health hazard. The U.S. EPA can ban the manufacture and import of those chemicals that pose an unreasonable risk.

3.4.2.1.5 Hazardous Material Worker and Public Safety Requirements

Occupational Safety and Health Administration Regulations: The federal Occupational Safety and Health Administration (OSHA) is an agency of the United States Department of Labor that was created by Congress under the Occupational Safety and Health Act in 1970. OSHA is the agency responsible for assuring worker safety in the handling and use of chemicals in the workplace. Under the authority of the Occupational Safety and Health Act of 1970, OSHA has adopted numerous regulations pertaining to worker safety (see 29 CFR Part 1910). These regulations set standards for safe workplaces and work practices, including the reporting of accidents and occupational injuries. Some OSHA regulations contain standards relating to hazardous materials handling to protect workers who handle toxic, flammable, reactive, or explosive materials, including workplace conditions, employee protection requirements, first aid, and fire protection, as well as material handling and storage. For example, facilities which use, store, manufacture, handle, process, or move hazardous materials are required to conduct employee safety training, have available and know how to use safety equipment, prepare illness prevention programs, provide hazardous substance exposure warnings, prepare emergency response plans, and prepare a fire prevention plan.

Procedures and standards for safe handling, storage, operation, remediation, and emergency response activities involving hazardous materials and waste are promulgated in 29 CFR Part 1910, Subpart H. Some key subsections in 29 CFR Part 1910, Subpart H are §1910.106 - Flammable Liquids and §1910.120 - Hazardous Waste Operations and Emergency Response. In particular, the Hazardous Waste Operations and Emergency Response regulations contain requirements for worker training programs, medical surveillance for workers engaging in the handling of hazardous materials or wastes, and waste site emergency and remediation planning, for those who are engaged in specific clean-up, corrective action, hazardous material handling, and emergency response activities (see 29 CFR Part 1910 Subpart H, §1910.120 (a)(1)(i-v) and §1926.65 (a)(1)(i-v)).

Process Safety Management: As part of the numerous regulations pertaining to worker safety adopted by OSHA, specific requirements that pertain to Process Safety Management (PSM) of Highly Hazardous Chemicals were adopted in 29 CFR Part 1910 Subpart H, §1910.119 and 8 CCR §5189 to protect workers at facilities that have toxic, flammable, reactive or explosive materials. PSM program elements are aimed at preventing or minimizing the consequences of catastrophic releases of chemicals and include process hazard analyses, formal training programs for employees and contractors, investigation of equipment mechanical integrity, and an emergency response plan. Specifically, the PSM program requires facilities that use, store, manufacture, handle, process, or move hazardous materials to conduct employee safety training; have an inventory of safety equipment relevant to potential hazards; have knowledge on use of the safety equipment; prepare an illness prevention program; provide hazardous substance exposure warnings; prepare an emergency response plan; and prepare a fire prevention plan.

Emergency Action Plan: An Emergency Action Plan (EAP) is a written document required by OSHA standards promulgated in 29 CFR Part 1910, Subpart E, §1910.38 (a) to facilitate and organize a safe employer and employee response during workplace emergencies. An EAP is

required by all that are required to have fire extinguishers. At a minimum, an EAP must include the following: 1) a means of reporting fires and other emergencies; 2) evacuation procedures and emergency escape route assignments; 3) procedures to be followed by employees who remain to operate critical plant operations before they evacuate; 4) procedures to account for all employees after an emergency evacuation has been completed; 5) rescue and medical duties for those employees who are to perform them; and, 6) names or job titles of persons who can be contacted for further information or explanation of duties under the plan.

National Fire Regulations: The National Fire Codes (NFC), Title 45, published by the National Fire Protection Association (NFPA) contains standards for laboratories using chemicals, which are not requirements, but are generally employed by organizations in order to protect workers. These standards provide basic protection of life and property in laboratory work areas through prevention and control of fires and explosions, and also serve to protect personnel from exposure to non-fire health hazards.

In addition to the NFC, the NFPA adopted a hazard rating system which is promulgated in NFPA 704 - Standard System for the Identification of the Hazards of Materials for Emergency Response. NFPA 704 is a "standard (that) provides a readily recognized, easily understood system for identifying specific hazards and their severity using spatial, visual, and numerical methods to describe in simple terms the relative hazards of a material. It addresses the health, flammability, instability, and related hazards that may be presented as short-term, acute exposures that are most likely to occur as a result of fire, spill, or similar emergency." In addition, the hazard ratings per NFPA 704 are used by emergency personnel to quickly and easily identify the risks posed by nearby hazardous materials in order to help determine what, if any, specialty equipment should be used, procedures followed, or precautions taken during the first moments of an emergency response. The scale is divided into four color-coded categories, with blue indicating level of health hazard, red indicating the flammability hazard, yellow indicating the chemical reactivity, and white containing special codes for unique hazards such as corrosivity and radioactivity. Each hazard category is rated on a scale from 0 (no hazard; normal substance) to 4 (extreme risk). Table 3.4-3 summarizes what the codes mean for each hazards category.

TABLE 3.4-3

NFPA 704 Hazards Rating Code

Hazard Rating Code	Health (Blue)	Flammability (Red)	Reactivity (Yellow)	Special (White)
4 = Extreme	Very short exposure could cause death or major residual injury (extreme hazard).	Will rapidly or completely vaporize at normal atmospheric pressure and temperature, or is readily dispersed in air and will burn readily. Flash point below 73°F.	Readily capable of detonation or explosive decomposition at normal temperatures and pressures.	W = Reacts with water in an unusual or dangerous manner.
3 = High	Short exposure could cause serious temporary or moderate residual injury.	Liquids and solids that can be ignited under almost all ambient temperature conditions. Flash point between 73°F and 100°F.	Capable of detonation or explosive decomposition but requires a strong initiating source, must be heated under confinement before initiation, reacts explosively with water, or will detonate if severely shocked.	**OXY** = Oxidizer
2 = Moderate	Intense or continued but not chronic exposure could cause temporary incapacitation or possible residual injury.	Must be moderately heated or exposed to relatively high ambient temperature before ignition can occur. Flash point between 100°F and 200°F.	Undergoes violent chemical change at elevated temperatures and pressures, reacts violently with water, or may form explosive mixtures with water.	**SA** = Simple asphyxiant gas (includes nitrogen, helium, neon, argon, krypton, and xenon).
1 = Slight	Exposure would cause irritation with only minor residual injury.	Must be heated before ignition can occur. Flash point over 200°F.	Normally stable, but can become unstable at elevated temperatures and pressures.	Not applicable
0 = Insignificant	Poses no health hazard, no precautions necessary.	Will not burn.	Normally stable, even under fire exposure conditions, and is not reactive with water.	Not applicable

In addition to the information in Table 3.4-3, many other physical or chemical properties may cause a substance to be a fire hazard. With respect to determining whether any substance is classified as a fire hazard, SDS lists the NFPA 704 flammability hazard ratings (e.g., NFPA 704).

Although substances can have the same NFPA 704 Flammability Ratings Code, other factors can make each substance's fire hazard very different from each other. For this reason, additional chemical characteristics, such as auto-ignition temperature, boiling point, evaporation rate, flash point, lower explosive limit (LEL), upper explosive limit (UEL), and vapor pressure, are also considered when determining whether a substance is fire hazard. The following is a brief description of each of these chemical characteristics.

Auto-ignition Temperature: The auto-ignition temperature of a substance is the lowest temperature at which it will spontaneously ignite in a normal atmosphere without an external source of ignition, such as a flame or spark.

Boiling Point: The boiling point of a substance is the temperature at which the vapor pressure of the liquid equals the environmental pressure surrounding the liquid. Boiling is a process in which molecules anywhere in the liquid escape, resulting in the formation of vapor bubbles within the liquid.

Evaporation Rate: Evaporation rate is the rate at which a material will vaporize (evaporate, change from liquid to a vapor) compared to the rate of vaporization of a specific known material. This quantity is a represented as a unit less ratio. For example, a substance with a high evaporation rate will readily form a vapor which can be inhaled or explode, and thus have a higher hazard risk. Evaporation rates generally have an inverse relationship to boiling points (i.e., the higher the boiling point, the lower the rate of evaporation).

Flash Point: Flash point is the lowest temperature at which a volatile liquid can vaporize to form an ignitable mixture in air. Measuring a liquid's flash point requires an ignition source. At the flash point, the vapor may cease to burn when the source of ignition is removed. There are different methods that can be used to determine the flashpoint of a solvent but the most frequently used method is the Tagliabue Closed Cup standard (ASTM D56), also known as the TCC. The flashpoint is determined by a TCC laboratory device which is used to determine the flash point of mobile petroleum liquids with flash point temperatures below 175 degrees Fahrenheit (79.4 degrees Centigrade).

Flash point is a particularly important measure of the fire hazard of a substance. For example, the Consumer Products Safety Commission (CPSC) promulgated Labeling and Banning Requirements for Chemicals and Other Hazardous Substances in 15 U.S.C. §1261 and 16 CFR Part 1500. Per the CPSC, the flammability of a product is defined in 16 CFR Part 1500.3 (c)(6) and is based on flash point. For example, a liquid needs to be labeled as: 1) “Extremely Flammable” if the flash point is below 20 degrees Fahrenheit; 2) “Flammable” if the flash point is above 20 degrees Fahrenheit but less than 100 degrees Fahrenheit; or, 3) “Combustible” if the flash point is above 100 degrees Fahrenheit up to and including 150 degrees Fahrenheit.

Lower Explosive Limit (LEL): The lower explosive limit of a gas or a vapor is the limiting concentration (in air) that is needed for the gas to ignite and explode or the lowest concentration (percentage) of a gas or a vapor in air capable of producing a flash of fire in presence of an ignition source (e.g., arc, flame, or heat). If the concentration of a substance in air is below the LEL, there is not enough fuel to continue an explosion. In other words, concentrations lower than the LEL are "too lean" to burn. For example, methane gas has a LEL of 4.4 percent (at 138 degrees Centigrade) by volume, meaning 4.4 percent of the total volume of the air consists of methane. At 20 degrees Centigrade, the LEL for methane is 5.1 percent by volume. If the atmosphere has less that 5.1 percent

methane, an explosion cannot occur even if a source of ignition is present. When the concentration of methane reaches 5.1 percent, an explosion can occur if there is an ignition source.

Upper Explosive Limit (UEL): The upper explosive limit of a gas or a vapor is the highest concentration (percentage) of a gas or a vapor in air capable of producing a flash of fire in presence of an ignition source (e.g., arc, flame, or heat). Concentrations of a substance in air above the UEL are "too rich" to burn.

Vapor Pressure: Vapor pressure is an indicator of a chemical's tendency to evaporate into gaseous form.

Health Hazards Guidance: In addition to fire impacts, health hazards can also be generated due to exposure of chemicals present in both conventional as well as reformulated products. Using available toxicological information to evaluate potential human health impacts associated with conventional solvents and potential replacement solvents, the toxicity of the conventional solvents can be compared to solvents expected to be used in reformulated products. As a measure of a chemical's potential health hazards, the following values need to be considered: the Threshold Limit Values established by the American Conference of Governmental Industrial Hygiene, OSHA's Permissible Exposure Limits, the Immediately Dangerous to Life and Health levels recommended by the National Institute for Occupational Safety and Health (NIOSH), and health hazards developed by the National Safety Council. The following is a brief description of each of these values.

Threshold Limit Values (TLVs): The TLV of a chemical substance is a level to which it is believed a worker can be exposed day after day for a working lifetime without adverse health effects. The TLV is an estimate based on the known toxicity in humans or animals of a given chemical substance, and the reliability and accuracy of the latest sampling and analytical methods. The TLV for chemical substances is defined as a concentration in air, typically for inhalation or skin exposure. Its units are in parts per million (ppm) for gases and in milligrams per cubic meter (mg/m^3) for particulates. The TLV is a recommended guideline by ACGIH.

Permissible Exposure Limits (PEL): The PEL is a legal limit, usually expressed in ppm, established by OSHA to protect workers against the health effects of exposure to hazardous substances. PELs are regulatory limits on the amount or concentration of a substance in the air. A PEL is usually given as a time-weighted average (TWA), although some are short-term exposure limits (STEL) or ceiling limits. A TWA is the average exposure over a specified period of time, usually eight hours. This means that, for limited periods, a worker may be exposed to concentrations higher than the PEL, so long as the average concentration over eight hours remains lower. A short-term exposure limit is one that addresses the average exposure over a 15 to 30 minute period of maximum exposure during a single work shift. A ceiling limit is one that may not be exceeded for any period of time, and is applied to irritants and other materials that have immediate effects. The OSHA PELs are published in 29 CFR 1910.1000, Table Z1.

Immediately Dangerous to Life and Health (IDLH): IDLH is an acronym defined by NIOSH as exposure to airborne contaminants that is "likely to cause death or immediate or delayed permanent adverse health effects or prevent escape from such an environment." IDLH values are often used to guide the selection of breathing apparatus that are made available to workers or firefighters in specific situations.

3.4.2.1.6 Oil and Pipeline Regulations and Oversight

Oil Pollution Act: The Oil Pollution Act was signed into law in 1990 to give the federal government authority to better respond to oil spills. The Oil Pollution Act improved the federal government's ability to prevent and respond to oil spills, including provision of money and resources. The Oil Pollution Act establishes polluter liability, gives states enforcement rights in navigable waters of the state, mandates the development of spill control and response plans for all vessels and facilities, increases fines and enforcement mechanisms, and establishes a federal trust fund for financing clean-up.

The Oil Pollution Act also establishes the National Oil Spill Liability Trust Fund to provide financing for cases in which the responsible party is either not readily identifiable, or refuses to pay the cleanup/damage costs. In addition, the Oil Pollution Act expands provisions of the National Oil and Hazardous Substances Pollution Contingency Plan, more commonly called the National Contingency Plan, requiring the federal government to direct all public and private oil spill response efforts. It also requires area committees, composed of federal, state, and local government officials, to develop detailed, location-specific area contingency plans. In addition, the Oil Pollution Act directs owners and operators of vessels, and certain facilities that pose a serious threat to the environment, to prepare their own specific facility response plans. The Oil Pollution Act increases penalties for regulatory non-compliance by responsible parties; gives the federal government broad enforcement authority; and provides individual states the authority to establish their own laws governing oil spills, prevention measures, and response methods.

Oil Pollution Prevention Regulation: In 1973, the USEPA issued the Oil Pollution Prevention regulation (see 40 CFR 112)**,** to address the oil spill prevention provisions contained in the Clean Water Act of 1972. The Spill Prevention, Control, and Countermeasure (SPCC) Rule is part of the Oil Pollution Prevention regulations (see 40 CFR Part 112, Subparts A - C). Specifically, the SPCC rule includes requirements for oil spill prevention, preparedness, and response to prevent oil discharges to navigable waters and adjoining shorelines. The rule requires specific facilities to prepare, amend, and implement SPCC Plans. SPCC Plans require applicable facilities to take steps to prevent oil spills including: 1) using suitable storage containers/tanks; 2) providing overfill prevention (e.g., high-level alarms); 3) providing secondary containment for bulk storage tanks; 4) providing secondary containment to catch oil spills during transfer activities; and, 5) periodically inspecting and testing pipes and containers.

U.S. Department of Transportation, Office of Pipeline Safety: The Office of Pipeline Safety, within the U.S. DOT, Pipeline and Hazards Material Safety Administration, has jurisdictional responsibility for developing regulations and standards to ensure the safe and secure movement of hazardous liquid and gas pipelines under its jurisdiction in the United States. The Office of Pipeline Safety has the following key responsibilities:

- Support the operation of, and coordinate with the United States Coast Guard on the National Response Center and serve as a liaison with the Department of Homeland Security and the Federal Emergency Management Agency on matters involving pipeline safety;

- Develop and maintain partnerships with other federal, state, and local agencies, public interest groups, tribal governments, and the regulated industry and other underground utilities to address threats to pipeline integrity, service, and reliability and to share responsibility for the safety of communities;

- Administer pipeline safety regulatory programs and develops regulatory policy involving pipeline safety;

- Oversee pipeline operator implementation of risk management and risk-based programs and administer a national pipeline inspection and enforcement program;

- Provide technical and resource assistance for state pipeline safety programs to ensure oversight of intrastate pipeline systems and educational programs at the local level; and,

- Support the development and conduct of pipeline safety training programs for federal and state regulatory and compliance staff and the pipeline industry.

49 CFR Parts 178 – 185 relates to the role of transportation, including pipelines, in the United States. 49 CFR Parts 186-199 establishes minimum pipeline safety standards. The Office of the State Fire Marshal works in partnership with the Federal Pipeline and Hazardous Materials Safety Administration to assure pipeline operators are meeting requirements for safe, reliable, and environmentally sound operation of their facilities for intrastate pipelines within California.

Chemical Facility Anti-Terrorism Standards: The Federal Department of Homeland Security established the chemical facility anti-terrorism standards in 2007 (see 6 CFR Part 27). These regulations established risk-based performance standards for the security of chemical facilities and require covered chemical facilities to prepare Security Vulnerability Assessments, which identify facility security vulnerabilities, and to develop and implement security plans.

3.4.2.2 State Regulations

California Hazardous Waste Control Law: The California Hazardous Waste Control Law is administered by the California Environmental Protection Agency (CalEPA) to regulate hazardous wastes within the State of California. While the California Hazardous Waste Control Law is generally more stringent than RCRA, both the state and federal laws apply in California. The California Department of Toxic Substances Control (DTSC) is the primary agency in charge of enforcing both the federal and state hazardous materials laws in California. The DTSC regulates hazardous waste, oversees the cleanup of existing contamination, and pursues methods to reduce hazardous waste produced in California. The DTSC regulates hazardous waste in California under the authority of RCRA, the California Hazardous Waste Control Law, and the California Health and Safety Code. Under the direction of the CalEPA, the DTSC maintains the Cortese List and Envirostor databases of hazardous materials and waste sites as specified under Government Code §65962.5.

The Hazardous Waste Control Law (22 CCR Chapter 11, Appendix X) also lists 791 chemicals and approximately 300 common materials which may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal, and transportation; and identifies some wastes that cannot be disposed of in landfills.

California Occupational Safety and Health Administration: The California Occupational Safety and Health Administration (CalOSHA) is the primary agency responsible for worker safety in the handling and use of chemicals in the workplace. CalOSHA requires the employer to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR Sections 337-340). The regulations specify requirements for employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings. CalOSHA standards are generally more stringent than federal regulations.

Hazardous Materials Release Notification: Many state statutes require emergency notification of a hazardous chemical release, including:

- California Health and Safety Code §25270.7, §25270.8, and §25507;
- California Vehicle Code §23112.5;
- California Public Utilities Code §7673 (General Orders #22-B, 161);
- California Government Code §51018 and §8670.25.5(a);
- California Water Code §13271 and §13272; and,
- California Labor Code §6409.1(b)10.

California Accidental Release Prevention (CalARP) Program: The California Accidental Release Prevention Program (19 CCR Division 2, Chapter 4.5) requires the preparation of RMPs. CalARP requires stationary sources with more than a threshold quantity of a regulated substance to be evaluated to determine the potential for and impacts of accidental releases from any processes onsite (not transport) subject to state risk management requirements. RMPs are documents prepared by the owner or operator of a stationary source containing detailed information including: (1) regulated substances held onsite at the stationary source; (2) offsite consequences of an accidental release of a regulated substance; (3) the accident history at the stationary source; (4) the emergency response program for the stationary source; (5) coordination with local emergency responders; (6) hazard review or process hazard analysis; (7) operating procedures at the stationary source; (8) training of the stationary source's personnel; (9) maintenance and mechanical integrity of the stationary source's physical plant; and (10) incident investigation. The CalARP program is implemented at the local government level by Certified Unified Program Agencies (CUPAs) also known as Administering Agencies (AAs). Typically, local fire departments are the administering agencies of the CalARP program because they frequently are the first responders in the event of a release. California modified the CalARP Program along with the state's PSM program in response to an accident at the Chevron Richmond Refinery. The proposed regulations were released for public comment on July 15, 2016 and the public comment period closes on September 15, 2016. After the close of the comment period a modified version of the proposed regulations was released in February 2017 and the public comment period for comments on the modifications closed on March 3, 2017. The final regulations were approved in August 2017 and will become effective on October 1, 2017.

Hazardous Materials Disclosure Program: The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program) as promulgated by CalEPA in CCR, Title 27, Chapter 6.11 requires the administrative consolidation of six hazardous materials and waste programs (program elements) under one agency, a CUPA. The Unified Program administered by the State of California consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities for the state's environmental and emergency management programs, which include Hazardous Waste Generator and Onsite Hazardous Waste Treatment Programs ("Tiered Permitting"); Above ground SPCC Program; Hazardous Materials Release Response Plans and Inventories (business plans); the CalARP Program; the UST Program; and the Uniform Fire Code Plans and Inventory Requirements. The Unified Program is implemented at the local government level by CUPAs.

Hazardous Materials Management Act: The State of California (California Health and Safety Code Division 20, Chapter 6.95) requires any business that handles more than a specified amount of hazardous or extremely hazardous materials, termed a "reportable quantity," to submit a Hazardous Materials Business Plan to its Certified Unified Program Agency. Business plans must include an inventory of the types, quantities, and locations of hazardous materials at the facility. Businesses are required to update their business plans at least once every three years and the chemical portion of their plans every year. Also, business plans must include emergency response plans and procedures to be used in the event of a significant or threatened significant release of a hazardous material. These plans need to identify the procedures to follow for immediate notification to all appropriate agencies and personnel of a release, identification of

local emergency medical assistance appropriate for potential accident scenarios, contact information for all company emergency coordinators, a listing and location of emergency equipment at the business, an evacuation plan, and a training program for business personnel. The requirements for hazardous materials business plans are specified in the California Health and Safety Code and 19 CCR.

Hazardous Materials Transportation in California: California regulates the transportation of hazardous waste originating or passing through the State in Title 13, CCR. The California Highway Patrol (CHP) and Caltrans have primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies. The CHP enforces materials and hazardous waste labeling and packing regulations that prevent leakage and spills of material in transit and provide detailed information to cleanup crews in the event of an incident. Vehicle and equipment inspection, shipment preparation, container identification, and shipping documentation are all part of the responsibility of the CHP. Caltrans has emergency chemical spill identification teams at locations throughout the State.

California Fire Code: While NFC Standard 45 and NFPA 704 are regarded as nationally recognized standards, the California Fire Code (24 CCR) also contains state standards for the use and storage of hazardous materials and special standards for buildings where hazardous materials are found. Some of these regulations consist of amendments to NFC Standard 45. State Fire Code regulations require emergency pre-fire plans to include training programs in first aid, the use of fire equipment, and methods of evacuation.

3.4.2.3 Local Regulations

Most counties in California have prepared Hazardous Waste Management Plans (HWMPs) that outlines how hazardous waste generated in the county is managed. The HWMP identifies the types and amounts of wastes generated; establishes programs for managing these wastes; identifies an application review process for the siting of specified hazardous waste facilities; identifies mechanisms for reducing the amount of waste generated; and identifies goals, policies, and actions for achieving effective hazardous waste management

Contra Costa County has adopted an industrial safety ordinance that addresses the human factors that lead to accidents. The ordinance requires stationary sources to develop a written human factors program that considers human factors as part of process hazards analyses, incident investigations, training, operating procedures, among others.

3.4.3 SIGNIFICANCE CRITERIA

The impacts associated with hazards will be considered significant if any of the following occur:

- Non-compliance with any applicable design code or regulation.
- Non-conformance to National Fire Protection Association standards.
- Non-conformance to regulations or generally accepted industry practices related to operating policy and procedures concerning the design, construction, security, leak detection, spill containment or fire protection.

- Exposure to hazardous chemicals in concentrations equal to or greater than the Emergency Response Planning Guideline (ERPG) 2 levels.

3.4.4 ENVIRONMENTAL IMPACTS

The proposed rule is designed to reduce health risk associated with emissions of TACs from existing stationary sources in the Bay Area. The proposed rule is not expected to require substantial new development. Any new air pollution control equipment or enclosures would be expected to occur within existing commercial or industrial facilities. Facility modifications associated with the proposed rule are largely expected to include limiting throughput or hours of operations; increased use of diesel particulate filters; additional enclosures and bag houses, and thermal oxidizers or carbon adsorption systems. The hazards associated with the use of these types of air pollution control equipment and systems are minimal. Table 3.4-4 summarizes the expected air pollution control equipment and the impacts of those with potential hazard impacts are discussed further in the subsections below.

TABLE 3.4-4

Potential Hazards Impacts from Installing Air Pollution Control Equipment under Rules 11-18

Potential Control Technology	Hazard Impacts	Analyzed Further?	Significant?
Enclosures	None Identified	No	No
Diesel Particulate Filter	None identified	No	No
Replace Old Diesel ICEs with New Diesel ICEs	None Identified	No	No
Baghouse with HEPA Filters	Potential for fire explosion	Yes	No[1]
Carbon Adsorption	None Identified	No	No
Catalytic Oxidation	None identified	No	No
Thermal Oxidizer	None Identified	No	No
Wet Gas Scrubber	Potential hazards associated with increased use of caustic	Yes	No
Electrostatic Precipitator (Wet and Dry)	Potential for explosion	Yes	No[1]
Process Improvements	None Identified	No	No
Product Substitution	None Identified	No	No
Enhanced Monitoring or Component Replacement	None Identified	No	No

(1) Implementing mitigation measures in Section 3.4.5 reduces impacts to less than significant.

(2) Includes reduced throughput, reduced operating time, and stack modifications.

3.4.4.1 Baghouse

Dusts have a very large surface area compared to their mass. Since burning can only occur at the surface of a solid or liquid, where it can react with oxygen, this causes dusts to be much more flammable than bulk materials. Explosions are another operating hazard. For an explosion to occur, the concentration of dust in the baghouse housing or duct must be between the lower and upper explosive concentrations and a spark must be present. In mechanical cleaning (shaker) collectors, the flow is stopped in the filter compartment and the filter elements are agitated all at the same time. A potential for an explosion occurs since the concentration will likely pass through the explosive limits during this action.

Although the type of facilities where these accidents occurred were not identified, at least 281 combustible dust fires and explosions from baghouses occurred in general industries between 1980 and 2005 in the United States, which caused at least 119 fatalities and 718 injuries (Dalsanto, 2011). However, based on the chemical and physical characteristics of the dusts involved, e.g., organic, sulfur, coke, etc., it is assumed that at least some of these accidents occurred at industrial facilities. Therefore, in light of the fact that there is a potential for explosion or fire hazards, to be conservative it is concluded here that baghouses may cause or contribute to significant adverse hazard and hazardous materials impacts. Therefore, mitigation measures have been identified in Section 3.4.5.

3.4.4.2 Electrostatic Precipitator

Electrostatic precipitators have several advantages compared with other air pollution control devices, in part, because they are very efficient collectors, even for small particles. Further, because the collection forces act only on the particles, ESPs can treat large volumes of gas with low pressure drops. They can collect dry materials, fumes, or mists. Electrostatic precipitators can also operate over a wide range of temperatures and generally have low operating costs. There are two broad types of ESPs, dry and wet.

3.4.4.2.1 Dry ESPs

Dry ESPs remove dust from the collection electrodes by vibrating the electrodes through the use of rappers. Wire-plate dry ESPs are by far the most common design of an ESP and are used in a number of industries, including petroleum refining. Dry ESPs remove dust from the collection electrodes by vibrating the electrodes through the use of rappers. Common types of rappers are gravity impact hammers and electric vibrators. For a given ESP, the rapping intensity and frequency must be adjusted to optimize performance. Sonic energy is also used to assist dust removal in some dry ESPs. The main components of dry ESPs are an outside shell to house the unit, high voltage discharge electrodes, grounded collection electrodes, a high voltage source, a rapping system, and hoppers.

Hazards associated with dry ESPs include fire and explosion hazards that can occur at the inlet to ESPs when highly charged dust particles are transported by a gas carrier that can contain the mixtures of both incombustible and combustible flue gases. The risk of ignition and even explosion is especially high in the presence of an explosive mixture of oxygen, hydrocarbons,

carbon monoxide, etc. The ignition source is typically caused by the breakdown between the corona electrode and the collecting electrode, but in some cases electrostatic discharge (typically back corona) can also act as an ignition source.

Other problems that may contribute to fire or explosion hazards include the following. Minimum clearance between electrodes may result in repeated "sparkover" causing local heating and vaporization of wires causing the wires to break. Broken wires may swing freely and cause shorting between discharge and collector electrodes. Excessive rapping may also break wires. Poor electrical alignment may cause the wire frame to oscillate fatiguing wires and increasing sparking. If high levels of carbon are known to exist on the collecting surface or in the hoppers, opening the precipitator access doors may result in spontaneous combustion of the hot dust caused by the inrush of air.

Electrostatic Precipitators or ESPs have been used in industry for over 60 years. Review of the safety record of dry ESPs over the last 20 years did not identify any explosion or fire hazards. However, in light of the fact that there is a potential for explosion or fire hazards, to be conservative it is concluded here that dry ESPs may cause or contribute to significant adverse hazard and hazardous materials impacts. Therefore, mitigation measures have been identified in Section 3.4.5.

3.4.4.2.2 Wet ESPs

The basic components of a wet ESP are the same as those of a dry ESP with the exception that a wet ESP requires a water spray system rather than a system of rappers. The gas stream is either saturated before entering the collection area or the collecting surface is continually wetted to prevent agglomerations from forming. Because the dust is removed from a wet ESP in the form of a slurry, hoppers are typically replaced with a drainage system. Wet ESPs have the following advantages over dry ESPs. Wet ESPs can adsorb gases, cause some pollutants to condense, are easily integrated with scrubbers, and eliminate re-entrainment of captured particles.

Particulates collected from wet ESPs are washed from the collection electrodes with water or another suitable liquid. Some wet ESP applications require that liquid is sprayed continuously into the gas stream; in other cases, the liquid may be sprayed intermittently. Since the liquid spray saturates the gas stream in a wet ESP, it also provides gas cooling and conditioning. Because particulates are removed from a wet ESP as a slurry, explosion hazards are unlikely (Dorman, 1974). Therefore, hazards and hazardous materials impacts from wet ESPs are concluded to be less than significant. Therefore, mitigation measures are not required.

3.4.4.3 Wet Gas Scrubber

3.4.4.3.1 Caustic

For any operators at potentially affected facilities who choose to install a WGS, hazardous materials may be needed to operate the WGSs depending on the source category. Caustic is a key ingredient needed for the operation of a WGS; it is the most widely used substance for

several pollutant control applications spanning multiple equipment/source categories. While there are several types of caustic solutions that can be used in WGS operations, caustic made from sodium hydroxide (NaOH) is most commonly used for WGSs for FCCUs and coke calciners.

NAOH: NaOH, used as caustic in a WGS, is a toxic air contaminant; it is also a noncancerous but acutely hazardous substance. Located on the MSDS for NaOH (50 percent by weight), the hazards ratings are as follows: health is rated 3 (highly hazardous, flammability is rated 0 (none), and reactivity is rated 1 (slightly hazardous). Use of NaOH caustic in a WGS would most likely occur at refineries that already use and store NAOH caustic for other purposes. Otherwise, the facility would need to construct a new NAOH caustic storage tank and ancillary piping and other associated equipment.

Soda Ash: For WGSs that may be installed to control emissions from SRU/TGUs, the caustic used in the WGS is made from soda ash, instead of NaOH. Soda ash is the common name for sodium carbonate (Na2CO3), a non-toxic, non-cancerous, and non-hazardous substance. Located on the MSDS for Na2CO3, the hazards ratings are as follows: health is rated 2 (moderate), flammability is rated 0 (none) and reactivity is rated 0 (none).

Based on the above information, additional use of caustic in a WGS would not cause or contribute to exceedances of any applicable hazards and hazardous materials significance thresholds.

3.4.4.4 Releases During Transport

3.4.4.4.1 Oxidation Catalyst

A typical oxidation catalyst system is not expected to require more than several hundred pounds of catalyst modules per year. As a result, delivery of catalyst modules can be accomplished in one truck trip. Based on their chemical properties, oxidation catalysts are not expected to pose significant adverse health or physical hazard impacts during use. Similarly, significant adverse hazards and hazardous materials impacts during use or transport of new catalysts to a facility or transport of spent catalysts for recycling are expected to be less than significant because of they do not pose adverse health or physical hazard impacts and, in the event of an accidental release, the modules would be easily contained and cleaned up.

3.4.4.4.2 Wet Gas Scrubber

Installation of a WGS would require deliveries of fresh caustic, either NaOH or soda ash. If an accidental release of caustic during transport occurs, potentially significant adverse hazards or hazardous materials impacts may be generated.

NaOH: Deliveries of NaOH (50 percent by weight) are typically made by tanker truck via public roads. The maximum capacity of one NaOH tanker truck is approximately 6,000 gallons. The projected consumption rates of NaOH are assumed to range from approximately 160 tons per year (T/Y) (0.44 tons per day (T/D)) to 1,228 T/Y (3.37 T/D) based on an analysis of WGS

for refineries in southern California (SCAQMD, 2008). Based on worst-case assumptions, an affected refinery would need up to an additional 32 truck trips of NaOH caustic per year[1]. Although some of the affected refineries currently receive NaOH caustic, it is likely that they receive shipments periodically throughout the year rather than on a daily basis. Therefore, it is unlikely that an affected refinery would require one delivery per day in addition to any existing deliveries of NaOH caustic, instead it is likely that NaOH deliveries would occur on more days per year. Operators of trucks that transport hazardous materials by public highway are required to comply with requirements described in 49 CFR §§ 173 and 177. Hazardous materials impacts during the transport of NaOH caustic are considered to be less than significant. Facilities affected by Rule 11-18 may also use WGS; the associated hazardous materials impacts are expected to be less than the worst case scenario analyzed above for petroleum refineries and are thus found to be less than significant.

Soda Ash: Additional soda ash and catalyst could be delivered to some of the affected facilities in the future, but no increase in transportation hazards is expected as none of these materials are considered to be hazardous.

Based on the above information, accidental releases of caustic during transport would not cause or contribute to exceedances of any applicable hazards and hazardous materials significance thresholds.

3.4.5 MITIGATION MEASURES

3.4.5.1 Baghouses

To reduce potential fire or explosion impacts from baghouses, the following mitigation measures are normally required by Air District permit conditions that typically specify that abatement equipment be properly installed, maintained, and operated in accordance with manufacturer's instructions.

HHM-1 Maintain a comprehensive dust control program, with hazard dust inspections, testing, housekeeping, and control initiatives.

HHM-2 Ground the filter elements using grounding wires, rods, etc., to prevent sparks that could be generated during cleaning.

HHM-3 Install additional explosion rupture panels and vent outdoors

HHM-4 If the collector filters are to be replaced the first procedure is to remove as much flammable or explosive dusts from the filters as possible. Reverse the exhaust fan's direction to maintain a low flow and prevent dust from returning to the hood. Clean the collector one section at a time allowing time for the dust to settle into the

[1] Annual NaOH deliveries are calculated based on one delivery truck holding 6,000 gallons per truck load. For example, 1,228 T/Y NaOH x 2,000 lbs/ ton = 2,465.000 lbs/yr x 1 gal NaOH @ 50%/12.77 lbs = 192,000 gal/year x 1 truck/6,000 gallons = 32 trucks/year

collection hopper. After several complete cleaning cycles a large portion of the dust will be ejected, which is expected to lower the exposure of the worker in handling the filter elements.

HHM-5 Perform all hot work (welding, acetylene cutting, grinding, etc.) away from the collector, if possible.

HHM-6 Ensure that power tools and impact hand tools (such as hammers, chippers, etc.) used by maintenance personnel that could present a sparking hazard are not used in high dust concentrations. When such work is being performed on the structure itself, make certain the dust concentrations within the enclosure are well below combustible levels.

HHM-7 Ensure adherence to National Fire Protection Agency (NFPA) standards including, but not limited to, NFPA 499, Recommended Practice for the Classification of Combustible Dusts and of Hazardous (classified) Locations for Electrical Installations in Chemical Process Areas

Implementing the above mitigation measures is expected to ensure that hazard and hazardous materials impacts would not exceed any applicable hazards and hazardous materials significance thresholds, therefore, hazards and hazardous materials impacts from baghouses are concluded to be less than significant.

3.4.5.2 Dry Electrostatic Precipitators

Research of dry ESPs over the last 20 years has shown that this type of air pollution control equipment is generally safe to use. However, to ensure that potential fire and explosion risks are less than significant, permit conditions may specify the following safety mitigation measures.

HHM-8 Fire and explosion risks can be reduced by equipping dry ESPs with CO sensors that send a signal to a safety system to stop the process when CO concentrations exceed the critical limit. This solution reduces the risk dramatically.

HHM-9 Modern digital electronic controls shall be used to automate this process to assure the dry ESP operates at peak performance levels at all times.

HHM-10 The bottom and top of each wire should be covered with shrouds to help minimize sparking and metal erosion at these points.

HHM-11 To further reduce fire and explosion hazards, affected refinery operators shall establish the inspection frequency of all dry ESP components through a formal in-house maintenance procedure. Vendors' recommendations for an inspection schedule shall be followed and shall include at a minimum, the following procedures.

Daily: On a daily basis operation of hoppers and ash removal system should be checked; the control room ventilation system should be examined; any abnormal

arcing in the ESP enclosure and ducts (typically caused by broken wires, which may swing freely causing shorting between discharge and collector electrodes) should be investigated; and electrodes should be checked.

Weekly: Air filters should be checked and cleaned on a weekly or more frequently.

Semianually: On a semiannual basis the operator should check the exterior for visual signs of deterioration, and abnormal vibration, noise, or leaks.

Implementing the above mitigation measures is expected to ensure that hazard and hazardous materials impacts would not exceed any applicable hazards and hazardous materials significance thresholds, therefore, hazards and hazardous materials impacts from dry ESPs are concluded to be less than significant.

3.4.5.3 Remaining Impacts

With the exception of baghouses and dry ESPs, the hazard impacts associated with the installation of air pollution control equipment under Rule 11-18 are expected to be less than significant without mitigation. For baghouses and dry ESPs, feasible mitigation measures pursuant to CEQA Guidelines §15126.4 have been identified and are described in Chapter 3.4.5.1 and 3.4.5.2. The hazard impacts under implementation of Rule 11-18 are expected to be less than significant following mitigation.

3.4.6 CUMULATIVE IMPACTS

As concluded in the above hazards and hazardous materials analysis, installation of most types of air pollution control equipment, if required in the future, is not expected to cause or contribute to significant adverse hazard impacts, with the exception of baghouses or dry ESPs. As a result, feasible mitigation measures pursuant to CEQA Guidelines §15126.4 have been identified and were described. Implementing the mitigation measures identified in Sections 3.4.5.1 and 3.4.5.2 is expected to reduce significant adverse hazards and hazardous materials impacts to less than the applicable hazards and hazardous materials significance thresholds. Therefore, overall hazards and hazardous materials impacts, including accidental releases of hazardous materials during transport, were concluded to be less than significant. Because hazards and hazardous materials impacts do not exceed the applicable hazards and hazardous materials significance thresholds, they are not considered to be cumulatively considerable (CEQA Guidelines §15064 (h)(1)) and, therefore are not expected to generate significant adverse cumulative hazards and hazardous materials impacts.

CHAPTER 3.5

HYDROLOGY AND WATER QUALITY

Introduction
Environmental Setting
Regulatory Setting
Significance Criteria
Hydrology and Water Quality Impacts
Mitigation Measures
Cumulative Impacts

This page intentionally left blank

3.5 HYDROLOGY AND WATER QUALITY

This subchapter of the EIR evaluates the potential hydrology and water quality impacts associated with implementation of proposed Rule11-18. Rule 11-18 would reduce exposure to TAC emissions from a number of stationary sources within the Bay Area, including refineries.

As discussed in the Initial Study, implementation of proposed Rule 11-18 would reduce risk from facilities that emit toxic air contaminants throughout the Bay Area. Risk reduction measures are expected to be limited to new air pollution control equipment and construction of enclosures. The NOP/IS concluded that wet gas scrubbers were not expected to be used to control TACs; therefore, implementation of Rule 11-18 was not expected to result in a substantial increase in water use or wastewater discharge. However, public comments received on the NOP/IS indicated that wet gas scrubbers could be used to control TAC emissions from some sources, such as refinery FCCUs.

The NOP/IS determined that the potential flooding, flood hazards and increased stormwater runoff was less than significant as modifications would occur at existing facilities that have been graded and developed. Therefore, project-specific and cumulative adverse water demand and water quality impacts associated with implementation of proposed Rules 11-18 have been evaluated in Chapter 3.5 of this EIR. It should be noted that the NOP/IS concluded that the potential utilities and service system impacts were potentially significant due to an increase in water demand. The EIR consolidated the potential water demand impacts on both hydrology and water quality and utilities and service systems in this Subchapter 3.5

3.5.1 ENVIRONMENTAL SETTING

3.5.1.1 Regional Hydrology

The state of California is divided into ten hydrologic regions corresponding to the state‘s major water drainage basins. The hydrologic regions define a river basin drainage area and are used as planning boundaries, which allows consistent tracking of water runoff, and the accounting of surface water and groundwater supplies. The Air District is within the San Francisco Bay Hydrologic Region (Bay Region) which includes all of San Francisco County and portions of Marin, Sonoma, Napa, Solano, San Mateo, Santa Clara, Contra Costa, and Alameda counties. It occupies approximately 4,500 square miles; from southern Santa Clara County to Tomales Bay in Marin County; and inland to near the confluence of the Sacramento and San Joaquin rivers at the eastern end of Suisun Bay. The eastern boundary follows the crest of the Coast Ranges, where the highest peaks are more than 4,000 feet above mean sea level (DWR, 2013).

Some water agencies in the region have imported water from the Sierra Nevada for nearly a century to supply their customers. Water from the Mokelumne and Tuolumne rivers accounts for about 38 percent of the region’s average annual water supply. Water from the Sacramento-San Joaquin Delta (Delta), via the federal Central Valley Project (CVP) and the State Water Project (SWP), accounts for another 28 percent. Approximately 31 percent of the average annual water supply is from local groundwater and surface water, and 3 percent is from miscellaneous

sources such as harvested rainwater, recycled water, and transferred water. Population growth and diminishing water supply and water quality have led to the development of local surface water supplies, recharge of groundwater basins, and incorporation of conservation guidelines to sustain water supply and water quality for future generations (DWR, 2013).

The San Francisco Bay estuary system is one of the largest in the country and drains approximately 40 percent of the state's surface water from the Sierra Nevada and the Central Valley. The two major drainages, the Sacramento and San Joaquin Rivers, receive more than 90 percent of runoff during the winter and spring months from rainstorms and snow melt. Water from these drainages flows into what is known as the Delta region, then into the sub-bays, Suisun Bay and San Pablo Bay, and finally into the Central Bay and out the Golden Gate. Nearly half of the surface water in California starts as rain or snow that falls within the watershed and flows downstream toward the Bay. Much of the water flowing toward the Bay is diverted for agricultural, residential, and industrial purposes as well as delivery to distant cities of southern California as part of state and federal water projects (ABAG, 2017).

San Francisco Bay encompasses approximately 1,600 square miles and is surrounded by the nine Bay Area counties, of which seven border the Bay. San Francisco Bay is partially enclosed and is relatively shallow, with a median depth of approximately 12 feet (USGS, 2007). Based on mean sea level; median depth varies from roughly 8 feet in San Pablo Bay to 36 feet in the central area of the Bay near the Golden Gate. Much of the perimeter of the Bay is shallow tidal mud flats, tidal marshes, diked or leveed agricultural areas, and salt ponds. The north lobe of San Francisco Bay is brackish and is known as San Pablo Bay. It is surrounded by Marin, Sonoma, Napa, and Solano counties. Suisun Marsh is between San Pablo Bay and the Delta and is the largest contiguous brackish marsh on the West Coast of North America, providing more than 10 percent of California's remaining natural wetlands. The south and central lobes of San Francisco Bay are saltier than San Pablo Bay, as the marine influence dominates (DWR, 2013, ABAG 2017).

3.5.1.2 Surface Water Hydrology

The California Department of Water Resources (DWR) has grouped the watersheds in the Bay Region into six principal watersheds. These watersheds drain into Suisun Bay, San Pablo Bay, North San Francisco Bay, South San Francisco Bay, or directly into the Pacific Ocean. Large streams such as the Guadalupe River and Coyote and Alameda creeks, drain from the Coast Ranges and generally flow northwest into San Francisco Bay. The Alameda Creek watershed is the largest in the region at nearly 700 square miles. The Napa River originates in the Mayacamas Mountains at the northern end of Napa Valley and flows south into San Pablo Bay. Sonoma Creek begins in mountains within Sugarloaf State Park, then flows south through Sonoma Valley into San Pablo Bay. The major watersheds of the San Francisco Bay hydrologic region are summarized in Table 3.5-1.

TABLE 3.5-1

Watersheds of the San Francisco Bay Hydrologic Region

LOCATION	WATERSHED
North Bay	Corte Madera Creek Watershed
	Novato Creek Watershed
	Petaluma River Watershed
	Sonoma Creek Watershed
	Napa River Watershed
	Marin and North Bay Coastal Drainages(1)
Suisun Bay	GreenValley/Suisun Creeks watersheds
	Walnut Creek Watershed
	San Pablo/Wildcat Creeks Watersheds
	Suisun Bay Drainages(2)
East Bay	San Leandro Creek Watershed
	San Lorenzo Creek Watershed
	Alameda Creek Watershed
	East Bay Drainages(3)
South Bay	Coyote Creek Watershed
	Guadalupe River Watershed
	West Santa Clara Valley Drainages(4)
Peninsula	San Francisquito Creek Watershed
	San Mateo Creek Watershed
	San Mateo and Peninsula Coastal Drainages(5)

Source: ABAG, 2017

(1) Including Lagunitas Creek, Arroyo Corte Madera Creek, Miller Creek, etc.
(2) Including Sulphur Springs Creek, Laurel Creek, Mt. Diablo Creek, etc.
(3) Including Rodeo Creek, Cordonices Creek, Claremont Creek, Peralta Creek, Lake Merritt, etc.
(4) Including Stevens Creek, Permanente Creek, Saratoga Creek, etc.
(5) Including Cordilleras Creek, Colma Creek, Pilarcitos Creek, Pescadero Creek, San Gregorio Creek, etc.

The most prominent surface water body in the Bay Region is San Francisco Bay itself. Other surface water bodies include: creeks and rivers; ocean bays and lagoons (such as Bolinas Bay and Lagoon, Half Moon Bay, and Tomales Bay); urban lakes (such as Lake Merced and Lake Merritt); and human-made lakes and reservoirs (such as Lafayette Reservoir, Briones Reservoir, Calaveras Reservoir, Crystal Springs Reservoir, Kent Lake, Lake Chabot, Lake Hennessey, Nicasio Reservoir, San Andreas Lake, San Antonio Reservoir, San Pablo Reservoir, Upper San Leandro Reservoir, Anderson Reservoir, and Lake Del Valle).

3.5.1.2 Groundwater

A groundwater basin is an area underlain by permeable materials capable of storing a significant amount of water. Groundwater basins are closely linked to local surface waters. As water flows from the hills toward the Bay, it percolates through permeable soils into the groundwater basins. The nine-county Bay Area contains a total of 28 groundwater basins. The ten primary

groundwater basins are the Petaluma Valley, Sonoma Valley, Suisun-Fairfield Valley, San Joaquin Valley, Clayton Valley, Diablo Valley, San Ramon Valley, Livermore Valley, and Santa Clara Valley basins. Groundwater in the Bay Area is used for numerous purposes, including municipal and industrial water supply; however, groundwater use accounts for only about five percent of the total water usage.

3.5.1.3 Water Quality

The San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) is the lead agency charged with protecting and enhancing surface water and groundwater quality in the Bay Area. SFBRWQCB implements the Total Maximum Daily Load (TMDL) Program, which involves determining a safe level of loading for each problem pollutant, determining the pollutant sources, allocating loads to all of the sources, and implementing the load allocations. SFBRWQCB is taking a watershed management approach to runoff source issues, including TMDL implementation, by engaging all affected stakeholders in designing and implementing goals on a watershed basis to protect water quality.

The SFBRWQCB monitors pollutants through its Regional Monitoring Program; develops management strategies; and implements actions, including pollution prevention. San Francisco Bay and a number of the streams, lakes, and reservoirs in the Bay Region have elevated mercury levels, as indicated by elevated mercury levels in fish tissue. The major source of the mercury is local mercury mining and mining activities in the Sierra Nevada and coastal mountains. Large amounts of contaminated sediments were discharged into the Bay from Central Valley streams and local mines in the region. Significant impaired water bodies include the Bay, the Guadalupe River in Santa Clara County (from New Almaden Mine), and Walker Creek in Marin County (from Gambonini Mine). Consequently, the SFBRWQCB has adopted TMDLs for mercury in the Bay, Guadalupe River, and Walker Creek. Wastewater treatment plants and urban runoff also are a source of mercury, and some wetlands may contain significant amounts of methylmercury (the bioavailable form of mercury in the aquatic environment) from contaminated sediments (DWR, 2013).

San Francisco Bay is a nutrient-enriched (nitrogen and phosphorus) estuary, but has not suffered from some of the problems found in other similar estuaries with high nutrient concentrations. Dissolved oxygen concentrations in the Bay's subtidal habitats are much higher, and phytoplankton levels are substantially lower than expected in an estuary with such high nutrient enrichment. The phytoplankton growth is limited by strong tidal mixing, reduced sunlight due to high turbidity, and grazing clams (DWR, 2013).

Since the late 1990s, the Bay has experienced significant increases in phytoplankton biomass from Suisun Bay to the South Bay (30 to 105 percent) and significant declines in dissolved oxygen concentrations (2 to 4 percent). Also, cyanobacteria and dinoflagellate (red tide) blooms are occurring in portions of the Bay. The SFBRWQCB is working collaboratively with stakeholders to evaluate the impacts of nutrients on water quality and to develop a regional nutrient management strategy (DWR, 2013).

The rate and timing of freshwater inflows are among the most important factors influencing the physical, chemical, and biological conditions in San Francisco Bay. Retaining adequate freshwater inflows to the Bay is critical to protect migrating fish and estuarine habitat. Adequate inflows are necessary to control salinity, to maintain proper water temperature, and to flush out residual pollutants that cannot be eliminated by treatment or source management.

The Sacramento and San Joaquin Rivers flow into the eastern end of Suisun Bay, contributing most of the freshwater inflows to the bay. Many small rivers and streams also contribute fresh water. Much of the fresh water is impounded by upstream dams and is diverted to various water projects, which provide vital water to industries, farms, homes, and businesses throughout the state. The SFBRWQCB, the Central Valley Regional Water Quality Control Board, the SWRCB, and other stakeholders are working to improve Bay water quality by finding solutions to complex diversion issues. These agencies have formed the Bay-Delta Team to implement a long-term program that addresses impacts to beneficial uses of water in the bay and the Delta (DWR, 2013).

Another water quality issue in the Bay Region is from stream channel erosion. An excess of sediment can be conveyed downstream, which leads to loss of riparian habitat and loss of spawning habitat for native salmonids. Stream erosion is accelerated by urbanization and additional impervious surfaces, land use conversion, rural development, and grazing. Many watersheds in the region are impaired by excessive sedimentation, a lack of large woody debris, and a lack of spawning gravels. The SFBRWQCB addresses these issues through its stormwater program, which regulates construction activities and controls erosion from developments; through working with flood control agencies on stream maintenance; and through its TMDL program, which sets load limits for discharge from sources such as roads, confined animal facilities, vineyards, and grazing lands. The SFBRWQCB also directs technical assistance and grant funding to locally managed watershed programs working on restoration projects and education and outreach efforts (DWR, 2013).

3.5.1.4 Water Supply and Demand

The following water agencies serve the majority of the water demands in the Bay Area Region:

- Alameda County Water District (ACWD)
- Bay Area Water Supply and Conservation Agency (BAWSCA)
- Contra Costa Water District (CCWD)
- East Bay Municipal Utility District (EBMUD)
- Marin Municipal Water District (MMWD)
- City of Napa Water Department
- San Francisco Public Utilities Commission (SFPUC)
- Santa Clara Valley Water District (SCVWD)
- Solano County Water Agency (Solano CWA)
- Sonoma County Water Agency (Sonoma CW)
- Zone 7 Water Agency (Zone 7)

The Bay Area relies on imported water, local surface water, and groundwater for water supply. Local supplies account for about 30 percent of the total, and the remaining supply is imported from the State Water Project (SWP), Central Valley Project (CVP), and the Mokelumne and Tuolumne watersheds. In 2010, demand in the region was 1,278,480 acre-feet per year (af/yr)[1]. Demand is projected to grow to 1,680,963 af/yr in a normal year, and 1,666,870 af/yr in a single dry year by 2035 (see Table 3.5-2) (DWR, 2013).

TABLE 3.5-2

Summary of Bay Area Region Water Supply and Demand

		Projected				
	Current	**Normal Year**		**Single Dry Year**		**Multiple Dry Year**
	2010	2020	2035	2020	2035	Worst Case
Population(1)	7,331,716	8,231,905	9,186,676	8,231,905	9,186,676	
Supply (AFY)	1,475,595	1,719,535	1,793,699	1,522,959	1,563,757	1,073,975
Demand (AFY)	1,278,480	1,534,534	1,680,963	1,517,778	1,666,870	1,197,143
Difference (AFY)	197,115	185,001	112,736	5,181	-103,113	-123,168

Source: IRWMP, 2013
Note: (1) Does not include Sonoma CWA

Some water agencies in the region have imported water from the Sierra Nevada for nearly a century to supply customers. EBMUD and SFPUC import surface water into the Bay Region from the Mokelumne and Tuolumne rivers via the Mokelumne and Hetch Hetchy aqueducts, respectively. Water from these two rivers accounts for approximately 38 percent of the average annual water supply in the Bay Area. Water from the Sacramento-San Joaquin Delta (Delta), via the federal CVP and the SWP, accounts for another 28 percent. Approximately 31 percent of the average annual water supply in the Bay Area comes from local groundwater and surface water; and three percent is from miscellaneous sources such as harvested rainwater, recycled water, and transferred water. Reservoirs in the region capture runoff to augment local water supplies and to recharge aquifers. Some reservoirs store water at the terminus of constructed aqueducts, such as the Santa Clara Terminal Reservoir at the terminus of the South Bay Aqueduct.

Many Bay Region residents get their water from local streams. In the South Bay, local streams supply water to the SFPUC, San Jose and other cities in Santa Clara County, cities in Alameda County, and to small developments in the surrounding mountains. The Alameda County Water District, Zone 7 Water Agency (Zone 7) and SCVWD recharge their groundwater basins with local streams, as well as with deliveries from the SWP and the CVP. Local streams also play a large role in the North Bay, providing a majority of the water supply for Marin and Napa counties. Population growth and diminishing water supply and water quality have led to the development of local surface water supplies, recharge of groundwater basins, and incorporation

1 One acre-foot of water is equal to approximately 325,851 gallons.

of conservation guidelines to sustain water supply and water quality for future generations (DWR, 2013).

Bay Area water agencies manage a diverse portfolio of water supplies, including groundwater, local surface water, Sierra Nevada water from the Mokelumne and Tuolumne rivers, Delta water from the SWP and the CVP, and recycled water. San Francisco Public Utilities Commission (SFPUC), East Bay Municipal Utility District (EBMUD), and Santa Clara Valley Water District (SCVWD) have critical water interties to deliver water between water systems during emergencies such as earthquakes and wildfires. SWP contractors and DWR established the Monterey Agreement in 1994 to improve water management flexibility and increase the reliability of SWP deliveries during periods of water shortage (DWR, 2013).

Historically, the Bay Area has experienced a significant increase in population with a minimal associated change in total water use. The Water Conservation Bill of 2009, or SBX7-7, provides the regulatory framework to support the statewide reduction in urban per capita water use. Each water retailer was required to determine and report its existing baseline water consumption and establish an interim target in their 2015 Urban Water Management Plan (UWMP) and a 2020 water use target. Although water wholesalers are not required to meet the targets outlined in SBX7-7, many Bay Area wholesalers implement conservation programs and policies both to ensure compliance with SBX7-7 and to ensure that long-term water supply reliability goals are met (San Francisco Bay Area IRWMP, 2013).

These demand management measures, combined with alternative resources and strategies, and regulatory requirements, are expected to allow Bay Area water agencies to continue to meet projected demand through 2035 in average years. However, in dry years all but four major agencies (Marin Municipal Water District, City of Napa, SFPUC and Zone 7) project a shortfall. Without strong local and regional planning, most Bay Area Region water agencies could experience future supply shortfalls in severe droughts. Supplies and demands of the Bay Area Region are summarized in Table 3.5-2 and show that supplies are adequate through 2035 except in dry year scenarios, in which a shortfall is projected (San Francisco Bay Area IRWMP, 2013).

3.5.1.5 Drinking Water Quality

Drinking water in the Bay Region ranges from high-quality Mokelumne and Tuolumne River water to variable-quality Delta water, which constitutes about one-third of the domestic water supply. Purveyors that depend on the Delta for all or part of their domestic water supply can meet drinking water standards, but still need to be concerned about microbial contamination, salinity, and organic carbon.

In 2013, the SWRCB completed a statewide report titled, “Communities that Rely on a Contaminated Groundwater Source for Drinking Water.” The report identified contaminated wells statewide that exceed a primary drinking water standard prior to any treatment or blending. In the Bay Region, 28 contaminated wells were identified that are used by 18 water systems. Most of the affected drinking water systems are small and often need financial assistance to construct a water treatment plant or another facility to meet drinking water standards. The most prevalent contaminants in the region are arsenic, nitrate, and aluminum (DWR, 2013).

3.5.1.6 Recycled Water

In the 1990s, a number of local agencies joined with the DWR and the United States Bureau of Water Reclamation to study the feasibility of using high-quality recycled water to augment water supplies and help the Bay-Delta ecosystem. This cooperative effort, known as the Bay Area Regional Water Recycling Program (BARWRP), produced a Master Plan for regional water recycling in 1999 for the five South Bay counties. Since then, local water agencies have built a number of projects consistent with BARWRP, and recycled water has come to be widely used in the Bay Area for a number of applications, including landscape irrigation, agricultural needs, commercial and industrial purposes, and as a supply to the area's wetlands. The 2006 Bay Area Integrated Regional Water Management Plan (IRWMP) identified 43 potential recycled water projects that could be implemented by the year 2020 (ABAG, 2017). The potential market for recycled water is estimated to be 240,000 acre-feet per year by 2025. The region increased its recycled water use over 36 percent, from 29,500 af in 2001 to 40,300 af in 2009 (DWR, 2013). The largest use of recycled water is for landscape irrigation, including golf courses, wetlands, industrial uses, and agricultural irrigation.

3.5.1.7 Wastewater Treatment

Wastewater is generated by residential, commercial and industrial sources throughout the Bay Area. The Clean Water Act requires treatment of wastewater for the protection of human health and receiving water bodies and preservation of the health of aquatic and riparian species. Wastewater treatment facilities consist of staged processes with the specific treatment systems authorized through NPDES permits. Primary treatment generally consists of initial screening and clarifying. Primary clarifiers are large pools where solids in wastewater are allowed to settle out. The clarified water is pumped into secondary clarifiers and the screenings and solids are collected, processed through large digesters to break down organic contents, dried and pressed, and either disposed of in landfills or used for beneficial agricultural applications. Secondary clarifiers repeat the process of the primary clarifiers further, refining the effluent.

Other means of secondary treatment include flocculation (adding chemicals to precipitate solids removal) and aeration (adding oxygen to accelerate breakdown of dissolved constituents). Tertiary treatment involves the removal of nutrients and nearly all suspended organic matter from wastewater, and may consist of filtration, disinfection, and reverse osmosis technologies. Chemicals are added to the wastewater during the primary and secondary treatment processes to accelerate the removal of solids and to reduce odors. Chlorine is often added to eliminate pathogens during final treatment, and sulfur dioxide is often added to remove the residual chlorine. Methane produced by the treatment processes can be used as fuel for the plant's engines and electricity needs. Recycled water must receive a minimum of tertiary treatment in compliance with DHS regulations. Water used to recharge potable groundwater supplies generally receives reverse osmosis and microfiltration prior to reuse.

Wastewater treatment in the Bay Area is provided by various agencies as well as individual city and town wastewater treatments. Treated wastewater is generally discharged into a water body, evaporation pond or percolation basin, or used recycled for agriculture, irrigation or landscaping.

The U.S. EPA's NPDES permit program affects how a municipality handles its sanitary wastewater. Tertiary treatment is now commonly required for discharges to bodies of water, particularly where there is potential for human contact. Properly managed wastewater treatment systems play an important role in protecting community health and local water quality

3.5.2 REGULATORY SETTING

There are a variety of overlapping federal, state and local regulations that regulate water resources and water quality. A number of federal regulations (e.g., the Clean Water Act) are primarily implemented by state agencies with oversight from the U.S. EPA. This section summarizes the more pertinent federal, state and local regulations on water resources.

3.5.2.1 Federal Regulations

3.5.2.1.1 Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into "waters of the United States." The Act specifies a variety of regulatory and non-regulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. Some of these tools include:

- Section 303(d) – Total Maximum Daily Loads (TMDLs);
- Section 401 – Water Quality Certification;
- Section 402 – National Pollutant Discharge Elimination System (NPDES) Program; and.
- Section 404 – Discharge of Dredge or Fill Material.

Section 303(d) – Total Maximum Daily Loads (TMDLs): The CWA §303(d) requires the SWRCB to prepare a list of impaired water bodies in the state and determine total maximum daily loads (TMDLs) for pollutants or other stressors impacting water quality of these impaired water bodies. A TMDL is a quantitative assessment of water quality conditions, contributing sources, and the load reductions or control actions needed to restore and protect bodies of water in order to meet their beneficial uses. All sources of the pollutants that caused each body of water to be included on the list, including point sources and non-point sources, must be identified. The California §303 (d) list was completed in March 1999. On July 25, 2003, U.S. EPA gave final approval to California's 2002 revision of §303 (d) List of Water Quality Limited Segments. A priority schedule has been developed to determine TMDLs for impaired waterways. TMDL projects are in various stages throughout the Air District for most of the identified impaired water bodies. The Regional Water Quality Control Boards are responsible for ensuring that total discharges do not exceed TMDLs for individual water bodies as well as for entire watersheds.

Section 401 – Water Quality Certification: The RWQCBs coordinate the State Water Quality Certification program, or CWA §401. Under CWA §401, states have the authority to review any federal permit or license that will result in a discharge or disruption to wetlands and other waters under state jurisdiction to ensure that the actions will be consistent with the state's water quality requirements. This program is most often associated with CWA §404 which obligates the U.S. Army Corps of Engineers to issue permits for the movement of dredge and fill material into and from "waters of the United States."

Section 402 – National Pollutant Discharge Elimination System (NPDES) Program: Section 402: Section 402 regulates point-source discharges to surface waters through the National Pollutant Discharge Elimination System (NPDES) program. In California, the State Water Resources Control Board (State Water Board or SWRCB) oversees the NPDES program, which is administered by the RWQCBs. The NPDES program provides for both general permits (those that cover a number of similar or related activities) and individual permits. The NPDES program covers municipalities, industrial activities, and construction activities. The NPDES program includes an industrial stormwater permitting component that covers ten categories of industrial activity that require authorization under an NPDES industrial stormwater permit for stormwater discharges. The NPDES permit establishes discharge pollutant thresholds and operational conditions for industrial facilities and wastewater treatment plants. For point source discharges (e.g., wastewater treatment facilities), the RWQCBs prepare specific effluent limitations for constituents of concern such as toxic substances, total suspended solids (TSS), bio-chemical oxygen demand (BOD), and organic compounds.

Construction activities, also administered by the State Water Board, are discussed below under state regulations. Section 402(p) of the federal Clean Water Act, as amended by the Water Quality Act of 1987, requires NPDES permits for stormwater discharges from municipal separate storm sewer systems (MS4s), stormwater discharges associated with industrial activity (including construction activities), and designated stormwater discharges, which are considered significant contributors of pollutants to waters of the United States. On November 16, 1990, U.S. EPA published regulations (40 CFR Part 122), which prescribe permit application requirements for MS4s pursuant to CWA 402(p). On May 17, 1996, U.S. EPA published an Interpretive Policy Memorandum on Reapplication Requirements for Municipal Separate Storm Sewer Systems, which provided guidance on permit application requirements for regulated MS4s. MS4 permits include requirements for post-construction control of stormwater runoff in what is known as Provision C.3. The goal of Provision C.3 is for the Permittees to use their planning authorities to include appropriate source control, site design, and stormwater treatment measures in new development and redevelopment projects to address both soluble and insoluble stormwater runoff pollutant discharges and prevent increases in runoff flows from new development and redevelopment projects. This goal is to be accomplished primarily through the implementation of low impact development (LID) techniques.

Part 503: The Clean Water Act, Title 40 CFR Part 503 establishes requirements for the final use or disposal of sewage sludge (biosolids) when biosolids are: applied to land to condition the soil or fertilize crops other vegetation grown in the soil; placed on a surface disposal site for final disposal; or fired in a biosolids incinerator. The Part 503 Rule is designed to protect public

health and the environment from any reasonably anticipated adverse effects of certain pollutants and contaminants that may be present in biosolids.

3.5.2.1.2 Safe Water Drinking Act (SDWA)

Passed in 1974 and amended in 1986 and 1996, the SDWA gives the U.S. EPA the authority to set drinking water standards. Drinking water standards apply to public water systems, which provide water for human consumption through at least 15 service connections, or regularly serve at least 25 individuals. There are two categories of drinking water standards, the National Primary Drinking Water Regulations (NPDWR) and the National Secondary Drinking Water Regulations (NSDWR). The NPDWR are legally enforceable standards that apply to public water systems. NPDWR standards protect drinking water quality by limiting the levels of specific contaminants that can adversely affect public health and are known or anticipated to occur in water.

3.5.2.1.2 Section 10 of the Rivers and Harbors Act

Section 10 of the Rivers and Harbors Act, administered by United States Army Corp of Engineers (U.S. ACE), requires permits for all structures (such as riprap) and activities (such as dredging) in navigable waters of the U.S.

3.5.2.1.3 Executive Order 11990 – Protection of Wetlands

Executive Order 11990 is an overall wetlands policy for all agencies managing federal lands, sponsoring federal projects, or providing federal funds to state or local projects. Executive Order 11990 requires that when a construction project involves wetlands, a finding must be made by the federal agency that there is no practicable alternative to such construction, and that the proposed action includes all practicable measures to minimize impacts to wetlands resulting from such use.

3.5.2.1.4 Executive Order 11988 – Floodplain Management

Executive Order 11988 directs federal agencies to avoid to the extent practicable and feasible short- and long-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. Further, Executive Order 11988 requires the prevention of uneconomic, hazardous, or incompatible use of floodplains; protection and preservation of the natural and beneficial floodplain values; and consistency with the standards and criteria of the National Flood Insurance Program (NFIP).

3.5.2.1.5 National Flood Insurance Act

The U.S. Congress passed the National Flood Insurance Act (NFIA) in 1968 and the Flood Disaster Protection Act in 1973 to restrict certain types of development on floodplains and to provide for a national flood insurance program (NFIP). The purpose of these acts is to reduce the need for large, publicly funded flood control structures and disaster relief. The NFIP is a

federal program administered by the Flood Insurance Administration of FEMA. It enables individuals who have property (a building or its contents) within the 100-year floodplain to purchase insurance against flood losses. Community participation and eligibility, flood hazard identification, mapping, and floodplain management aspects are administered by state and local programs and support directorate within FEMA. FEMA works with the states and local communities to identify flood hazard areas and publishes a flood hazard boundary map of those areas. Floodplain mapping is an ongoing process in the Bay Area and flood maps must be regularly updated for both major rivers and tributaries as land uses and development patterns change.

3.5.2.2 State Regulations

3.5.2.2.1 Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act established the State Water Resources Control Board and divided the state into nine regions, each overseen by a RWQCB. The nine regional boards have the primary responsibility for the coordination and control of water quality within their respective jurisdictional boundaries. Under the Porter-Cologne Water Quality Control Act, water quality objectives are limits or levels of water quality constituents or characteristics established for the purpose of protecting beneficial uses. The Act requires the RWQCBs to establish water quality objectives while acknowledging that water quality may be changed to some degree without unreasonably affecting beneficial uses. Designated beneficial uses, together with the corresponding water quality objectives, also constitute water quality standards under the federal Clean Water Act. Therefore, the water quality objectives form the regulatory references for meeting state and federal requirements for water quality control.

Each RWQCB is required to prepare and update a Basin Plan for their jurisdictional area. Pursuant to the CWA NPDES program, the RWQCB also issues permits for point source discharges that must meet the water quality objectives and must protect the beneficial uses defined in the Basin Plan.

3.5.2.2.2 Construction General Permit

The California Construction Stormwater Permit (Construction General Permit), adopted by the State Water Resources Control Board, regulates construction activities that include clearing, grading, and excavation resulting in soil disturbance of at least one acre of total land area. Individual storm water NPDES permits are required for specific industrial activities and for construction sites greater than five acres. Statewide general storm water NPDES permits have been developed to expedite discharge applications. They include the statewide industrial permit and the statewide construction permit. A prospective applicant may apply for coverage under one of these permits and receive Waste Discharge Requirements (WDRs) from the appropriate RWQCB. WDRs establish the permit conditions for individual dischargers. The Stormwater Rule automatically designates, as small construction activity under the NPDES stormwater permitting program, all operators of construction site activities that result in a land disturbance of equal to or greater than one and less than five acres. Site activities that disturb less than one acre

are also regulated as small construction activity if they are part of a larger common plan of development or sale with a planned disturbance of equal to or greater than one acre and less than five acres, or if they are designated by the NPDES permitting authority. The NPDES permitting authority or U.S. EPA Region may designate construction activities disturbing less than one acre based on the potential for contribution to a violation of a water quality standard or for significant contribution of pollutants to waters of the United States.

The Construction General Permit authorizes the discharge of stormwater to surface waters from construction activities. The Construction General Permit requires that all developers of land where construction activities will occur over more than one acre to develop and implement a Stormwater Pollution Prevention Plan (SWPPP), which specifies Best Management Practices (BMPs) that will reduce pollution in stormwater discharges to the Best Available Technology Economically Achievable/Best Conventional Pollutant Control Technology standards; and, perform inspections and maintenance of all BMPs. Typical BMPs contained in SWPPPs are designed to minimize erosion during construction, stabilize construction areas, control sediment, control pollutants from construction materials, and address post construction runoff quantity (volume) and quality (treatment). The SWPPP must also include a discussion of the program to inspect and maintain all BMPs.

3.5.2.2.4 Drinking Water Standards

The California Safe Drinking Water Act, enacted in 1976, is codified in Title 22 of the CCR. The California Safe Drinking Water Act provides for the operation of public water systems and imposes various duties and responsibilities for the regulation and control of drinking water in the State of California including enforcing provisions of the federal Safe Drinking Water Act. The California Safe Drinking Water Program was originally implemented by the California Department of Public Health until July 1, 2014 when the program was transferred to the SWRCB via an act of legislation, SB 861. This transfer of authority means that the SWRCB has regulatory and enforcement authority over drinking water standards and water systems under Health and Safety Code §116271.

Potable water supply is managed through the following agencies and water districts: the California Department of Water Resources (DWR), the California Department of Health Services (DHS), the SWRCB, the U.S. EPA, and the U.S. Bureau of Reclamation. Water right applications are processed through the SWRCB for properties claiming riparian rights. The DWR manages the State Water Project (SWP) and compiles planning information on water supply and water demand within the state. Primary drinking water standards are promulgated in the CWA §304 and these standards require states to ensure that potable water retailed to the public meets these standards. Standards for a total of 88 individual constituents, referred to as Maximum Contaminant Levels (MCLs), have been established under the Safe Drinking Water Act as amended in 1986 and 1996. The U.S. EPA may add additional constituents in the future. The MCL is the concentration that is not anticipated to produce adverse health effects after a lifetime of exposure. State primary and secondary drinking water standards are codified in CCR Title 22 §§64431 - 64501. Secondary drinking water standards incorporate non-health risk factors including taste, odor, and appearance. The 1991 Water Recycling Act established water recycling as a priority in California. The Water Recycling Act encourages municipal wastewater

treatment districts to implement recycling programs to reduce local water demands. The DHS enforces drinking water standards in California.

3.5.2.2.4 California Department of Fish and Wildlife

The California Department of Fish and Wildlife is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. To meet this responsibility, the Fish and Game Code (Section 1602) requires an entity to notify the Department of any proposed activity that may substantially modify a river, stream, or lake. The notification requirement applies to any work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water.

3.5.2.2.5 Wastewater Treatment Regulations

The federal government enacted the CWA to regulate point source water pollutants, particularly municipal sewage and industrial discharges, to waters of the United States through the NPDES permitting program. In addition to establishing a framework for regulating water quality, the CWA authorized a multibillion dollar Clean Water Grant Program, which together with the California Clean Water Bond funding, assisted communities in constructing municipal wastewater treatment facilities. These financing measures made higher levels of wastewater treatment possible for both large and small communities throughout California, significantly improving the quality of receiving waters statewide. Wastewater treatment and water pollution control laws in California are codified in the CWC and CCR, Titles 22 and 23. In addition to federal and state restrictions on wastewater discharges, most incorporated cities in California have adopted local ordinances for wastewater treatment facilities. Local ordinances generally require treatment system designs to be reviewed and approved by the local agency prior to construction. Larger urban areas with elaborate infrastructure in place would generally prefer new developments to hook into the existing system rather than construct new wastewater treatment facilities. Other communities promote individual septic systems to avoid construction of potentially growth accommodating treatment facilities. The RWQCBs generally delegate management responsibilities of septic systems to local jurisdictions. Regulation of wastewater treatment includes the disposal and reuse of biosolids.

3.5.2.3 Local Regulations

3.5.2.3.1 McAteer-Petris Act/San Francisco Bay Conservation and Development Commission

The McAteer-Petris Act is a provision under California law that preserves San Francisco Bay from indiscriminate filling. The Act established the San Francisco Bay Conservation and Development Commission (BCDC) as the agency charged with preparing a plan for the long-term use of the Bay and regulating development in and around the Bay while the plan was being prepared. The San Francisco Bay Plan, completed in January 1969, includes policies on 18

issues critical to the wise use of the bay, ranging from ports and public access to design considerations and weather. The McAteer-Petris Act authorizes BCDC to incorporate the policies of the Bay Plan into state law. The Bay Plan has two features: policies to guide future uses of the Bay and shoreline, and maps that apply these policies to the bay and shoreline. BCDC conducts the regulatory process in accordance with the Bay Plan policies and maps, which guide the protection and development of the bay and its tributary waterways, marshes, managed wetlands, salt ponds, and shoreline.

3.5.2.3.2 General Plan Safety Elements

Government Code §65302, as amended (2007 Cal. Stat. 369) requires that on or after January 1, 2009, the updated safety elements of general plans must incorporate significantly enhanced geographic data, goals, and policies related to flood hazards. This enhanced assessment of flood hazards will include, but is not limited to: flood mapping information from multiple agencies including FEMA, the Army Corps of Engineers, the Office of Emergency Services, the Department of Water Resources, and any applicable regional dam, levee, or flood protection agencies; historical data on flooding; an inventory of existing and planned development (including transportation infrastructure) in flood zones; and new policies that comprehensively address existing and future flood risk in the planning area.

3.5.2.3.3 Other Local Regulations

In addition to federal and state regulations, cities, counties and water districts may also provide regulatory advisement regarding water resources. Many jurisdictions incorporate policies related to water resources in their municipal codes, development standards, storm water pollution prevention requirements, and other regulations.

3.5.3 SIGNIFICANCE CRITERIA

The proposed project impacts on hydrology and water quality would be considered significant if the following occurs:

Water Demand:

- The existing water supply does not have the capacity to meet the increased demands of the project, or the project would use more than 263,000 gallons per day of potable water.

Water Quality:

- The project will cause degradation or depletion of ground water resources substantially affecting current or future uses.

- The project will cause the degradation of surface water substantially affecting current or future uses.

- The project will result in a violation of NPDES permit requirements.

- The capacities of existing or proposed wastewater treatment facilities and the sanitary sewer system are not sufficient to meet the needs of the project.

3.5.4 ENVIRONMENTAL IMPACTS

As discussed previously, the NOP/IS (see Appendix A) found that implementation of Rule 11-18 could require more facilities to install new or modify their existing air pollution control equipment. Under Rule 11-18, if facilities exceed certain health risk limits, they would be required to make modifications to reduce the health risk associated with the facility which could include facility modifications, changes in operation, and/or modifications to existing or installation of new air pollution control equipment. Additional water demand and wastewater generation impacts are expected to result from the operation of several of the possible control technologies that would most likely be used (see Table 3.5-3).

3.5.4.1 Potential Water Demand Impacts

If any stationary sources are shown to exceed threshold limits for toxic air contaminants, it is expected that facility operators could install new, or modify their existing air pollution control equipment in order to reduce TAC emissions under Rule 11-18. Most air pollution control equipment does not use water or generate wastewater (see Table 3.5-3). However, additional water demand and wastewater generation impacts are expected to result from the operation of wet gas scrubbers which may be used for control of particulate TAC emissions (see Table 3.5-3).

TABLE 3.5-3

Potential Control Technologies and Potential Water Use and Wastewater Generation During Equipment Operations

Potential Control Technology	Uses Water?	Exceeds Threshold?	Generates Wastewater?	Exceeds Threshold?
Enclosures	No	No	No	No
Diesel Particulate Filters	No	No	No	No
Replace Old Diesel ICEs with New Diesel ICEs	No	No	No	No
Baghouse with HEPA Filters	No	No	No	No
Carbon Adsorption	No	No	No	No
Catalytic Oxidation	No	No	No	No
Thermal Oxidizer	No	No	No	No
Wet Gas Scrubber	Yes	No	Yes	Yes
Electrostatic Precipitator (Dry)	No	No	No	No
Electrostatic Precipitator (Wet)	Yes	No	Yes	No
Process Improvements(1)	No	No	No	No
Product Substitution	No	No	No	No
Enhanced Monitoring or Component Replacement	No	No	No	No

(1) Includes reduced throughput, reduced operating time, and stack modifications.

It is difficult to project water demand impacts from TAC control equipment for the following reasons. It is necessary to know the desired level of control to sufficiently reduce concentrations as appropriate. This in turn will determine the number of industrial facilities or refinery units that would need to be retrofitted with air pollution control equipment. It also necessary to know the size of the facilities/refinery unit, which affects exhaust flow rate calculated as dry cubic feet per minute at standard conditions, another necessary parameter used to calculate water demand. To maintain fresh solution, fresh water must be added periodically using either sump overflow or blowdown. In the sump overflow method fresh water is added through an adjustable flow meter at a continuous rate while the sump liquid overflows into the scrubber drain at a predetermined location. In the blowdown method, liquid is forced to drain by the recirculation pump. Regardless of the replenishing method used, it is necessary to know the flow rate necessary to maintain fresh solution. The rate of evaporation from the system must also be factored into the calculation of water demand impacts, which, at a minimum, requires knowing the operating

temperature and humidity. All of these factors require precise data from each facility operator for each piece of equipment, which is currently not available.

Demolition and construction activities to install air pollution control equipment have the potential to generate potential water demand and water quality impacts. For example, water is used during construction to reduce fugitive dust from any site preparation or grading activities. Potential water demand and water quality impacts during potential future construction activities will be evaluated in the subsections below.

Table 3.5-3 shows air pollution control equipment that would provide the best opportunities for obtaining further reductions of TAC emissions from stationary sources that would be regulated by Rule 11-18. As shown in Table 3.5-3, not all control technologies use water as part of the emission control process and, therefore, would not be expected to contribute to water demand or water quality impacts. These control technologies will not be considered further in this analysis. Analyses of water demand and water quality impacts from control equipment that do use water as part of the control process are provided in the following subsections.

3.5.4.1.1 Dust Suppression Associated with Construction Activities

Installation of some types of relatively small air pollution control equipment, e.g., new diesel ICE's and diesel particulate filters, are not expected to require site preparation activities because the equipment is generally not very large and could often be constructed onto existing foundations. In the event that some site preparation is necessary for these types of control technologies, plots would be small in area, thus, requiring little water for fugitive dust control. Therefore, little or no water for dust suppression purposes is expected to be needed for construction of diesel particulate filters, or the replacement of diesel ICEs with new diesel ICEs.

For large air pollution control equipment, e.g., ESPs, WGSs, etc., site preparation activities requiring water for dust control would likely be necessary for relatively larger areas. For example, it is assumed that one water truck per affected facility may be needed for dust suppression activities during the initial site preparation/earth moving to install large air pollution control equipment. One water truck used for dust control can hold approximately 6,000 gallons and it can be refilled over the course of the day if more than 6,000 gallons is needed. If one WGS (one of the largest types of potential air pollution control equipment that could be installed in response to future Regulation 11-18), a typical system could require an area of approximately 6,000 square feet. By applying one gallon of water per square foot of disturbed area, at a minimum of two times per day to minimize fugitive dust, the total amount of water expected to be used for dust suppression is approximately 12,000 gallons per day for each affected facility. This analysis assumes that all water used for dust suppression activities is potable water. It is likely that some affected facilities have access to reclaimed water supplies, which could be used instead of potable water for dust suppression activities. Finally, once construction is complete, water demand for fugitive dust control activities would cease. Construction activities for medium sized APCE would be expected to require about half the space (3,000 square feet) and about half the water use. The anticipated areas and water use requirements are summarized in Table 3.5-4.

TABLE 3.5-4

Estimated Water Use during Construction of Medium and Large Control Equipment

Air Pollution Control Equipment	Estimated Size of Grading (sq ft)	Estimated Water Needed for Dust Suppression (gal/day)
Refinery WGS	6,000	12,000
Non-Refinery WGS, Baghouses, ESPs	3,000	6,000
Enclosures	6,000	12,000
Overlapping Construction Activities		
Refinery WGS (3 Units)	18,000	36,000
Non-Refinery WGS, Baghouses, ESPs (10 Units)	30,000	120,000
Enclosures (3 Units)	18,000	36,000
Total	**-**	**192,000**
Significance Threshold	**-**	**263,000**
Significant?	**-**	**No**

3.5.4.1.2 Operation

Wet Electrostatic Precipitator

Installation of wet ESPs may occur under Rule 11-18 and would require additional water, which is used as part of the emission control process. Instead of clean water, it is likely that each affected facility operator would utilize strip sour water or similar existing treated waste process water from elsewhere within each facility. Because existing sources of wastewater, e.g., strip sour water or similar existing treated wastewater, could be used to operate a wet ESP, demand from installing new add-on control equipment would be minimal. In addition, as discussed in Subsection 3.5.4.2.2 below, wastewater from the wet ESP can be treated and recycled back to the wet ESP, further minimizing water demand impacts. Thus, the impacts of installing a wet ESP to comply with TAC emission reduction requirements pursuant to Regulation 11-18 on future water demand at an affected facility are not expected to exceed any applicable water demand significance thresholds and, therefore, are concluded to be less than significant.

Wet Gas Scrubber – Operation

A WGS removes particulates from the flue by using a liquid solution that can be regenerated. As a result, installation of a WGS would result in an increased demand for water at an affected facility. Water use for WGS was estimated by the SCAQMD for their amendments to rules 1401, 1401.1, and 1402 (SCAQMD, 2015a). Depending on the size of the WGS, water use was estimated to be between 2,786 gal/day and 15,286 gal/day. It is conservatively estimated that a maximum of 10 WGS of this size will be installed to comply with Rule 11-18. Thus, the maximum amount of water use is estimated to be 152,860 gal/day.

WGS could also be used to reduce TAC emissions at refineries, which would result in an increased demand for water. One wet ESP and one WGS were installed on the FCCU at the Phillips 66 Los Angeles Refinery to control sulfur oxide emissions, as well as PM10 and PM2.5 emissions. The environmental analysis for this project indicated that the expected water demand associated with the WGS was about 300 gallons per minute (432,000 gallons per day) (SCAQMD, 2007). WGS of this size are primarily designed for large emission sources (e.g., refineries and other large manufacturing facilities), but this technology can also be scaled down for use on smaller sources. The water demand from one new WGS of this size would exceed the CEQA significance threshold for water demand of 263,000 gallons per day. Air District staff has estimated that up to three WGS of this size may be installed to comply with Rule 11-18. If 10 smaller WGS and three large WGS were installed the total water usage could total a maximum of 1,448,860 gal/day, as summarized in Table 3.5-4. Therefore, operational impacts to water demand are considered to be significant.

TABLE 3.5-5

Estimated Operational Water Use of Wet Gas Scrubbers

Size of WGS	Estimated Operational Water Use (gal/day)
Refinery WGS (1 Unit)	432,000
Non-Refinery WGS (1 Unit)	2,786 - 15,286
Refinery WGS (3 Units)	1,296,000
Non-Refinery WGS (10 Units)	27,860 - 152,860
Maximum Daily Water Usage	**1,323,860 - 1,448,860**
Significance Threshold	**263,000**
Significant?	**Yes**

Conclusion

Based upon the above considerations, water demand impacts from installing most types of air pollution control equipment that use water as part of the control process would not create water demand impacts that exceed the applicable water demand significance thresholds. However, it is likely that water demand impacts from installing WGS, especially on large refinery equipment, would exceed applicable water demand significance thresholds and, therefore, water demand impacts are concluded to be significant.

3.5.4.2 Potential Water Quality Impacts

Increased demand for water from the various control technologies is limited to control technologies that use water (i.e., wet ESPs and WGS) and will be directly proportional to any increases in wastewater from affected facilities. However, as with quantifying water demand, there is insufficient information available to calculate the volumes of wastewater from control equipment for the following reasons. First, not all of the additional water demand generated by

installing air pollution control equipment would ultimately be discharged as wastewater. In addition, some proportion of the increased water demand would be emitted as steam or would evaporate during the control process. To determine the evaporation rate it is necessary to know the operating temperature and humidity in the vicinity of the equipment, which are currently unknown. In addition, wastewater discharge requirements under a facility's Industrial Wastewater Discharge Permit (IWDP) and current wastewater discharge rates need to be known. To the extent possible and based on available information, water quality impacts from air pollution control technologies that use water as part of the control process are evaluated in the following subsections

3.5.4.2.1 Construction Activities

Dust Suppression

Water used for dust suppression activities typically wets the top one to two inches of soil, evaporates and then forms a soil crust. As a result, this water does not flow into storm drains, sewers or other water collection systems and, therefore, water runoff from dust suppression activities would not be expected to occur and water quality impacts from dust suppression activities are concluded to be less than significant.

3.5.4.2.2 Operation

Wet ESPs

As noted above, an IWDP entitles affected facilities to discharge wastewater. Since additional water would be needed as part of the wet ESP's pollution control process to comply with potential future requirements, the proposed project could increase the wastewater generated by each affected facility. However, instead of clean water, it is likely that each affected facility operator would utilize strip sour water or similar existing treated waste process water from elsewhere within each facility.

Wastewater from the wet ESP is collected and flows into a sump where it is typically treated and recycled to minimize water demand and wastewater generated from the equipment. Once recycled, wastewater generated by the wet ESP can also be returned to the wet ESP, which further reduces the total amount of water required for air pollution control, as well as the amount of wastewater discharged into the sewer system. For some types of wet ESPs recirculation of treated water to the ESP may approach 100 percent (U.S. EPA, 2016a).

If wastewater from the wet ESP is recycled before being discharged, depending on the volume of the potential wastewater discharged, if it is not within the percent variation allowed by the local sanitation districts, each affected facility may need to apply for a revision to its IWDP or other wastewater discharge permits to accommodate any additional discharges to the sanitary sewer system. However, because existing sources of facility wastewater, e.g., strip sour water or similar existing treated waste process water, could be used to operate a wet ESP, additional wastewater generated from installing new add-on control equipment would be minimal. Using existing sources of wastewater could actually result in a net decrease in the amount of

wastewater discharged from the affected refinery. Thus, the impacts of installing a wet ESP to comply with potential future emission reduction requirements pursuant to Rule 11-18 on each affected facility's wastewater discharge volumes and their IWDPs are not expected to exceed any applicable water quality significance thresholds and, therefore, are concluded to be less than significant.

Wet Gas Scrubber

Water from a WGS can be treated and then recirculated back to the wet gas scrubber to be used again. Depending on a facility's wastewater treatment system, the rest of the effluent may be further treated and discharged to the sanitary sewer system. WGS are most likely to be used on large emission sources such as refinery units, gas turbines or other large industrial facilities that currently have wastewater discharges or wastewater treatment systems. Depending on the type of WGS, some water may be lost as steam. For these reasons, it is not expected that WGS wastewater would exceed a facility's current wastewater discharge limits, require changes to existing wastewater permit conditions, or require new wastewater permits. Refineries are large users of water, have large wastewater discharges, and have large wastewater treatment facilities. Other industrial facilities that would install WGSs would also be expected to be large facilities with existing IWDPs and existing wastewater treatment facilities. Changes to existing permit conditions would not likely be required and no violations of existing IWDPs, NPDES permits, or other wastewater permit limits are expected. Regardless of the facility, wastewater discharges from an industrial facility would be required to be discharged in compliance with applicable wastewater discharge permits. Therefore, water quality impacts from a WGS are not expected to exceed any applicable water quality significance thresholds, so water quality impacts during operation are concluded to be less than significant.

3.5.4.3 Conclusion

Based upon the above considerations, water quality impacts from installing most types of air pollution control equipment that use water as part of the control process would not exceed applicable water quality significance thresholds and, therefore, are concluded to be less than significant.

3.5.5 MITIGATION MEASURES

Because it was concluded that if large wet gas scrubber(s) are installed as a response to Rule 11-18, potential future water demand impacts from the proposed systems during operation would be significant, mitigation measures for water demand are required. Therefore, for any affected refinery that installs an air pollution control technology that increases demand for water, the following water demand mitigation measures will apply.

HWQ-1 When air pollution control equipment is installed and water is required for its operation, the facility is required to use recycled water, if available, to satisfy the water demand for the air pollution control equipment.

HWQ-2 In the event that recycled water cannot be delivered to the affected facility, the facility is required to submit a written declaration with the application for a Permit to Construct for the air pollution control equipment, to be signed by an official of the water purveyor indicating the reason(s) why recycled water cannot be supplied to the project.

3.5.5.2 Remaining Impacts

Because of the prevalence of drought conditions in Northern California, in spite of implementing the mitigation measures identified above, water demand impacts during operation of the proposed project remain significant, in part because there is currently no guarantee that reclaimed water will be available to all of the affected facilities. Therefore, the proposed project will remain significant after mitigation for water demand.

With regard to water quality, it was concluded that impacts would be less than significant, so no mitigation measures are required.

3.5.6 CUMULATIVE IMPACTS

In the above analyses of construction water demand and water quality it was concluded that impacts would be less than significant. Similarly, it was concluded that water quality impacts from the proposed project during operation would be less than significant. Therefore, because construction water quality and water demand impacts and operational water quality impacts were concluded to be less than significant, they are not considered to be cumulatively considerable (CEQA Guidelines §15064 (h)(1)) and, therefore are not expected to generate significant adverse cumulative impacts for these environmental topic areas.

In the above analysis of water demand impacts from the proposed project during operation it was concluded that installing WGS have the potential to generate significant adverse operational water demand impacts. Therefore, operational water demand impacts during operation of the proposed project are considered to be cumulatively considerable for implementation of Rule 11-18 (CEQA Guidelines §15064 (h)(1)).

In addition, the 2017 Clean Air Plan contains a total of 85 control measures that the District intends to impose to improve overall air quality in the District. Control measures in the 2017 Clean Air Plan included Rule 11-18 as well as a number of other control measures to control emissions from refineries as well as other stationary sources and transportation control measures. The 2017 Clean Air Plan is expected to result in overall reductions in VOC, NOx, SOx, and PM emissions, providing an air quality benefit (BAAQMD, 2017). The Final EIR for the 2017 Air Plan evaluated the potential hydrology and water quality impacts associated with implementation of the 85 control measures (including Control Measure SS20 Air Toxics Risk Cap and Reduction from Existing Facilities, which is proposed Rule 11-18) and concluded that the 2017 Plan could result in the installation of control equipment that would utilize water in excess of the water demand significance thresholds. Accordingly, stationary source control measures in the 2017 Plan may result in a cumulative considerable contribution to water demand. The impacts on wastewater treatment and water quality associated with the 2017 Plan does not include any

specifically identified actions that would result in any cumulatively considerable contributions to water treatment and water quality impacts.

CHAPTER 3.6

OTHER CEQA SECTIONS

Growth Inducing Impacts
Significant Environmental Effects Which Cannot Be Avoided And Significant Irreversible Environmental Changes
Potential Environmental Impacts Found Not to be Significant

This page intentionally left blank

3.6 OTHER CEQA SECTIONS

3.6.1 GROWTH INDUCING IMPACTS

#

3.6.1.1 Introduction

CEQA defines growth-inducing impacts as those impacts of a proposed project that "could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects, which would remove obstacles to population growth" (CEQA Guidelines §15126.2(d)).

To address this issue, potential growth-inducing effects are examined through the following considerations:

- Facilitation of economic effects that could result in other activities that could significantly affect the environment;
- Expansion requirements for one or more public services to maintain desired levels of service as a result of the proposed Project modifications;
- Removal of obstacles to growth, e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area or through changes in existing regulations pertaining to land development;
- Adding development or encroachment into open space; and/or
- Setting a precedent that could encourage and facilitate other activities that could significantly affect the environment.

3.6.1.2 Economic and Population Growth, and Related Public Services

The proposed rule would not directly foster economic or population growth or the construction of new housing in the Bay area. The proposed rule may require construction of air pollution control equipment or operational measures/modifications within the confines of the existing industrial facilities but would not be expected to involve new development outside of existing facilities. Therefore, it would not stimulate significant population growth, remove obstacles to population growth, or necessitate the construction of new community facilities that would lead to additional growth.

A project would directly induce growth if it would directly foster economic or population growth or the construction of new housing in the surrounding environment (e.g., if it would remove an obstacle to growth by expanding existing infrastructure). The proposed new rule would not remove barriers to population growth, as it involves no changes to General Plan, zoning ordinance, or related land use policy. The proposed new rule does not include the development of new housing or population-generating uses or infrastructure that would directly encourage

such uses. Therefore, proposed Rule 11-18 would not directly or indirectly trigger new residential development in the Air District.

Further, the proposed rule would not result in an increase in local population, housing, or associated public services (e.g. fire, police, schools, recreation, and library facilities) since the proposed rule would not result in an increase in workers or residents. Likewise, the proposed rule would not create new demand for secondary services, including regional or specialty retail, restaurant or food delivery, recreation, or entertainment uses. As such, the proposed rule would not foster economic or population growth in the surrounding area in a manner that would be growth-inducing.

3.6.1.3 Removal of Obstacles to Growth

The proposed new rule would not employ activities or uses that would result in growth inducement, such as the development of new infrastructure (i.e., new roadway access or utilities, such as wastewater treatment facilities) that would directly or indirectly cause the growth of new populations, communities, or currently undeveloped areas. Likewise, the proposed rules would not result in an expansion of existing public service facilities (e.g., police, fire, libraries, and schools) or the development of public service facilities that do not already exist.

3.6.1.4 Development of Encroachment Into Open Space

Development can be considered growth-inducing when it is not contiguous to existing urban development and introduces development into open space areas. The proposed rule may require additional air pollution control equipment and measures within the confines of existing facilities and existing industrial areas. New development outside of the boundaries of industrial facilities is not expected to occur. Therefore, the proposed rule would not result in development within or encroachment into an open space area.

3.6.1.5 Precedent Setting Action

Proposed Rule 11-18 would lead to further control of TAC emissions. Similar types of activities are currently required of refineries and other industrial facilities to comply with various regulatory requirements. Emissions of TACs are currently required to be reported and HRAs are required to be prepared under AB2588 for various industrial facilities. Proposed Rule 11-18 would reduce the acceptable health risk limits for stationary sources of emissions. However, the requirement for the preparation of emission inventories and HRAs already exists under state law. Establishing thresholds, reporting emission inventories, conducting HRAs, additional monitoring requirements, and installing air pollution control equipment to reduce health risks would not result in precedent-setting actions that might cause significant environmental impacts.

3.6.1.6 Conclusion

The proposed new rule would not be considered growth-inducing, because it would not result in an increase in production of resources or cause a progression of growth that could significantly affect the environment either individually or cumulatively.

3.6.2 SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED AND SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126.2(b) of the CEQA Guidelines requires that an EIR describe significant environmental impacts that cannot be avoided, including those effects that can be mitigated but not reduced to a less than significant level. As evaluated in the preceding portions of Chapter 3 of this EIR, proposed Rule 11-18 would result in potentially significant unavoidable impacts as identified in Table 3.6-1.

TABLE 3.6-1

IMPACTS IDENTIFIED AS POTENTIALLY SIGNIFICANT IN THIS EIR FOR IMPLEMENTATION OF RULE 11-18

POTENTIALLY SIGNIFICANT IMPACTS
Air Emission Impacts During Construction
GHG Impacts
Water Demand Impacts

3.6.3 POTENTIAL ENVIRONMENTAL IMPACTS FOUND NOT TO BE SIGNIFICANT

The environmental effects of proposed Rule 11-18 that may have potentially significant adverse effects on the environment are identified, evaluated, and discussed in detail in the preceding portions of Chapter 3 of this EIR and in the Initial Study (see Appendix A) per the requirements of the CEQA Guidelines (§§15126(a) and 15126.2). The potentially significant adverse environmental impacts as determined by the Initial Study (see Appendix A) include: air quality; greenhouse gas emissions; hazards and hazardous materials; hydrology and water quality; and water demand under utilities and service systems. The water demand impacts were determined to be significant under hydrology/water quality and utilities and services. To avoid repetition, the water demand impacts have been included under the hydrology and water quality impacts only. The analysis provided in the Initial Study has concluded that the following environmental topics would be less than significant: aesthetics; agriculture and forestry resources; biological resources; cultural resources; geology and soils; land use and planning; mineral resources; noise, population and housing; public services, recreation, transportation and traffic, and utilities and service systems (impacts other than water demand). The reasons for finding the environmental resources to be less than significant are explained below.

3.6.3.1 Aesthetics

Proposed Rule 11-18 would affect hundreds of facilities that cover a wide variety of industries and operations that emit toxic pollutants located throughout the Air District, including data centers, petroleum refineries, a cement kiln, gasoline dispensing facilities, hospitals, crematoria, etc. The proposed rule would require affected facilities to reduce the health risk they pose using various risk reduction measure and controls. The methods of control expected to be used to comply with Rule 11-18 are not expected to result in any aesthetic alterations of the facilities. Scenic highways or corridors are generally not located in the vicinity of these facilities.

The facilities affected by proposed Rule 11-18, including petroleum refineries, may need to install or modify air pollution control equipment or modify operations to implement risk reduction measures. However, it is unlikely that any of the changes would result in additional night-time operation that would require extra lighting. New light sources, if any, are not expected to be noticeable in residential areas. Most local land use agencies have ordinances that limit the intensity of lighting and its effects on adjacent property owners. Therefore, Rule 11-18 is not expected to have significant adverse aesthetic impacts to the surrounding community.

3.6.3.2 Agriculture and Forestry Resources

Proposed Rule 11-18 would affect hundreds of facilities that cover a wide variety of industries and operations located throughout the Air District, including data centers, petroleum refineries, a cement kiln, gasoline dispensing facilities, hospitals, crematoria, etc.

The facilities affected by Rule 11-18 are primarily located in industrial and commercial areas where agricultural or forest resources are generally not located. All construction associated with compliance with the Rule 11-18 is expected to occur on the premises of the affected facilities and would not result in the conversion of agricultural or forest lands, or involve land under Williamson Act contracts.

3.6.3.3 Biological Resources

The facilities affected by proposed Rule 11-18 are located in the Bay Area-Delta Bioregion (as defined by the State's Natural Communities Conservation Program). This Bioregion is comprised of a variety of natural communities, which range from salt marshes to chaparral to oak woodland.

Hundreds of facilities located throughout the Bioregion would be affected by proposed Rule 11-18. The facilities that would be affected by proposed rule are expected to be located in the commercial and industrial areas within the Bay Area. These commercial/industrial areas have been graded to develop various structures, and are typically surrounded by other commercial and industrial facilities. Native vegetation, other than landscape vegetation, has usually been removed from industrial facilities.

Similarly, modifications at existing facilities would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with native or resident or migratory

wildlife corridors, or impede the use of native wildlife nursery sites. Further, since proposed Rule 11-18 would primarily regulate stationary emission sources at commercial or industrial facilities, it does not directly or indirectly affect land use policy that may adversely affect riparian habitat or other sensitive natural communities identified in local or regional plans, policies, or regulations, or identified by the CDFW or U.S. Fish and Wildlife Service. Improving air quality is expected to provide health benefits to plant and animal species in the Air District, as well as humans.

3.6.3.4 Cultural Resources

Implementing proposed Rule 11-18 is primarily expected to result in controlling stationary source emissions at commercial or industrial facilities. Affected facilities are typically located in appropriately zoned commercial or industrial areas that have previously been graded and developed. Construction activities would be limited to areas within existing facilities boundaries, i.e., within areas that have already been graded and developed. Therefore, the proposed project is not expected to impact cultural resources, including historical and archaeological resources, either directly or indirectly, or disturb human remains.

3.6.3.5 Geology and Soils

The San Francisco Bay Area is a seismically active region, which is situated on a plate boundary marked by the San Andreas Fault System. Several northwest trending active and potentially active faults are included with this fault system. Under the Alquist-Priolo Earthquake Fault Zoning Act, Earthquake Fault Zones were established by the California Division of Mines and Geology along "active" faults, or faults along which surface rupture occurred in Holocene time (the last 11,000 years). In the Bay Area, these faults include the San Andreas, Hayward, Rodgers Creek-Healdsburg, Concord-Green Valley, Greenville-Marsh Creek, Seal Cove/San Gregorio and West Napa faults. Other smaller faults in the region classified as potentially active include the Southampton and Franklin faults.

The facilities affected by any Air District control equipment requirements are typically located in industrial or commercial areas, which are not typically located near known geological hazards. Implementation of Rule 11-18 will not directly expose people or structures to earthquake faults, seismic shaking, seismic-related ground failure including liquefaction, landslides, mudslides, or substantial soil erosion. New structures must be designed to comply with the California Building Code requirements since the Air District is located in a seismically active area. Construction activities would be limited to the confines of existing industrial facilities and will not require substantial grading. Therefore, significant adverse impacts to geology and soil are not expected to occur due to implementation of proposed Rule 11-18.

3.6.3.6 Land Use and Planning

The proposed Rule 11-18 is not expected to require any new substantial construction or development. New or modified pollution control equipment would be located within existing commercial or industrial facilities. Construction activities would be limited to the confines of existing facilities which are usually zoned for commercial or industrial land use. Modifications

are not expected to affect adjacent land uses, divide an established community, conflict with any applicable land use plan or policy or conflict with any habitat conservation plan. Therefore, significant adverse project-specific impacts to land use and planning are not expected to occur due to implementation of proposed Rule 11-18.

3.6.3.7 Mineral Resources

Rule 11-18 does not contain provisions that would directly result in the loss of availability of a known mineral resource of value to the region and the residents of the state, or of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. The proposed rule is not expected to deplete non-renewable mineral resources, such as aggregate materials, metal ores, etc., at an accelerated rate or in a wasteful manner because the risk reduction measures and related air pollution control equipment are typically not mineral resource intensive measures. Therefore, significant adverse impacts to mineral resources are not anticipated.

3.6.3.8 Noise

The existing noise environment at each of the affected facilities is typically dominated by noise from existing equipment onsite, vehicular traffic around the facilities, and trucks entering and exiting facility premises. No new major industrial equipment is expected to be required to be installed due to the proposed rule so that no noise impacts associated with the implementation of the proposed rule are expected. Air pollution control equipment is not generally a major noise source. Further, all noise producing equipment must comply with local noise ordnances and applicable OSHA and Cal/OSHA noise requirements. Therefore, industrial operations affected by the proposed new rule are not expected to have a significant adverse effect on local noise control laws or ordinances.

Construction activities associated with the proposed rule may generate some noise associated with temporary construction equipment and construction-related traffic. Construction would likely require truck trips to deliver equipment, a construction crew of workers, and construction equipment (e.g., forklift, welders, backhoes, cranes, and generators). All construction activities would be temporary are expected to occur within the confines of existing commercial or industrial facilities so that no significant increase in noise during construction activities is expected.

3.6.3.9 Population and Housing

The current population of the Bay Area is about seven million people and is expected to grow to about nine million people by 2035 according to the Association of Bay Area Governments (ABAG, 2007). The proposed rule is not anticipated to generate any significant effect, either directly or indirectly, on the Bay Area's population or population distribution as Rule 11-18 affect existing facilities located in predominantly industrial or commercial urbanized areas. It is expected that the existing labor pool will be sufficient to accommodate any requirements for modifications or increased demand for workers that might occur as a result of implementing the proposed rule. Furthermore, the proposed rule is not expected to require construction activities

that would displace people or existing housing as construction activities are expected to occur exclusively within the confines of existing industrial and commercial facilities. Thus, adopting Rule 11-18, would not induce substantial population growth.

3.6.3.10 Public Services

There is no potential for adverse public service impacts as a result of adopting proposed Rule 11-18 as it would not result in the need for new or physically altered government facilities to maintain acceptable service ratios, response times, or other performance objectives. Many of the affected industrial facilities have onsite security and fire protection personnel, so no increase in police or fire protection services is expected. Implementing the proposed rule would not cause a future population increase, thus it is not expected to affect land use plans, future development, or the demand for public facilities such as schools and parks.

3.6.3.11 Recreation

As discussed under "Land Use and Planning" and "Population and Housing," there are no provisions in the proposed rule that would affect land use plans, policies, ordinances, or regulations as land use and other planning considerations are determined by local governments. No land use or planning requirements, including those relating to recreational facilities, will be altered by Rule 11-18. The proposed rule does not have the potential to directly or indirectly induce population growth or redistribution. As a result, the proposed rule would not increase the use of, or demand for, existing neighborhood or regional parks or other recreational facilities nor require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

3.6.3.12 Transportation and Traffic

Any new or modified air pollution control equipment is expected to be located in commercial or industrial facilities and may require construction activities. Construction activities would be expected at existing commercial or industrial land uses and would be temporary. The proposed rule is not expected to require modification to circulation for temporary construction activities. Waste products may be generated from the use of several types of control technologies. Wastes could include: spent carbon generated from the carbon adsorption process; spent metal catalysts from the catalytic oxidation process; and dry solids from filtration controls. The majority of wastes will likely need to be transported to disposal or recycling facilities. The catalysts in catalytic oxidizers need to be replaced every few years so this potential waste product was considered to contribute to the waste transport impacts.

These facilities on any given day would generate an additional one-two truck trips per day in the entire Air District for delivery and disposal. This volume of additional daily truck traffic is negligible over the entire area of the Air District. The number of waste disposal transport trips substantially overestimates the number of anticipated trips because owners/operators at affected facilities may use other types of add-on control equipment and most are expected to limit throughput rates or operating times which would have no impact on traffic. No increase in worker traffic is expected as the operation of air pollution control equipment of the type expected

under the proposed rule is not expected to require any additional employees. Therefore, operational traffic under Proposed Rule 11-18 is expected to be less than significant.

Additionally, Rule 11-18 is not expected to result in any changes to air traffic patterns, the creation of hazardous intersections, result in inadequate emergency access, or conflict with adopted policies involving mass transit or non-motorized travel.

3.6.3.13 Utilities and Service Systems

The NOP/IS found that there were potentially significant impacts for utilities and service systems for water use and wastewater treatment. However, because these issues are specific to water, the associated potential impacts are discussed in Chapter 3.5 of the DEIR (hydrology and water quality).

No significant impacts are expected on solid waste disposal. Baghouses will generate solid waste, but they are not expected to require annual replacement events. The baghouses are only expected to generate a few tons of waste per change out. It is assumed that any hazardous material will be taken to the U.S. Ecology Beatty Nevada hazardous waste facility for treatment and disposal. U.S. Ecology, Inc. is currently receiving waste, and is in the process of extending the operational capacity for an additional 35 years (U.S. Ecology, 2015). Clean Harbors in Grassy Mountain, Utah is also available to receive hazardous waste and is expected to continue to receive waste for an additional 70 years (Clean Harbors, 2015). Additionally, the air pollution control equipment would be installed at already existing facilities and refineries, which have systems in place for processing and disposing solid and hazardous waste. Therefore, the proposed project impacts on solid waste and hazardous waste landfills are less than significant.

3.6.3.14 Tribal Cultural Resources

Tribal cultural resources were evaluated as part of the cultural resources in the NOP/IS for Rule 11-18. Some affected industrial and commercial facilities may have equipment older than 50 years. However, such equipment does not typically meet the criteria identified in CEQA Guidelines §15064.5(a)(3), are not listed or eligible for listing in the California Register of Historic Resources or a local register of historical resources (Public Resources Code Section 5020.1(k), and are not considered to have cultural value to a California Native American Tribe. Construction activities are expected to be limited to industrial and commercial facilities. For this reason, proposed Rule 11-18 is not expected to require physical changes to a site, feature, place, cultural landscape, sacred place or object with cultural value to a California Native American Tribe. Furthermore, the proposed rule would not be expected to result in a physical change to a resource determined to be eligible for inclusion or listed in the California Register of Historical Resources or included in a local register of historical resources. Any new development potentially affecting tribal resources would not be as a result of the proposed rule and approval of those projects including evaluation of their impacts on tribal resources would occur regardless of the adoption of proposed Rule 11-18.

As part of releasing this CEQA document for public review and comment, the document is circulated to the State Clearinghouse that provides notice of the proposed project to all California

Native American Tribes that requested to be on the Native American Heritage Commission's (NAHC) notification list per Public Resources Code § 21080.3.1(b)(1). The NAHC notification list provides a 30-day period during which a Native American Tribes may respond to the notice, in writing, requesting consultation on the proposed Rule amendments.

Since construction activities are expected to be limited to existing industrial and commercial facilities, the proposed rule would not adversely affect historical or tribal resources as defined in Public Resources Section 5020.1(k), or 5024.1. Therefore, no impacts to tribal resources are anticipated to occur as a result of proposed Rule 11-18.

CHAPTER 4

ALTERNATIVE ANALYSES

Discussion of Alternatives
Description of The Project Alternatives
Environmental Impacts of Project Alternatives
Environmentally Superior Alternative
Comparison of Alternatives

This page intentionally left blank

4.0 ALTERNATIVES ANALYSIS

4.1 DISCUSSION OF ALTERNATIVES

An EIR is required to describe a reasonable range of feasible alternatives to the proposed project that could feasibly attain most of the basic project objectives and would avoid or substantially lessen any of the significant environmental impacts of the proposed project (CEQA Guidelines §15126.6(a)). As discussed in Chapter 3 of this EIR the proposed project could result in potentially significant impacts to air quality during construction activities, GHG emissions, and hydrology (water demand) during project operation. Therefore, alternatives analysis should focus on alternatives that avoid or minimize these potentially significant impacts.

The objectives of proposed Rule 11-18: Toxic Risk Reduction are as follows:

1) Reduce the public's exposure to health risks associated with the emissions of TACs from stationary sources to the lowest levels achievable;
2) Incorporate the most up-to-date health risk methodologies and health values into the Air District's risk evaluation process for existing stationary sources of TACs;
3) Ensure the facilities that impact the most sensitive and overburdened communities reduce their associated health risk in an efficient and expeditious manner;
4) Provide the public opportunity to comment on the draft HRAs to provide transparency and clarity to the process; and
5) Provide the public opportunity to comment on risk reduction plans as they are drafted by the affected facilities.

Chapter 4 provides a discussion of alternatives to the proposed project as required by CEQA. According to the CEQA guidelines, alternatives should include feasible measures to attain the basic objectives of the proposed project and provide means for evaluating the comparative merits of each alternative. In addition, though the range of alternatives must be sufficient to permit a reasoned choice, they need not include every conceivable project alternative (CEQA Guidelines, §15126.6(a)). The key issue is whether the selection and discussion of alternatives fosters informed decision making and public participation.

In accordance with CEQA Guidelines §15126.6(c), a CEQA document should identify any alternatives that were considered by the lead agency, but were rejected as infeasible during the scoping process and briefly explain the reason underlying the lead agency's determination. Section 15126.6(c) also states that among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (1) failure to meet most of the basic project objectives; (2) infeasibility; or (3) inability to avoid significant environmental impacts.

The possible alternatives to the proposed rule are limited by the nature of the project. The proposed Risk Reduction Rule is designed to minimize health risks associated with facilities that emit TAC emissions through the approval and implementation of risk reduction plans or the application of the best available retrofit control technology for toxics (TBARCT) to significant sources of toxic emissions.

This Final EIR will evaluate Project Alternatives for Rule 11-18, including the "No Project Alternative" and additional alternatives deemed appropriate by Air District staff.

4.2 DESCRIPTION OF THE PROJECT ALTERNATIVES:

4.2.1 ALTERNATIVE 1 – NO PROJECT ALTERNATIVE

CEQA Guidelines §151216.6 (e) requires evaluation of a "No Project Alternative." Under the No Project Alternative, the proposed rule would not be adopted and, thus, the Air District would not establish risk actions levels of 10/M for cancer health risk and 1.0 for both acute and chronic hazard indices. Although, portions of the rule could be implemented under the Air District's AB 2588 – Air Toxics "Hot Spots" Program, such as incorporating the new OEHHA health risk assessment protocols and health risk values and conducting health risk screening analyses and health risk assessments. Facilities with a cancer health risk greater than 10/M or an acute or chronic hazard index greater than 1.0[1] would only have to notify all exposed persons of their exposure. Facilities with a cancer risk greater than 100/M or a hazard indices greater than 10 would have to both 1) notify exposed individuals, and 2) reduce the facility health risk below the risk action level in accordance to the Air District AB 2588 Program, California Health and Safety Code, §§44300-44394.[2]

4.2.2 ALTERNATIVE 2 – SET RISK ACTION LEVEL AT 25/M CANCER AND 2.5 HAZARD INDICES

Under Alternative 2, the Air District would establish risk action levels at 25/M for cancer risk and 2.5 for hazard indices instead of 10/M and 1.0 respectively. Further, the significant risk level for the compliance alternative for the application of TBARCT would be set at 5/M for cancer and 0.5 hazard indices or removed.[3] All other aspects of the proposed rule would remain in place, including the provisions for the two compliance options: developing a risk reduction plan or demonstrating that all significant sources of risk are controlled with TBARCT. Under this alternative, the scope of the project would be significantly reduced because the rule would not apply to those facilities with health risks that are less than 25/M for cancer or 2.5 for hazard indices. As a result, the number of facilities affected by the rule would be reduced by from approximately 386 to 36-39 – an order of magnitude reduction. Table 4-1 illustrates the estimated change in the air pollution control equipment requirements under Alternative 2.

[1] Health risks of 10/M cancer and 1.0 hazard indices are current action levels for notification under the Air District's AB 2588 Air Toxics "Hot Spots" Program.

[2] Health risks of 100/M cancer and 10.0 hazard indices are the current action levels for risk reduction under AB 2588. It should be noted that Air District staff did not identify any facilities with a preliminary health risks greater than these action levels.

[3] Without the TBARCT compliance option, the rule would be, in effect, an implementation of the AB 2588 program with lower risk action levels.

TABLE 4-1

Comparison of Air Pollution Control Equipment under Proposed Rule 11-18 and Alternative 2

Facility Type	Proposed Rule 11-18	Alternative 2 Rule 11-18
Enclosures	60	6
Diesel Particulate Filters	100	10
New ICEs	100	10
Baghouse with HEPA Filters	12	1-2
Carbon Adsorption	5	0
Catalytic Oxidization	10	1
Thermal Oxidizers	10	1
Non-Refinery Wet Gas Scrubbers	10	1
Refinery Wet Gas Scrubbers	3	1-3
ESPs	5	0
Process Improvements(1)	30	3
Product Substitution	10	1
Enhanced Monitoring/Component Replacement	7	1
TOTALS	**362**	**36-39**

The requirements of the rule under Alternative 2 would still apply to major sources of risk, such as refineries, cement manufacturing, and waste water treatment facilities; however, the level to which those facilities must reduce their health risk would be 25/M instead of 10/M. Under Alternative 2, the number of individuals that remain exposed to elevated health risk levels posed by these facilities would be much greater than that under the proposed project.

4.3 ENVIRONMENTAL IMPACTS OF PROJECT ALTERNATIVES TO RULE 11-18

4.3.1 ALTERNATIVE 1 – NO PROJECT ALTERNATIVE

4.3.1.1 Air Quality

Under the No Project Alternative, the proposed rule would not be adopted and, thus, the Air District would not establish risk actions levels of 10/M for cancer health risk and 1.0 for both acute and chronic hazard indices. Therefore, construction activities associated with installation of additional air pollution control equipment would be avoided. The construction activities associated with large air pollution control equipment, e.g., WGS, are potentially significant and this impact would not occur under the No Project Alternative. The potential beneficial impacts of the proposed project associated with additional risk and toxic emission reductions would not be realized under the No Alternative. Since the risk impacts of the affected facilities have not yet been determined, the amounts of risk and toxic emissions reductions that would not be realized

under the No Project Alternative are unknown. However, because there would be no construction emissions associated with the No Project Alternative, these impacts would be less than significant.

4.3.1.2 GHG Emissions

Under the No Project Alternative, the proposed rule would not be adopted and, thus, the Air District would not establish risk actions levels of 10/M for cancer health risk and 1.0 for both acute and chronic hazard indices. As a result, construction and operational activities associated with installation of additional air pollution control equipment would be avoided. Therefore, the GHG emissions associated with the No Project Alternative would be less than significant.

4.3.1.3 Hazards and Hazardous Materials

Under the No Project Alternative, the proposed rule would not be adopted and, thus, the Air District would not establish risk actions levels of 10/M for cancer health risk and 1.0 for both acute and chronic hazard indices. As a result, construction and operational activities associated with installation of additional air pollution control equipment would be eliminated. The hazards associated with the proposed project were determined to be potentially significant for the operations of baghouses and ESPs. Hazards impacts associated with the potential installation of this equipment were determined to be less than significant after mitigation.

Under the No Project Alternative, there would be no additional construction and operational activities and hazards and the additional use of hazardous materials associated with implementation of Rule 11-18 would be avoided. Therefore, hazards and hazardous materials impacts associated with the No Project Alternative would be less than significant.

4.3.1.4 Hydrology and Water Quality

Under the No Project Alternative, the proposed rule would not be adopted and, thus, the Air District would not establish risk actions levels of 10/M for cancer health risk and 1.0 for both acute and chronic hazard indices. As a result, construction and operational activities associated with installation of additional air pollution control equipment would be eliminated. Therefore, hydrology and water quality impacts associated with the No Project Alternative would be less than significant.

Under the No Project Alternative, there would be no additional construction and operational activities and the additional water use and wastewater discharged associated with implementation of Rule 11-18 would be avoided. Therefore, hydrology and water quality impacts associated with No Project Alternative would be less than significant.

4.3.2 ALTERNATIVE 2 – RISK ACTION LEVEL SET AT 25/M CANCER AND 2.5 HAZARD INDICES

4.3.2.1 Air Quality

Under Alternative 2, the Air District would establish risk action levels at 25/M for cancer risk and 2.5 for hazard indices instead of 10/M and 1.0 respectively. Further, the significant risk level for the compliance alternative for the application of TBARCT would be set at 5/M and 0.5 for hazard indices. Thus, there would be far fewer facilities that would be required to reduce their risk through the implementation of risk reduction measures and also fewer sources of risk that would have to be reduced. Therefore, construction activities associated with the installation of additional air pollution control equipment or implementation of risk reduction measures (such as increasing a stack's height or relocating equipment) would be less under Alternative 2. The estimated construction emissions under Alternative 2 are provided in Table 4-2.

TABLE 4-2

Estimated Construction Emissions Under Alternative 2 to Rule 11-18

ACTIVITY	ROG	CO	NOx	SOx	PM10	PM2.5
Construction Emissions Per Unit Under Rule 11-18 (lbs/day)						
Diesel ICE Replacements 1 ICEs	0.88	4.73	4.77	<0.01	1.02	1.00
Diesel ICE Retrofits 1 ICEs	0.27	1.32	2.36	<0.01	0.08	0.06
1 Non-Refinery WGS, Baghouse, or ESP	2.96	15.23	17.99	0.10	2.69	2.44
1 Carbon Adsorption Unit or Thermal Oxidizer	3.27	10.84	16.53	0.01	2.22	2.01
1 Enclosure	1.56	14.08	17.61	0.04	1.54	1.20
Refinery WGS	17	67	84	<1	39	23
Potential Overlapping Emissions	25.94	113.2	143.26	1.15	46.55	29.71
Significance Thresholds	54	None	54	None	82	54
Significant?	No	--	**Yes**	--	No	No
Potential Overlapping Construction Emissions Under Rule 11-18 (lbs/day)						
2 Diesel ICE Replacements	1.76	9.46	9.54	<0.01	2.04	2.00
2 Diesel ICE Retrofits	0.54	2.64	4.72	<0.01	0.16	0.12
3 Non-Refinery WGS, Baghouse, or ESP	8.88	45.69	53.97	0.3	8.07	7.32
1 Carbon Adsorption Unit or Thermal Oxidizer	3.27	10.84	16.53	0.01	2.22	2.01
2 Enclosures	3.12	28.16	35.22	0.08	3.08	2.40
3 Refinery WGSs	51	201	252	1	117	69
Alternative 2 Total Potential Overlapping Emissions (lbs/day)	68.6	297.8	372.0	1.41	132.6	82.9
Significance Thresholds	54	None	54	None	82	54
Significant?	**Yes**	**- -**	**Yes**	**--**	**Yes**	**Yes**
Proposed Project Estimated Construction Emissions	113.71	510.28	638.27	2.29	170.44	117.63

See Table 3.2-20 and Appendix B for further information.

As shown in Table 4-2, the construction activities under Alternative 2 would be less than the proposed project since less air pollution control equipment would be installed under Alternative 2. However, since the installation of large air pollution control equipment, e.g., refinery wet gas scrubbers may still be required, the construction emissions remain significant for ROG, NOx, PM10 and PM2.5 under Alternative 2.

The operational air quality impacts associated with the proposed rule were determined to be less than significant and the operational emissions under Alternative 2 would be less than under the proposed project (see Table 4-3). The potential beneficial impacts of the proposed rule associated with additional risk and emission reductions of TACs would also be less under Alternative 2. Since the precise need for risk and emission reductions has yet to be determined, the amounts of risk and emissions reductions that would not occur under Alternative 2 are unknown. However, the operational air quality impacts associated with Alternative 2 would remain less than significant.

TABLE 4-3

Estimated Criteria Pollutant
Operational Emissions Under Alternative 2 to Rule 11-18

ACTIVITY	ROG	CO	NOx	SOx	PM10	PM2.5
Operational Emissions Per Unit Under Rule 11-18 (lbs/day)						
Regenerating Spent Carbon	0.02	0.08	0.29	<0.01	0.02	0.02
Thermal Oxidizer	0.16	7.10	0.88	0.01	0.17	0.17
Caustic/Catalyst for WGS Unit Truck Trips	0.06	0.26	1.84	0.02	0.04	0.02
Alternative 2 Total Potential Overlapping Emissions	0.24	7.44	3.01	0.03	0.23	0.21
Significance Thresholds	54	None	54	None	82	54
Significant?	No	--	No	--	No	No
Potential Overlapping Construction Emissions Under Alternative 2 (lbs/day)						
Regenerating Spent Carbon	0	0	0	0	0	0
Thermal Oxidizer (1)	0.16	7.10	0.88	0.01	0.17	0.17
Caustic/Catalyst for WGS Unit Truck Trips (4)	0.24	1.04	7.36	0.08	0.16	0.08
Total Potential Overlapping Emissions	0.40	8.1	8.2	0.1	0.3	0.3
Significance Thresholds	54	None	54	None	82	54
Significant?	No	--	No	--	No	No
Proposed Project Estimated Operational Emissions	2.41	71.23	34.19	0.37	2.3	2.04

See Table 3.2-24 and Appendix B for further details.

4.3.2.2 GHG Emissions

Under Alternative 2, the Air District would establish risk action levels at 25/M for cancer risk and 2.5 for hazard indices instead of 10/M and 1.0 respectively. Further, the significant risk level for the compliance alternative for the application of TBARCT would be set at 5 or 2.5. Thus, there would be far fewer facilities that would be required to reduce their risk through the implementation of risk reduction measures and also few sources of risk that would have to be reduced. As a result, construction activities associated with installation of additional air pollution control equipment or implementation of risk reduction measures (such as increasing a stack's height or relocating equipment) would be less. As shown in Table 4-4 the GHG construction emissions under Alternative 2 would also expected to be less than the proposed project.

TABLE 4-4

Estimated Construction GHG Emissions Under Alternative 2 to Rule 11-18

ACTIVITY	CO_2e MT
Total Construction Emissions for 10 Diesel ICE Replacement	4
Total Construction Emissions for 10 Diesel ICE Retrofit	2
Total Construction Emissions for 3 Non-Refinery WGS, Baghouses, ESPs	267
Total Construction Emissions for 2 Carbon Adsorption Units, Thermal Oxidizers or Catalytic Oxidization Units	296
Total Construction Emissions for 6 Enclosures	1,914
Construction Emissions for 3 Refinery WGS	3,786
Alternative 2 Total Potential GHG Emissions	6,269
Alternative 2 Total Potential GHG Emissions (Amortized)(1)	209
Proposed Project Total Potential GHG Emissions (Amortized)	970

See Table 3.3-12 and Appendix B for further details.

Since less air pollution control equipment would be installed under Alternative 2, the operations' GHG emissions are expected to be less than that of the proposed rule (see Table 4-5) and are expected to be less than significant. The GHG emissions associated with the proposed rule were determined to be significant. Therefore, Alternative 2 would eliminate potentially significant GHG impacts associated with proposed Rule 11-18.

TABLE 4-5

Estimated Operational GHG Emissions Under Alternative 2 to Rule 11-18

ACTIVITY	CO_2e MT
Total Amortized Construction Emissions	209
Total Operational Emissions for 0 Carbon Adsorption Units	0
Total Operational Emissions 1 Thermal Oxidizers	455
Total Haul Truck Emissions for 4 WGS Units	96
Total Electrical Emissions for 4 WGS Units	6,415
Alternative 2 Total Potential Overlapping GHG Emissions	7,175
Significance Threshold	10,000
Significant?	No
Proposed Project GHG Emissions	20,936

See Table 3.3-18 and Appendix B for further details.

4.3.2.3 Hazards and Hazardous Materials

Under Alternative 2, the Air District would establish risk action levels at 25/M for cancer risk and 2.5 for hazard indices instead of 10/M and 1.0 respectively. Further, the significant risk level for the compliance alternative for the application of TBARCT would be set at 5 or 2.5. Thus, there would be fewer facilities that would be required to reduce their risk through the implementation of risk reduction measures and also fewer sources of risk that would have to be reduced. As a result, under Alternative 2, less air pollution control equipment would be installed.

The potential hazards associated with the construction and operation of baghouses and ESPs under the proposed project were potentially significant (prior to mitigation). Explosions can occur in baghouses when dust concentrations reach explosive limits. Hazards associated with dry ESPs include fire and explosion hazards that can occur at the inlet to ESPs when highly charged dust particles are transported by a gas that can contain the mixtures of both incombustible and combustible flue gases. Fewer baghouses (1-2 instead of 12) would be constructed and no ESPs are expected to be construction under Alternative 2. The hazard impacts associated with the use of baghouses would be less than significant with the proposed mitigation. Therefore, hazards impacts under Alternative 2 are expected to be less than the proposed project and less than significant after mitigation.

4.3.2.3 Hydrology and Water Quality

Under Alternative 2, the Air District would establish risk action levels at 25/M for cancer risk and 2.5 for hazard indices instead of 10/M and 1.0 respectively. Further, the significant risk level for the compliance alternative for the application of TBARCT would be set at 5 or 2.5. This would result in there being far fewer facilities that would be required to reduce their risk through the implementation of risk reduction measures and also fewer sources of risk that would have to be reduced. Under Alternative 2, water demand impacts under construction activities are

estimated to be about 63,000 gpd for the overlapping construction of three refinery WGSs, one non-refinery WGS, and two enclosures.

Under Alternative 2, less air pollution equipment would be operated. The estimated water use associated with equipment operation is provided in Table 4-6. The water use still would include the use of up to three refinery WGSs; therefore, water demand would remain significant under Alternative 2. Wastewater discharge would also be less under Alternative 2 as compared to the proposed project. Water quality impacts under the proposed project were considered to be less than significant. Therefore, water quality impacts associated with Alternative 2 would be expected to remain less than significant.

TABLE 4-6

Estimated Operational Water Use Under Alternative 2

Size of WGS	Estimated Operational Water Use (gal/day)
Non-Refinery WGS (1 Unit)	2,786 - 15,286
Refinery WGS (3 Units)	1,296,000
Alternative 2 Maximum Daily Water Use	1,298,786 – 1,311,286
Significance Threshold	263,000
Significant?	**Yes**
Proposed Project Maximum Daily Water Use	1,323,860 - 1,448,860

4.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Pursuant to CEQA Guidelines §15126.6(e)(2), if the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

4.4.1 ALTERNATIVE 1 – THE NO PROJECT ALTERNATIVE

Alternative 1 – the No Project Alternative would eliminate the potentially significant impacts associated with construction criteria pollutant and GHG emissions and water demand associated with the potential installation of additional air pollution control equipment to less than significant. The potential beneficial impacts of the proposed project associated with risk and emission reductions of TACs would also be eliminated under the No Project Alternative. Since the precise needs for risk and emission reductions have yet to be determined, the amount of emissions reductions that would not occur under Alternative 1 is unknown. Further, the No Project Alternative would achieve only two of the project objectives:

1) Incorporate the most up-to-date health risk methodologies and health values into the Air District's risk evaluation process for existing stationary sources of TACs; and

2) Provide the public opportunity to comment on the draft HRAs to provide transparency and clarity to the process.

4.4.2 ALTERNATIVE 2 – SET RISK ACTION LEVEL AT 25/M CANCER AND 2.5 HAZARD INDICES

The environmentally superior alternative is Alternative 2. Under Alternative 2, the Air District would establish risk action levels at 25/M for cancer risk and 2.5 for hazard indices instead of 10/M and 1.0 respectively. Further, the significant risk level for the compliance alternative for the application of TBARCT would be set at 5/M for cancer and 0.5 for hazard indices or removed. Under Alternative 2, the scope of the project would be reduced because Rule 11-18 would not apply to those facilities with health risks that lie between either 10/M and 25/M for cancer or 1.0 and 2.5 for hazard indices. Thus, the number of facilities affected by the rule would be reduced by from approximately 362 to 29-36 – an order of magnitude reduction. Alternative 2 would reduce the air quality, water demand, and GHG emission impacts associated with the proposed project. However, air quality impacts during construction and water demand impacts during operation would remain significant under Alternative 2. Alternative 2 would achieve most of the project objectives, including:

1) Incorporate the most up-to-date health risk methodologies and health values into the Air District's risk evaluation process for existing stationary sources of TACs;
2) Ensure the facilities that impact the most sensitive and overburdened communities reduce their associated health risk in an efficient and expeditious manner;
3) Provide the public opportunity to comment on the draft HRAs to provide transparency and clarity to the process; and
4) Provide the public opportunity to comment on risk reduction plans as they are drafted by the affected facilities.

4.5 COMPARISON OF ALTERNATIVES

Pursuant to CEQA Guidelines §15126.6(d), an EIR should include sufficient information about each alternative to allow meaningful comparison with the proposed project. Section 15126.6(d) also recommends the use of a matrix to summarize the comparison. Table 4-7 below provides these matrix comparisons. The CEQA document shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project (CEQA Guidelines §15126.6(d)). A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison. Table 4-7 lists the alternatives considered in this EIR and how they compare to proposed Rule 11-18 (proposed project). Table 4-7 presents a matrix that lists the significant adverse impacts associated with the proposed project and the project alternatives for all environmental topics analyzed. Table 4-7 also ranks each section as to whether the proposed project or a project alternative would result in greater or lesser impacts relative to one another.

TABLE 4-7

Comparison of Alternatives to Proposed Rule 11-18

Environmental Topic	Proposed Project	No Project Alternative	Alternative 2
Air Quality			
Air Quality Benefits	B	B(-)	B(-)
Air Quality Construction Impacts	S	NS(-)	S(-)
Air Quality Operational Impacts	NS	NS(-)	S(-)
Toxic Air Contaminants	NS/B	None	NS/B(-)
GHG			
GHG Impacts	S	NS(-)	NS(-)
Hazards & Hazardous Materials			
Hazard Impacts	MNS	NS(-)	MNS(-)
Hydrology / Water Quality			
Water Demand Impacts	S	NS(-)	S(-)
Water Quality Impacts	NS	NS(-)	NS(-)

Notes:
S = Significant
NS = Not Significant
MNS = Mitigated Not Significant
B = Beneficial impacts
(-) = Potential impacts are less than the proposed project.
(+) = Potential impacts are greater than the proposed project.
(=) = Potential impacts are approximately the same as the proposed project.

4.5.1 COMPARISON OF ALTERNATIVES TO RULE 11-18

Alternative 1 – No Project Alternative was determined to result in less than significant environmental impacts. Compared to the other project alternative, the No Project Alternative would not achieve the critical project objective of health risk reductions. It would achieve only two of the objectives of the proposed project (Rule 11-18): Objectives 2 and 4. Because the current risk action levels established by the Air Toxic "Hot Spots" Program would remain unchanged, this alternative would not result in any facilities having to reduce their health risk nor having to develop a risk reduction plan because preliminary analyses show that there are likely no facilities that would pose a health risk in excess of the current risk action levels of 100/M for cancer and 10 for hazard indices.

Alternative 2 was determined to reduce GHG emissions to less than significant, but would still result in significant air quality impacts during construction and water demand impacts during operation. Alternative 2 will achieve the critical project objectives of health risk reductions at some of the affected facilities (Objective 1) and expeditiously reduce health risk in impacted communities (Objective 3). This alternative would also achieve the remaining three objectives and is considered to be the environmentally superior alternative to the proposed project.

The proposed project has been demonstrated to be the most effective approach that achieves all of the project objectives relative to environmental impact generated. Mitigation measures have been developed to minimize the potential increase in construction emission, GHG emissions, and water demand, while providing the greatest public health benefit by reducing health risk from stationary sources to the greatest feasible extent. Therefore, the proposed project is the preferred alternative.

CHAPTER 5

REFERENCES

References
Organizations and Persons Consulted
List of Environmental Impact Report Preparers

This page intentionally left blank.

5.1 REFERENCES

Association of Bay Area Governments (ABAG), 2007. Projections 2007. Accessed March, 2017. http://abag.ca.gov/pubs/newsletter/SM-Jan-Feb07.pdf

ABAG, 2017. Plan Bay Area 2040. Draft Environmental Impact Report. April 2017. SCH#2016052041

BAAQMD, 2017. BAAQMD CEQA Air Quality Guidelines. Accessed August, 2017. http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en

BAAQMD, 2011. Page 3.1-2

BAAQMD, 2014. Bay Area Emission Inventory Summary Report: Criteria Air Pollutants Base Year 2011, May 2014.

BAAQMD, 2015. Bay Area Emission Inventory Summary Report: Greenhouse Gases, January 2015.

BAAQMD, 2016. Toxic Air Contaminant Air Monitoring Data for 2014. Provide by BAAQMD.

BAAQMD. 2016a. Initial Study/Negative Declaration for the Bay Area Air Quality Management District – BAAQMD Regulation 2, Rule 5 (Regulation 2-5): New Source Review of Toxic Air Contaminants, Appendix A. Accessed online at: http://www.baaqmd.gov/~/media/files/planning-and-research/public-hearings/2016/reg-2-rule-5/appendixe_0205_ceqa_negdec-pdf.pdf?la=en

BAAQMD, 2017. FEIR for the Draft 2017 Clean Air Plan: Spare the Air, Cool the Climate: A Blueprint for Clean Air and Climate Protection in the Bay Area. Accessed August, 2017. http://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en

California Air Pollution Control Officers Association (CAPCOA). 2016. California Emission Estimator Model (CALEEMOD) User's Guide, Version 2016.3.1, Appendix D - Default Data Tables. Accessed online at: http://caleemod.com/.

CARB and U.S. Environmental Protection Agency (EPA). 2009. Technical Bulletin: Diesel Particulate Filter General Information. Accessed online at: https://nepis.epa.gov/Exe/ZyNET.exe/P10073LX.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2006+Thru+2010&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C06thru10%5CTxt%5C00000017%5CP10073LX.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-

&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL

CARB, 2011. OFFROAD2011: 2011 Off-road Inventory Model. https://www.arb.ca.gov/msei/off-road-emissions-inventory-v3-scenpop-and-hp.mdb.

CARB, 2017. 2017 Edition California GHG Inventory for 2000-2015. www.arb.ca.gov/cc/inventory/data/data.htm

California Department of Water Resources (DWR), 2013. California Water Plan Update, 2013, Investing in Innovation and Infrastructure. Volume 2. Regional Reports, San Francisco Bay Hydrologic Region. Accessed July 19, 2016.http://www.water.ca.gov/waterplan/docs/cwpu2013/Final/Vol2_SanFranciscoBayRR.pdf

California Energy Commission, 2016. LPG Propane as a Transportation Fuel. Access July 22, 2016. www.consumerenergycenter.org/transportation/afvs/lpg_propane.html

Clean Harbors, 2015. Personal communication with Les Ashwood, Clean Harbors 435-884-8967, October 16, 2015.

Confuorto, N. and Sexton, J., 2007. Wet Scrubbing-based NOx Control Using Technology - First Commercial FCC Start-up. Accessed online at http://www.digitalrefining.com/article/1000812,Wet_scrubbing_based_NOx_control_using_LoTOx_technology___first_commercial_FCC_start_up.html#.WH-46oWcG4Q

Dalsanto, D., 2011. The Potential for Dust Explosions in Dust Collection Systems. Baghouse.com News, Dust Collection Blog, Dust Collector Maintenance, Operation & Optimization, Industrial Workplace Safety. Jan 19. at: http://www.baghouse.com/2011/01/the-potential-for-dust-explosions-in-dust-collection-systems/

Dorman, R. G., 1974. Dust Control and Air Cleaning. International Series of Monographs in Heating, Ventilation, and Refrigeration. Vol. 9. at: https://books.google.com/books?id=lZSjBQAAQBAJ&pg=PA198&lpg=PA198&dq=explosion+hazards+associated+with+dry+electrostatic+precipitators&source=bl&ots=Mlbtvg-Ojm&sig=vJIUsQjJCOsSI8ajzUGv36MUU8k&hl=en&sa=X&ved=0CD8Q6AEwBmoVChMI6KjxorfPxwIVhZWICh23vAdX#v=onepage&q=explosion%20hazards%20associated%20with%20dry%20electrostatic%20precipitators&f=false

Integrated Regional Water Management Plan (IRWMP), 2013. San Francisco Bay Area Integrated Regional Water Management Plan. September 2013. Accessed July 20, 2016. http://bairwmp.org/docs/2013-bairwm-plan-update/2013-final-plan/San%20Francisco%20Bay%20Area%20IRWMP%20Final_September%202013.pdf

International Finance Corporation (IFC). 2007. Environmental, Health, and Safety Guidelines – General EHS Guidelines: Environmental Air Emissions and Ambient Air Quality. Accessed online at: https://www.ifc.org/wps/wcm/connect/532ff4804886583ab4d6f66a6515bb18/1-1%2BAir%2BEmissions%2Band%2BAmbient%2BAir%2BQuality.pdf?MOD=AJPERES

International Petroleum Industry Environmental Conservation Association (IPIECA), 2013. Guidelines for implementing ISO 50001 Energy Management Systems in the Oil and Gas Industry. Accessed online at: http://www.ogp.org.uk/pubs/482.pdf

Office of Emergency Services (OES), 2017. 2016 HazMat Spill Reports. Accessed July 27, 2017 at http://www.caloes.ca.gov/FireRescueSite/pages/spill-release-reporting.aspx

Pacific Institute. 2009. The Impacts of Sea-Level Rise on the California Coast: Thematic Maps. Accessed online at: http://pacinst.org/publication/sea-level-rise-thematic-maps/

Perry, Charles R., 2015. Amine Gas Treating 101 – Unique Design Features of Perry Gas Amine Units for Superior Performance. Accessed online at: http://webcache.googleusercontent.com/search?q=cache:r71jxVuMXYsJ:perrymanagement.com/downloads/Amine_Gas_Treating_101.docx+&cd=1&hl=en&ct=clnk&gl=us

Pipeline and Hazardous Materials Safety Administration (PHMSA), 2016. Incident Reports Database Search. Accessed, July 27, 2016 at https://www.phmsa.dot.gov/hazmat/library/data-stats/incidents

South Coast Air Quality Management District (SCAQMD), 2006. SCAB Fleet Average Emission Factors. http://www.aqmd.gov/docs/default-source/ceqa/handbook/emission-factors/off-road-mobile-source-emission-factors-(scenario-years-2007-2025).xls?sfvrsn=2.

SCAQMD, 2007. Final EIR for ConocoPhillips Los Angeles Refinery PM10 and NOx Reduction Project, SCH No. 2006111138, June 2007. http://www.aqmd.gov/home/library/documents-support-material/lead-agency-permit-projects/permit-project-documents---year-2007/feir-for-conocophillips-pm10-and-nox-reduction

SCAQMD, 2008. Final Environmental Assessment: Proposed Amended Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Internal Combustion Engines (ICEs). Accessed online at: http://www.aqmd.gov/docs/default-source/ceqa/documents/aqmd-projects/2008/rule-1110.2/finalea.pdf?sfvrsn=4

SCAQMD, 2013. Final Environmental Assessment for Proposed Rule 1114 – Petroleum Refinery Coking Operations. SCH No.: 2013021066. SCH No.: 2014121018. Accessed online at: http://www.aqmd.gov/docs/default-source/ceqa/documents/aqmd-projects/2013/final-environmental-assessment-for-proposed-rule-1114.pdf?sfvrsn=6

SCAQMD, 2014. Final Environmental Assessment for Proposed Rule 1420 – Emission Standards for Lead and Other Toxic Air contaminants from Large Lead-Acid Battery Recycling Facilities, SCAQMD No. 131010JK, January 2014. Accessed online at: http://www.aqmd.gov/docs/default-source/ceqa/documents/aqmd-projects/2014/par_1420_fea.pdf?sfvrsn=0

SCAQMD, 2015. Final Program Environmental Assessment for Proposed Amended Regulation XX – Regional Clean Air Incentives Market (RECLAIM). Accessed online at: http://www.aqmd.gov/docs/default-source/ceqa/documents/aqmd-projects/2015/regxxfinalpeaplusappendices.pdf?sfvrsn=2

SCAQMD, 2015a. Staff Report for SCAQMD Rule 1401.1 – Requirements for New and Relocated Facilities Near Schools, and SCAQMD Rule 1402 – Control of Toxic Air Contaminants from Existing Sources. Accessed online at: http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2015/2015-jun1-028.pdf?sfvrsn=9

SCAQMD, 2016. Final Environmental Assessment for: Proposed Amended Rule 307.1 – Alternative Fees for Air Toxics Emissions Inventory; Proposed Amended Rule 1401 – New Source Review of Toxic Air Contaminants; Proposed Amended Rule 1402 – Control of Toxic Air Contaminants from Existing Sources; SCAQMD Public Notification Procedures for Facilities Under the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) and Rule 1402; and, SCAQMD Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program. SCH No. 2016081057. Accessed online at: http://www.aqmd.gov/docs/default-source/ceqa/documents/aqmd-projects/2016/final-ea_par-307-1_1401_1402.pdf?sfvrsn=4

SCAQMD, 2017. Final Program Environmental Impact Report for the 2016 Air Quality Management Plan (AQMP). Accessed March, 2-17. http://www.aqmd.gov/home/library/documents-support-material/lead-agency-scaqmd-projects

State and Territorial Air Pollution Program Administrators and the Association of Local Air Pollution Control Official (STAPPA/ALAPCO). 1994. Controlling Nitrogen Oxides Under the Clean Air Act: A Menu of Options. Chapter 2 – Industrial and Commercial Boilers. Accessed online at: http://infohouse.p2ric.org/ref/02/01245.htm

STAPPA/ALAPCO, 1997. Preferred and Alternative Methods for Estimating Air Emissions from Wastewater Collection and Treatment: Final Report. Vol. 3, Chapter 5. http://www.sviva.gov.il/PRTRIsrael/PRTR/Documents/Methods/PRTR-Wastewater.pdf

STAPPA/ALAPCO, 2000. How to Incorporate the Effects of Air Pollution Control Device Efficiencies and Malfunctions into Emission Inventory Estimates. Vol. II, Ch 12. Accessed online at:

http://www.dep.wv.gov/daq/planning/inventory/Documents/EIIP%20V02%20Ch12%20Control%20Device%20Efficiencies%20and%20Malfunctions.pdf

STAPPA/ALAPCO, 2006. Controlling Fine Particulate Matter Under the Clean Air Act: A Menu of Options. March. http://www.4cleanair.org/PM25Menu-Final.pdf

U.S. Department of Defense 2005. Dictionary of Military and Associated Terms. Accessed online at: http://www.thefreedictionary.com/military+installation

U.S. Department of Energy (USDOE), 2003. Just the Basics. U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy. August, 2003. http://www1.eere.energy.gov/vehiclesandfuels/pdfs/basics/jtb_lpg.pdf

USDOE, 2014. How Gas Power Plants Work. Accessed online at: https://energy.gov/fe/how-gas-turbine-power-plants-work

USDOE, 2016. "Biodiesel Fuel Basics." Accessed July 28, 2016. http://www.afdc.energy.gov/fuels/biodiesel_basics.html

U.S. Ecology, 2015. Personal communication with Dan Church, U.S. Ecology, Inc. 800-590-5220. October 16, 2015.

United States Energy Information Administration (U.S. EIA), 2015. "Biofuels: Ethanol and Biodiesel Explained – Use of Biodiesel. Accessed July 28, 2016. http://www.eia.gov/energyexplained/index.cfm?page=biofuel_biodiesel_use

U.S. Environmental Protection Agency (U.S. EPA), 1998. Particulate Matter Controls – Section 6. Accessed online at: https://www3.epa.gov/ttncatc1/dir1/cs6ch1.pdf

U.S.EPA, 2010. Available and Emerging Technologies for Reducing Greenhouse Gas Emissions from the Petroleum Refining Industry. Accessed online at: https://www.epa.gov/sites/production/files/2015-12/documents/refineries.pdf

U.S. EPA, 2016. Greenhouse Reporting Program 2014: Reported Data. Accessed July 2016. https://www.epa.gov/ghgreporting/ghgrp-2014-reported-data.

U.S. EPA, 2016a. Air Pollution Control Technology Fact Sheet for Wet ESP. Accessed March, 2017. https://www3.epa.gov/ttncatc1/cica/files/fwespwpi.pdf

U.S. EPA, 2017. Wet Scrubber For Particulate Matter. Accessed online at: https://www.epa.gov/air-emissions-monitoring-knowledge-base/monitoring-control-technique-wet-scrubber-particulate-matter

U.S. Geological Survey (USGS), 2007. (December). San Francisco Bay Bathymetry. http://sfbay.wr.usgs.gov/sediment/sfbay/geostat.html. Accessed July 2016.

5.2 ORGANIZATIONS AND PERSONS CONSULTED

The CEQA statues and Guidelines require that organizations and persons consulted be provided in the EIR. The following organizations and persons have provided input into this document.

Alexander Crockett
Victor Douglas
William Guy
Karen Kristiansson
Greg Nudd
Josh Pollak
Eric Stevenson
Dave Vintz
Josh Pollak

5.3 LIST OF ENVIRONMENTAL IMPACT REPORT PREPARERS

Bay Area Air Quality Management District
San Francisco, California

Environmental Audit, Inc.
Placentia, California

CalEnviro Metrics, LLC
Bellingham, Washington

APPENDIX A

NOTICE OF PREPARATION AND INITIAL STUDY

This page intentionally left blank.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

California Environmental Quality Act

Notice of Preparation of Draft Environmental Impact Report for Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18) and Regulation 12: Miscellaneous Standards of Performance, Rule 16: Petroleum Refining Facility-Wide Emissions Limits (Rule 12-16).

Lead Agency: **Bay Area Air Quality Management District**
Contact: **Greg Nudd** **Phone: (415) 749-4786**

SUBJECT: NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT

Notice is hereby given pursuant to California Public Resources Code §21091, 21092, 21092.2, and 21092.3 and CEQA Guidelines Section 15085 and 15087 that the Bay Area Air Quality Management District ("Air District"), as lead agency, will prepare a Draft Environmental Impact Report (EIR) in connection with the projects described below.

Project Title: Air District Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18) and Regulation 12: Miscellaneous Standards of Performance, Rule 16: Petroleum Refining Facility-Wide Emissions Limits (Rule 12-16).

Project Location: The rules would apply within the Bay Area Air Quality Management District ("District"), which includes all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties, and the southern portions of Solano and Sonoma counties.

Project Description: Rule 11-18 would ensure that emissions of toxic air contaminants (TACs) from existing facilities do not pose an unacceptable health risk to people living and working nearby. The rule would use the most up-to-date assumptions about the risk of compounds and would require affected facilities to take action to reduce risk to a low level.

Rule 12-16 would limit the emissions of climate pollutants: greenhouse gases (GHGs); and three criteria pollutants: particulate matter (PM), oxides of nitrogen (NOx), and sulfur dioxide (SO_2) from the five Bay Area petroleum refineries and three associated facilities. The rule would establish facility-wide emissions limits for the covered pollutants at each of the affected facilities to ensure there is no emissions increase due to changes in operation, crude or product slates, or increases in production.

Scoping Meetings: Notice is also given pursuant to California Public Resource Code, Sections 15206 and 15082 (c) that the Air District will conduct California Environmental Quality Act (CEQA) scoping meetings at the Air District Headquarters' Yerba Buena Room, 375 Beale Street, San Francisco, California, on November 14, 2016 at 2:00 p.m. and at the Martinez City Hall, 525 Henrietta Street, Martinez, California, on November 16, 2016 at 2:00 p.m. to discuss and accept oral comments on the scope and content described in a Notice of Preparation and an Initial Study (NOP/IS) prepared in anticipation of a draft Environmental Impact Report (DEIR) that would be prepared for two new proposed rules.

Reviewing the Notice of Preparation/Initial Study (NOP/IS): The NOP/IS are available at the District headquarters or on the Air District's website at http://www.baaqmd.gov/rules-and-compliance/rule-development/regulatory-workshops or by request. Requests for copies of the NOP/IS should be directed to Jocelyn Orpia (jorpia@baaqmd.gov) at (415) 749-4763.

Comment Procedure: Comments relating to the environmental analysis in the NOP/IS should be addressed to Victor Douglas, Bay Area Air Quality Management District, 375 Beale Street, Suite 600, San Francisco, CA 94105. Comments may also be sent by e-mail to vdouglas@baaqmd.gov. Comments on the NOP/IS will be accepted from October 14, 2016 until December 2, 2016 at 5:00 p.m.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

CEQA NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT

October 14, 2016

To: Interested Parties

From: Executive Officer/APCO

Subject: Notice of Preparation of a Draft Environmental Impact Report

Project Title: Air District Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18) and Regulation 12: Miscellaneous Standards of Performance, Rule 16: Petroleum Refining Facility-Wide Emissions Limits (Rule 12-16).

In accordance with the California Environmental Quality Act (CEQA) (California Code of Regulations, Title 14, Sections 15082(a)), the Bay Area Air Quality Management District (District) will be the Lead Agency for the project identified above and described in the attached Initial Study. Through this Notice of Preparation (NOP), the District is soliciting information and your views on the scope of the environmental analysis for the project. As detailed in the attached Initial Study, District staff has made a preliminary determination that the potential air quality, greenhouse gas, hazard, and hydrology/water quality impacts of the rules require more detailed analyses in an Environmental Impact Report (EIR).

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice. Comments focusing on your area of expertise, your agency's area of jurisdiction, or issues relative to the environmental analysis should be addressed to Mr. Victor Douglas at the address shown below, or by e-mail to vdouglas@baaqmd.gov. Comments must be received no later than 5:00 PM on December 2, 2016. Please include the name and phone number of the contact person for your agency. Questions relative to the proposed Rule amendments should be directed to Mr. Victor Douglas (415) 749-4752, or by email to vdouglas@baaqmd.gov.

The following CEQA scoping meetings are scheduled for the rules:

Air District Headquarters Yerba Buena Room 375 Beale Street San Francisco, California November 14, 2016 at 2:00 p.m.	Martinez City Hall 525 Henrietta Street Martinez, California November 16, 2016 at 2:00 p.m

Date: *October 14, 2016* *Signature:*

Greg Nudd
Rule Development Manager

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
375 Beale Street, Suite 600, San Francisco, California 94105

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT

Project Title:
Air District Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18) and Regulation 12: Miscellaneous Standards of Performance, Rule 16: Petroleum Refining Facility-Wide Emissions Limits (Rule 12-16).

Project Location:
The rules would apply within the Bay Area Air Quality Management District ("District"), which includes all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties, and the southern portions of Solano and Sonoma counties.

Description of Nature, Purpose, and Beneficiaries of Project:
Rule 11-18 would ensure that emissions of toxic air contaminants (TACs) from existing facilities do not pose an unacceptable health risk to people living and working nearby. The rule would use the most up-to-date assumptions about the risk of compounds and would require affected facilities to take action to reduce risk to a low level.

Rule 12-16 would limit the emissions of climate pollutants: greenhouse gases (GHGs); and three criteria pollutants: particulate matter (PM), oxides of nitrogen (NOx), and sulfur dioxide (SO_2) from the five Bay Area petroleum refineries and three associated facilities. The rule would establish facility-wide emissions limits for the covered pollutants at each of the affected facilities to ensure there is no emissions increase due to changes in operation, crude or product slates, or increases in production.

Lead Agency:
Bay Area Air Quality Management District

Initial Study and all Supporting Documentation are Available at:

BAAQMD Headquarters	Or by Calling:
375 Beale Street, Suite 600	(415) 749-4763
San Francisco, CA 94105	

Attn: Jocelyn Orpia (jorpia@baaqmd.gov) at (415) 749-4763
Or by accessing: http://www.baaqmd.gov/rules-and-compliance/rule-development/regulatory-workshops

Scheduled Scoping Meeting Dates:

Air District Headquarters Yerba Buena Room 375 Beale Street San Francisco, California November 14, 2016 at 2:00 p.m.	Martinez City Hall 525 Henrietta Street Martinez, California November 16, 2016 at 2:00 p.m

The Notice of Preparation is provided through the following:

☑ Office of Planning & Research, State Clearinghouse
☑ Newspaper
☑ Interested Parties
☑ BAAQMD Website
☑ BAAQMD Mailing List

Review Period:
October 14, 2016 through December 2, 2016

Contact Person:	Phone Number:	E-Mail Address
Victor Douglas	(415) 749-4752	vdouglas@baaqmd.gov

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Initial Study for

Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities
&
Regulation 12, Rule 16: Petroleum Refining Facility-Wide Emissions Limits

Prepared by:

Staff of the Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, California 94105

Contact: Victor Douglas
415-749-4752

October 2016

This page was intentionally left blank.

Table of Contents

CHAPTER 1: PROJECT DESCRIPTION **1.1**
- Introduction 1.2
- Agency Authority 1.3
- Project Location 1.3
- Background 1.5
- Project Description 1.7

CHAPTER 2: ENVIRONMENTAL CHECKLIST **2.1**
- General Information 2.1
- Environmental Factors Potentially Affected 2.2
- Determination 2.3
- Evaluation of Environmental Impacts 2.4
- Environmental Checklist and Discussion 2.6
  - I. Aesthetics 2.6
  - II. Agriculture and Forestry Resources 2.9
  - III. Air Quality 2.12
  - IV. Biological Resources 2.18
  - V. Cultural Resources 2.22
  - VI. Geology and Soils 2.25
  - VII. Greenhouse Gas Emissions 2.31
  - VIII. Hazards and Hazardous Materials 2.35
  - IX. Hydrology and Water Quality 2.43
  - X. Land Use and Planning 2.48
  - XI. Mineral Resources 2.50
  - XII. Noise 2.52
  - XIII. Population and Housing 2.55
  - XIV. Public Services 2.57
  - XV. Recreation 2.60
  - XVI. Transportation / Traffic 2.62
  - XVII. Utilities / Service Systems 2.67
  - XVIII. Mandatory Findings of Significance 2.71

CHAPTER 3: REFERENCES **3.1**

PROJECT DESCRIPTION

Introduction

Agency Authority

Project Location

Background

Project Description

References

1.0 PROJECT DESCRIPTION

1.1 INTRODUCTION

Petroleum refineries are significant sources of harmful pollutants on both the global (greenhouse gases) and local scale (toxic air contaminants and criteria pollutants). Many Bay Area residents have expressed concern about the impact of this pollution on the environment and public health, particularly those that may disproportionately impact communities near refineries. Though refinery emissions have declined over time, it is possible that as refinery operations change in the future, emissions of these pollutants could increase.

In response to these concerns, the Board of Directors of the Bay Area Air Quality Management District (Air District) has directed staff to bring forward two rules for their consideration, one that reflects policy recommended by some environmental advocacy organizations, and an approach recommended by Air District staff.

Communities for a Better Environment (CBE) and several associated organizations (CBE) have recommended that the Air District adopt new Regulation 12, Rule 16: Petroleum Refining Facility-Wide Emissions Limits (Rule 12-16 or "Refining Caps Rule"). This rule would set numeric limits on specific refinery emissions. Rule 12-16 would apply only to the Bay Area's five petroleum refineries and three facilities associated with the refineries.

The staff of the Air District has developed a different approach that directly addresses concerns about health risks to communities exposed to air pollution. The staff recommendation is that the Air District adopt a new Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18 or "Toxic Risk Reduction Rule"). Rule 11-18 would apply to all facilities whose emissions of toxic air contaminants may result in a significant risk to nearby residents and workers – this would include petroleum refineries. The purpose of Rule 11-18 is to reduce the public's exposure to health risks associated with the emissions of toxic air contaminants (TACs) from stationary sources by reducing those risks to the lowest feasible levels

Because the Board of Directors of the Air District intends to consider these rules within the same timeframe, staff is preparing one Environmental Impact Report (EIR) to cover both rules. The intent of the single EIR is to ensure that all of the potential environmental impacts for both rules are considered and comprehensively addressed. Although they are being considered at the same time and both would affect refineries, the two rules are functionally independent. Adoption of one does not depend on adoption of the other. The Board of Directors could adopt either rule, both rules or neither rule.

1.1.1 Rule 12-16 – Refinery Emissions Caps Rule

Rule 12-16 reflects a policy recommendation from CBE and their associated organizations (henceforth called "CBE"). The rule, as proposed by CBE, would limit the emissions of climate pollutants and three criteria pollutants: greenhouse gases (GHGs), particulate matter (PM), oxides of nitrogen (NOx), and sulfur dioxide (SO_2) from petroleum refineries and three associated facilities. The rule would establish facility-wide emissions limits for the covered pollutants at each of the affected facilities to ensure that

each facility does not increase emissions due to changes in operation, crude or product slates, or increases in production. Each facility emissions limit would be set at the maximum-annual emissions reported for that facility in the period from 2011 through 2015[1] with an additional allowance or "threshold factor" of seven percent over the maximum annual emission rate for each pollutant.

1.1.2 Rule 11-18 – Toxic Risk Reduction Rule

Rule 11-18, as drafted by Air District staff, would ensure that emissions of toxic air contaminants (TACs) from existing facilities do not pose an unacceptable health risk to people living and working nearby. The rule would use the most up-to-date assumptions about the risk of compounds and would require the facility to take action to reduce risk below a specified risk threshold, if the facility exceeds the risk thresholds. If the facility could not devise a means to reduce the risk below the specified risk level, the facility would be required to install best available retrofit control technology for toxic pollutants (TBARCT) on every significant source of TAC emissions at the facility.

1.2 AGENCY AUTHORITY

The California Environmental Quality Act (CEQA), Public Resources Code §21000 et seq., requires that the environmental impacts of proposed projects be evaluated and that feasible methods to reduce, avoid or eliminate significant adverse impacts of these projects be identified and implemented. To fulfill the purpose and intent of CEQA, the Air District is the lead agency for Regulation 12, Rule 16 and Regulation 11, Rule 18 and has prepared this Notice of Preparation (NOP) of an Environmental Impact Report (EIR) and Initial Study (NOP/IS) to address the potential environmental impacts associated with the rules.

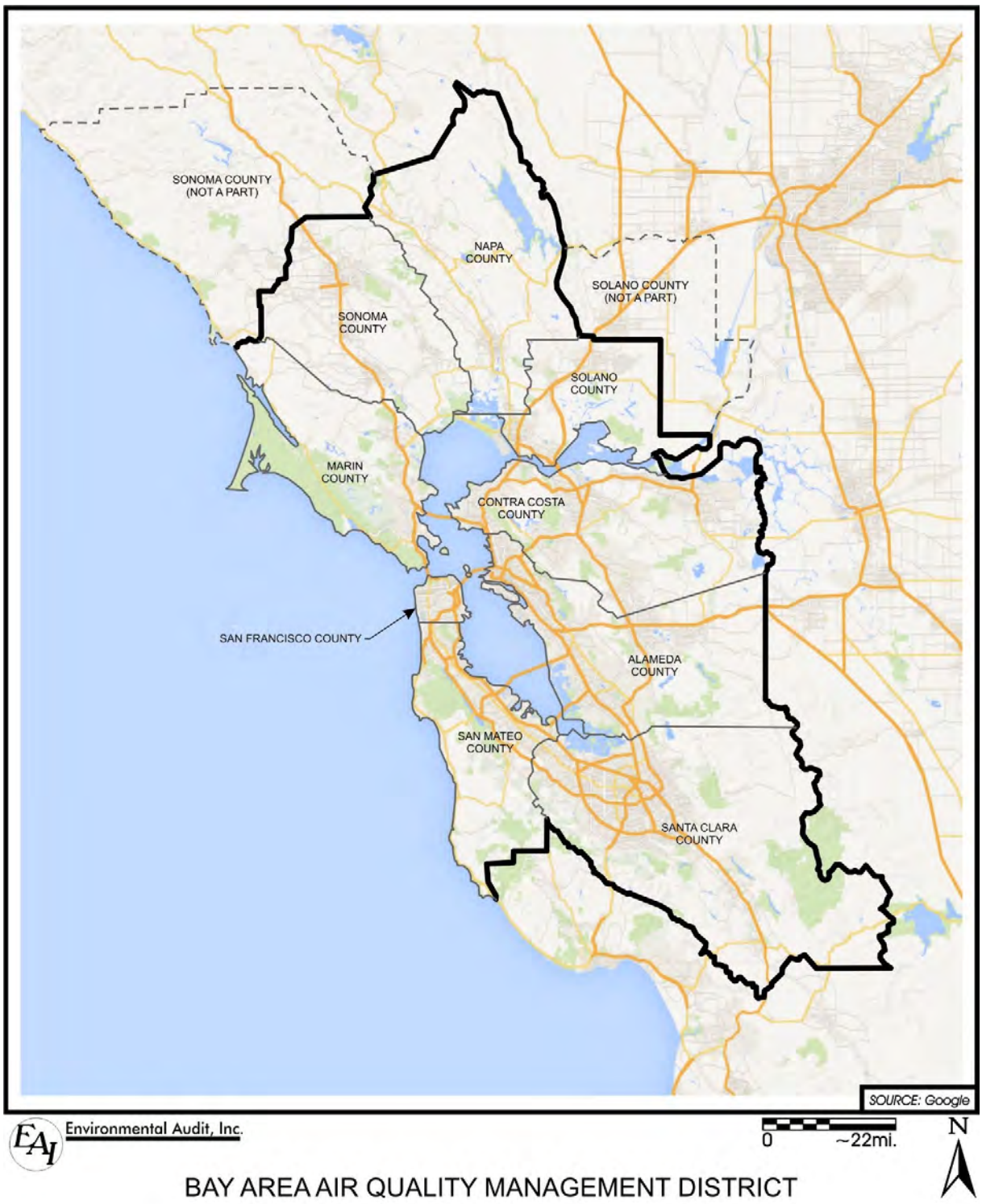
1.3 PROJECT LOCATION

The Air District has jurisdiction over an area encompassing 5,600 square miles. The Air District includes all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties, and portions of southwestern Solano and southern Sonoma counties. The San Francisco Bay Area is characterized by a large, shallow basin surrounded by coastal mountain ranges tapering into sheltered inland valleys. The combined climatic and topographic factors result in increased potential for the accumulation of air pollutants in the inland valleys and reduced potential for buildup of air pollutants along the coast. The Basin is bounded by the Pacific Ocean to the west and includes complex terrain consisting of coastal mountain ranges, inland valleys and bays (see Figure 1-1).

[1] GHG emissions are based on the 2011-2014 time period, since 2015 data is not available from the Air Resources Board yet.

Figure 1-1

Geographic Jurisdictional Boundaries of the Bay Area Air Quality Management District



1.4 BACKGROUND

Rule 12-16 would affect the five petroleum refineries currently located in the Bay Area within the jurisdiction of the Air District:

- Chevron Products Company (Richmond),
- Phillips 66 Company – San Francisco Refinery (Rodeo),
- Shell Martinez Refinery (Martinez),
- Tesoro Refining and Marketing Company (Martinez), and
- Valero Refining Company – California (Benicia).

The rule would also affect three refinery-related facilities:

- Air Liquide (Richmond),
- Air Products (Martinez), and
- Martinez Cogen LP (Martinez).

Rule 11-18 would affect hundreds of facilities that emit TACs. The Air District has determined that these toxic emissions need to be reduced in order to be more protective of public health. These facilities include data centers, petroleum refineries, a cement kiln, gasoline dispensing facilities, etc., and emit a variety of TACs that can adversely impact public health. TACs include compounds such as diesel particulate matter (DPM), benzene, polycyclic aromatic hydrocarbons (PAHs), and 1,3-butadiene.

The primary focus of CBE's concern has been petroleum refineries. Petroleum refineries convert crude oil into a wide variety of refined products, including gasoline, aviation fuel, diesel and other fuel oils, lubricating oils, and feed stocks for the petrochemical industry. Crude oil consists of a complex mixture of hydrocarbon compounds with smaller amounts of impurities including sulfur, nitrogen, oxygen and metals (e.g., iron, copper, nickel, and vanadium).

Air pollutants are categorized based on their properties, and the programs under which they are regulated. Air pollutants include: (1) criteria pollutants, (2) toxic pollutants (or TACs), and (3) climate pollutants (or GHGs). Additional categories of air contaminants include odorous compounds and visible emissions.

Criteria pollutants are emissions for which Ambient Air Quality Standards (AAQS) have been set and include: (1) carbon monoxide (CO), (2) nitrogen dioxide (NO_2) and NO_X, (3) PM in two size ranges – aerodynamic diameter of 10 micrometers or less (PM_{10}), and aerodynamic diameter of 2.5 micrometers or less ($PM_{2.5}$), (4) volatile organic compounds (VOC), and (5) sulfur dioxide (SO_2). Other compounds, specifically volatile organic compounds (VOC), can react in the atmosphere to form ozone and are often regulated along with criteria pollutants. These compounds can have both localized and regional impacts. Each of these criteria pollutants are emitted by petroleum refineries, as well as numerous other stationary sources and mobile sources (automobiles, trucks, locomotive engines, marine vessels, construction equipment, etc.).

TACs are emissions for which AAQS have generally not been established, but may result in human health risks. The state list of TACs currently includes approximately 190 separate chemical compounds and groups of compounds. These compounds tend to have more localized impacts. There are many TACs potentially emitted from industrial sources, including refineries.

GHGs are emissions that include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and three groups of fluorinated compounds (i.e., hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6)), and are the major anthropogenic GHGs. These compounds are global in nature and require a global reduction to a beneficial benefit on the global climate. GHGs emitted from petroleum refineries include CO_2, CH_4 and N_2O.

The regulatory approaches for Rules 11-18 and 12-16 are summarized below and include the following basic elements.

Regulation 11, Rule 18

- The Air District would screen all facilities that report toxic emissions. From this screening, the Air District would determine each facility's priority score (PS). The Air District would conduct health risk assessments (HRA) for facilities with a cancer risk prioritization score of 10 or greater or a non-cancer prioritization score of 1.0 or greater. The HRAs would incorporate the new Office of Environmental Health Hazard Assessment (OEHHA) protocol and health risk values adopted in March 2015, the Risk Management Guidelines adopted in July 2015 by the California Air Resources Board (ARB) and the California Air Pollution Control Officers Association (CAPCOA) and revised Air District HRA guidelines. The Air District will prioritize the development of the HRAs according to priority score and then according to type of facility. This is described in more detail later in this document.
- Facilities that pose a cancer risk in excess of 10 per million or a chronic or acute hazard index in excess of 1.0 must either:
    - Reduce the facility cancer risk below 10/M and reduce the chronic and acute hazard indices below 1.0; or
    - Install TBARCT on all significant sources of toxic emissions.

Regulation 12, Rule 16

- Would apply to each of the Bay Area petroleum refineries and three support facilities.
- Would establish facility-wide emissions limits for GHGs, $PM_{2.5}$ and PM_{10}, NOx, and SO_2 at each of the affected facilities based on the following method:
    - Each facility emissions limit would be set at the maximum-annual emissions reported for that facility in the period from 2011 through 2015,[2] and
    - Include an additional allowance or "threshold factor" that would equal seven percent over the maximum for GHGs, $PM_{2.5}$ and PM_{10}, NOx, and SO_2.
- Emissions from start-up, shut-down, maintenance and malfunction would be subject to the cap.
- Compliance with the emissions limits would be based on comparing the annual emissions inventory with the facility-wide emissions limit for each covered pollutant. Any annual emissions inventory that exceeds the established pollutant emissions limit for the affected facility would be a violation of the rule.

[2] Except GHGs, which are based on 2011 through 2014 emissions due to the current unavailability of 2015 data.

1.5 PROJECT DESCRIPTION

The description of Regulation 11, Rule 18 and Regulation 12, Rule 16 are provided below.

1.5.1 REGULATION 11, RULE 18

The rule would require facilities that pose a site-wide health risk in excess of the risk action level threshold of ten per million (10/M) cancer risk or 1.0 hazard index for both chronic and acute risk to reduce that risk below the threshold through the implementation of a risk reduction plan approved by the Air District or demonstrate that all significant sources of toxic emissions are controlled TBARCT; a significant source of toxic emission is one that poses a health risk of 1.0/M cancer or 0.2 hazard index. The rule would be implemented in four phases based on either a facility's priority score (PS) or the toxic emissions source.

1.5.1.1 Objectives

The objectives of Toxic Risk Reduction Rule are to:

1) Reduce the public's exposure to health risks associated with the emissions of TACs from stationary sources;
2) Incorporate the most up-to-date health risk methodologies and health values into the Air District's risk evaluation process for existing stationary sources of TACs;
3) Ensure the facilities that impact the most sensitive and overburdened communities reduce their associated health risk in an efficient and expeditious manner;
4) Provide the public opportunity to comment on the draft HRAs to provide transparency and clarity to the process; and
5) Provide the public opportunity to comment on risk reduction plans as they are drafted by the affected facilities.

1.5.1.2 Administrative Procedures

The Toxic Risk Reduction Rule would utilize the annual toxic emissions inventories reported to the Air District by sources that emit toxic compounds. From the toxic emissions inventory data, Air District[3] would conduct a site-specific Health Risk Screening Analysis (HRSA). The HRSA assesses the potential for adverse health effects from public exposure to routine and predictable emissions of TACs. Procedures used for completing HRSAs are based on guidelines adopted by CARB/CAPCOA. From these HRSAs, the Air District would determine each facility's priority score (PS). The facility PS or the toxic emissions source type would be used to determine which phase a facility would be placed. In establishing the priority level for a facility, the Air District would consider:

(1) The amount of toxic pollutants emitted from the facility;
(2) The toxicity of these materials;
(3) The proximity of the facility to potential receptors; and
(4) Any other factors that the Air District deems to be important.

[3] In order to complete the analyses in a timely manner. Some of the work may be completed by independent contractors working for the Air District under direction of Air District staff.

The rule would be implemented in four phases based on either a facility's PS or the toxic emissions source type as illustrated in Table 1.1. (Priority scores for all potentially affected facilities are expected to be completed by the end of 2017).

Table 1.1
Implementation Phases

Phase	Criterion	HRAs	Risk Reduction Plans	Plan Implementation
1	Cancer PS > 250 or Non-cancer PS >2.5	2017 – 2018	2018 – 2019	2019 – 2022
2	Cancer PS > 10 or Non-cancer PS >1.0	2019 – 2021	2021 – 2022	2022 – 2025
3	Diesel IC Engines	2021 – 2023	2023 – 2024	2024 – 2027
4	Retail Gas Stations	2023 – 2024	2024 – 2025	2025 – 2028

The Air District would conduct HRAs for facilities in accordance with the OEHHA HRA Guidelines and the CARB/CAPCOA Risk Management Guidelines that were updated in 2015. These Guidelines were updated pursuant to the Children's Environmental Health Protection Act (Senate Bill 25), which required that OEHHA develop health risk assessment procedures that ensure infants and children are protected from the harmful effects of air pollution. Using the results of the HRAs, the Air District would determine whether a facility would be affected by Rule 11-18. The rule would affect facilities with health risk impacts that exceeded any of the risk action level thresholds of ten per million (10/M) cancer risk or 1.0 hazard index for both chronic and acute risk. The Air District would notify facilities of their health risk score. A facility with a risk action level exceeding the threshold(s) will be required to reduce the risk below the threshold(s) by implementing a risk reduction plan within three years of plan approval, or demonstrate that all significant sources of toxic emissions are controlled by TBARCT within the same three-year period; a significant source of toxic emission is one that poses a health risk of 1.0/M cancer or 0.2 hazard index.

1.5.1.3 Health Risk Assessments

The Air District uses a variety of tools to determine where air quality health impacts may be occurring in the Bay Area, to assess the relative magnitude of these health impacts compared to other locations, and to determine how to best focus Air District resources in order to reduce these health impacts. HRAs are one of the tools that can be used to assess the relative magnitude of health hazards. HRAs are designed to quantify the potential health impacts that people and communities may be experiencing due to specific sources or facilities or that may occur in the future due to proposed projects or proposed changes at a facility. An HRA consists of four basic steps: 1) hazard identification; 2) exposure assessment; 3) dose response assessment; and 4) risk characterization. The Air District conducts HRAs using standardized methodologies for each of these steps. The Air District HRAs would be prepared in accordance with the most recent guidelines adopted by OEHHA in March 2015.

Air District staff believes that new facility-wide HRAs should be performed including improved emission inventories, updated health effects values, and the most recent HRA methodologies. rule 11-18 would require that the Air District conduct HRAs utilizing the most recent OEHHA HRA Guidelines along with more refined emissions inventories.

1.5.1.4 Pollutant Coverage

The Toxic Risk Reduction Rule would address TAC emissions from existing stationary sources. TAC emissions from new and modified sources are addressed under Air District Regulation 2, Rule 5. The California Health and Safety Code section 39655 defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of Section 112 of the federal act (42 U.S.C. Sec. 7412(b)) is a toxic air contaminant." For the purposes of this rule, TACs consists of the substances listed in Air District Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants, Table 2-5-1.

Some of the key pollutants to be addressed under the Toxic Risk Reduction Rule include the following:

Benzene: Benzene is highly carcinogenic and occurs throughout the Bay Area. Most of the benzene emitted in the Bay Area comes from motor vehicles, including evaporative leakage and unburned fuel exhaust. Stationary sources contribute 13 percent of the benzene statewide. The primary stationary sources of benzene emissions include gasoline stations, petroleum refining, electricity generation, and cement production.

1,3-Butadiene: 1,3-butadiene is another carcinogen, with similar origins to benzene, namely mainly from gasoline evaporation and motor vehicle exhaust, biomass burning, petroleum refining and electricity generation.

Polycyclic aromatic hydrocarbons (PAHs): PAHs are a set of hydrocarbons formed of multiple benzene rings. Several PAHs have been shown to be carcinogenic, the best-studied of which is Benzo(a)pyrene. Although PAHs are emitted during petroleum refining, in the Bay Area the vast majority derive from fossil fuel and wood combustion.

Diesel Particulate Matter (DPM): DPM is the primary source of ambient risk based on risk analysis, followed by benzene and 1,3-butadiene. DPM emissions sources mainly include mobile sources, such as heavy-duty trucks, buses, construction equipment, locomotives, and ships, but also stationary sources such as stationary diesel engines and backup generators.

1.5.1.5 Source Coverage

The Toxic Risk Reduction Rule would apply to all sources of TAC emissions from "stationary sources" in the Bay Area. Stationary sources, as opposed to mobile sources such as trucks and other vehicles, are the sources over which the Air District has regulatory jurisdiction.

The Toxic Risk Reduction Rule would apply to a wide variety of sources and facilities located throughout the Bay Area, including data centers, petroleum refineries, chemical plants, waste water treatment facilities, foundries, forges, landfill operations, hospitals, crematoria, gasoline dispensing facilities (GDF) (i.e., gasoline stations), colleges and universities, military facilities and installations and airline operations. The Air District estimates that hundreds of facilities could be impacted by this rule.

1.5.2 REGULATION 12, RULE 16

1.5.2.1 Objectives

The objectives of the Refining Emission Caps are to:

1) Protect air quality, public health, and the climate from increases in annual facility-wide mass emissions of GHGs, PM, NOx, and SOx caused by changes in refinery oil feed quality or quantity, refinery or support equipment or operation, or combinations of these causes, by preventing any significant increase in these emissions;
2) Protect the climate and public health by preventing any significant increase in these emissions at refineries and associated facilities from increasing the emission intensity of the production of transportation fuels;
3) Protect community and public health by preventing any significant increase in these emissions from worsening hazards for which HRA methods may not account, including but not limited to acute and chronic ambient PM, NOx, SOx, and PM exposure hazards;
4) Complement other air quality, public health, and climate measures by discouraging investment in new refinery equipment that would lead to increased emissions of GHG, PM, NOx, or SOx from Bay Area refineries.

1.5.2.2 Pollutant Coverage

The Refining Cap Rule would limit the emissions of climate pollutants (GHGs) and three criteria pollutants (PM – both PM_{10} and $PM_{2.5}$, NOx, and SO_2) from refineries and other refining related facilities to a specific baseline plus an allowance; thereby establishing a "cap" for each of these emissions that the facility could not exceed.

Greenhouse Gases (GHGs): GHGs refer to gases that contribute to global warming. In addition to negative impacts on air quality as higher temperatures contribute to increased levels of ozone and PM, climate change may cause a wide range of ecological, social, economic, and demographic impacts. GHGs include carbon dioxide, methane, nitrous oxide, and fluorinated hydrocarbons. CO_2 is released to the atmosphere when fossil fuels (oil, gasoline, diesel, natural gas, and coal), solid waste, and wood or wood products are burned. CH_4 is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from the decomposition of organic waste in municipal solid waste landfills and the raising of livestock. N_2O is emitted during agricultural and industrial activities, as well as during combustion of solid waste and fossil fuels. Fluorinated hydrocarbons: HFCs, PFCs, and SF_6, are generated in a variety of industrial processes. Although these gases are small in terms of their absolute mass, they are potent agents of climate change as expressed by their global warming potential.

Particulate Matter (PM): PM is a complex pollutant composed of an assortment of tiny airborne particles that vary in size and mass (ultrafine, fine, and coarse), physical state (solid or liquid), chemical composition, toxicity, and how they behave in the atmosphere. These particles originate from a variety of man-made and natural sources, including fossil fuel combustion, residential wood burning and cooking, wildfires, volcanoes, sea salt, and dust. Fine and ultrafine particles are so small, they can bypass the body's natural defenses and penetrate deep into the lungs, bloodstream, brain and other vital organs, and individual cells. Health studies have shown that exposure to PM can have a wide range of negative health effects, including triggering asthma attacks, chronic bronchitis, impaired lung

development in children, heart attack, stroke, and premature death. Residential wood burning is the largest source of PM in the Bay Area during winter days. On an annual basis, mobile sources such as cars, trucks, ships and trains are the largest source of PM in the Bay Area.

Nitrogen Oxides (NOx): Nitrogen oxides are a group of gases that form when nitrogen reacts with oxygen during combustion, especially at high temperatures. These compounds (including nitric oxide and nitrogen dioxide), can contribute significantly to air pollution, especially in cities and areas with high motor vehicle traffic. In the Bay Area, nitrogen dioxide appears as a brown haze. At higher concentrations, nitrogen dioxide can damage sensitive crops, such as beans and tomatoes, and aggravate respiratory problems.

Sulfur Oxides (SOx): Heating and burning fossil fuels (such as coal and oil) release the sulfur present in these materials. In areas where large quantities of fossil fuels are used, sulfur oxides can be a major air pollution problem. The most common kind of sulfur oxide is SO_2. This substance can react with oxygen to form sulfur trioxide, which can form sulfuric acid mist in the presence of moisture. These contaminants can damage vegetation and negatively impact the health of both humans and animals.

1.5.2.3 Affected Facilities

The Refining Caps Rule would apply to each of the Bay Area's five petroleum refineries and to three additional support facilities. The five refineries are Chevron Refinery in Richmond, Shell Refinery in Martinez, Phillips 66 Refinery in Rodeo, Tesoro Refinery in Martinez, and Valero Refinery in Benicia. The three affected support facilities are Air Liquide in Richmond, Air Products in Martinez, and Martinez Cogen LP in Martinez.

1.5.2.4 The Emissions Limits

The draft emissions limit for each covered pollutant and each affected facility are shown in Table 1.2. A numeric limit on the annual mass emission rate of each air pollutant specified would be applied to each facility specified in the table. The limit is equal to the maximum-year actual emissions reported in 2011–2015[4] plus the additional allowance, or threshold factor, of seven percent that is intended to account for normal year-to-year variations in emissions.

[4] Except GHGs, which are based on 2011 through 2014 emissions due to the current unavailability of 2015 data.

Table 1.2
The Enforceable Emissions Limits on Refinery-Wide Emissions [a]

Facility Name & Number	Pollutants				
	GHG[b] (thousands of metric tons)	**$PM_{2.5}$[c]** (tons)	**PM_{10}[c]** (tons)	**NOx[c]** (tons)	**SO_2[c]** (tons)
Chevron[d]: A-0010	4,774	502	526	971	394
Shell: A-0011	4,560	495	589	1,068	1,455
Phillips 66: A-0016	1,608	75	83	334	443
Tesoro: B-2758 / B-2759	2,615	77.7	97	1,015	644
Valero: B-2626 / B-3193	3,145	133	133	1,300	69.6
Martinez Cogen LP: A-1820	451	18.8	18.8	119	2.3
Air Liquide: B-7419	947	16.1	17.3	13.8	2.5
Air Products: B-0295	290	9.7	10.4	3.4	2.3

a. Annual facility-wide emission limits.
b. GHG: greenhouse gas emissions (CO_2e) as reported under Air Resources Board Mandatory Reporting. PM: filterable and condensable particulate matter.
c. $PM_{2.5}$ ("fine" particulate matter), PM_{10} ("respirable" particulate matter), NOx: oxides of nitrogen; SO_2: sulfur dioxide as reported in the Facility's annual emission inventory.
d. Facility owners or operators, as of August 2016, shown for information and context.

1.5.2.5 Changes in Monitoring Methods

CBE intends that these limits would change if the quantity of reported emissions changed solely due to a change in the method of monitoring or estimating emissions. Air District staff will work with CBE to capture this intent either in the rule language or in the plan for implementing the rule.

Chapter 2

Environmental Checklist

INTRODUCTION

The environmental checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed project.

GENERAL INFORMATION

Project Title:	Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities and Regulation 12, Rule 16: Petroleum Refining Facility-Wide Emissions Limits
Lead Agency Name and Address:	Bay Area Air Quality Management District 375 Beale Street, Suite 600 San Francisco, California 94105
Contact Person:	Victor Douglas
Contact Phone Number:	415-749-4752
Project Location:	The rules would apply to a multitude of facilities within the jurisdiction of the Bay Area Air Quality Management District, which encompasses all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties.
Project Sponsor's Name and Address:	Bay Area Air Quality Management District 375 Beale Street, Suite 600 San Francisco, California 94105
General Plan Designation:	Rule 11-18 would apply to facilities that emit toxic pollutants and Rule 12-16 would affect the five petroleum refineries and three refinery-related facilities currently located in the Bay Area within the jurisdiction of the Air District: • Chevron Products Company (Richmond), • Phillips 66 Company – San Francisco Refinery (Rodeo), • Shell Martinez Refinery (Martinez), • Tesoro Refining and Marketing Company (Martinez), and • Valero Refining Company – California (Benicia). Rule 12-16 would also affect: • Air Liquide (Richmond), • Air Products (Martinez), and • Martinez Cogen LP (Martinez).
Zoning:	See “General Plan Designation” above
Description of Project:	See “Background” in Chapter 1.
Surrounding Land Uses and Setting:	See “Affected Area” in Chapter 1.
Other Public Agencies Whose Approval Is Required:	None

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The following environmental impact areas have been assessed to determine their potential to be affected by the proposed project. As indicated by the checklist on the following pages, environmental topics marked with an "☑" may be adversely affected by the proposed project. An explanation relative to the determination of impacts can be found following the checklist for each area.

	Rule 11-18	Rule 12-16		Rule 11-18	Rule 12-16		Rule 11-18	Rule 12-16
Aesthetics	☐	☐	Agriculture and Forestry Resources	☐	☐	Air Quality	☑	☑
Biological Resources	☐	☐	Cultural Resources	☐	☐	Geology / Soils	☐	☐
Greenhouse Gas Emissions	☑	☑	Hazards & Hazardous Materials	☐	☑	Hydrology / Water Quality	☐	☑
Land Use / Planning	☐	☐	Mineral Resources	☐	☐	Noise	☐	☐
Population / Housing	☐	☐	Public Services	☐	☐	Recreation	☐	☐
Transportation / Traffic	☐	☐	Utilities / Service Systems	☐	☑	Mandatory Findings of Significance	☑	☑

DETERMINATION

On the basis of this initial evaluation:

☐ I find the proposed project COULD NOT have a significant effect on the environment, and that a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be significant effects in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☑ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature: Date:

Printed Name: Date:

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis.

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, Program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This checklist is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and

   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

ENVIRONMENTAL CHECKLIST AND DISCUSSION

I. AESTHETICS.

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
b) Substantially damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
c) Substantially degrade the existing visual character or quality of the site and its surroundings				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☐	☐	☑	☐
d) Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☐	☐	☑	☐

Setting

The Air District covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles), so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses. Rule 11-18 would affect hundreds of facilities that cover a wide variety of industries and operations that emit toxic pollutants located throughout the Air District, including data centers, petroleum refineries, a cement kiln, gasoline dispensing facilities, hospitals, crematoria, etc. The rule would require affected facilities to reduce the health risk they pose using various risk reduction measure and controls. Rule 12-16 would affect the four petroleum refineries that are located in Contra Costa County and one that is located in Solano County (Valero) and also three refinery-related facilities located in Contra Costa County, all of which are in areas designated for industrial facilities.

The methods of control expected to be used to comply with Rule 11-18 are not expected to result in any aesthetic alterations of the facilities. Refineries and other facilities affected by Rule 12-16 are generally located in industrial areas and compliance is not expected to result in any aesthetic changes to the facilities. Scenic highways or corridors are generally not located in the vicinity of these facilities.

Regulatory Background

Visual resources are generally protected by the City and/or County General Plans through land use and zoning requirements.

Discussion of Impacts

I. a, b, and c).

Rule 11-18: Rule 11-18 would require facilities whose health risk is determined to exceed a specific action level to either reduce the facility risk below the action level or to install best available retrofit control technology on all significant sources of risk. Some control options include stack modifications. Stack modifications are another common and generally inexpensive risk reduction measure that are often used to reduce risk from back-up generators and soil remediation operations. Changing the direction of a stack (from horizontal to vertical, for example) and increasing the height of a stack to just above the height of nearby buildings will increase the dispersion of the emissions from that stack and will typically result in lower ground level air concentrations at nearby receptors and lower health risks. Stack modifications may change the existing visual character or quality of a facility but are not expected to have significant adverse aesthetic impacts to the surrounding community as they would be expected to occur in industrial or commercial areas. Regulation 11-18 could also result in the installation of new air pollution control equipment to mitigate TAC emissions. While these control devices may be visible to surrounding areas, they would be installed within existing industrial or commercial areas, would be subject to local height limits, and are not expected to block any scenic vista, degrade the visual character or quality of the area, or result in significant adverse aesthetic impacts.

Rule 12-16: Rule 12-16 would limit air emissions of GHGs and certain criteria pollutants ($PM_{2.5}$, PM_{10}, NOx, and SO_2) from Bay Area petroleum refineries and three refinery-related facilities to the historic highest emission rate over a recent multi-year period, with an additional seven-percent margin to account for operational variations. Rule 12-16 is not expected to require the construction of any substantial new structures that would impact the views of the refineries or areas outside of existing refinery boundaries, provided existing crude and product slates remain relatively constant. However, because crude and product slates vary over time and these changes may result in changes in the emissions profile of a refinery, there is the potential that Rule 12-16 could result in the need for better controls on various refinery sources, (e.g. boilers and heaters) to mitigate any potential emissions increase. These emission controls could lead to changes in operations or installation of new air pollution control devices. While these control devices may be visible to surrounding areas, they would be installed within existing industrialized areas and are not expected to be taller than existing refinery structures. Any new equipment would be located within the refineries, would be compatible with the urban/developed nature of the refineries, are not expected to block any scenic vista, degrade the visual character or quality of the area, or result in any adverse aesthetic impacts. Once implemented,

equipment associated with the rule is not expected to be noticeably visible within the refineries. Therefore, the rule is not expected to have adverse aesthetic impacts to the surrounding community.

I. d).

Rule 11-18: The facilities affected by Rule 11-18, including petroleum refineries, may need to install or modify air pollution control equipment or modify operations as to implement risk reduction measures. However, it is unlikely that any of the changes would result in additional night-time operation that would require extra lighting. New light sources, if any, are not expected to be noticeable in residential areas. Most local land use agencies have ordinances that limit the intensity of lighting and its effects on adjacent property owners. Therefore, the rule is not expected to have significant adverse aesthetic impacts to the surrounding community.

Rule 12-16: The facilities affected by the Regulation 12-16 may be required to install additional air pollution control equipment or modify operations. Further, refinery modifications could require additional lighting. However, refineries are already lighted for night-time operations and safety measures, and are located in appropriately zoned areas that are not usually located next to residential areas. New light sources, if any, are not expected to be noticeable in residential areas. Most local land use agencies have ordinances that limit the intensity of lighting and its effects on adjacent property owners. Therefore, the rule is not expected to have significant adverse aesthetic impacts to the surrounding community.

Conclusions

Based upon the above considerations, significant adverse project-specific impacts to aesthetics are not expected to occur due to implementation of either Rule 11-18 or Rule 12-16 and, therefore, will not be further evaluated in the Draft EIR.

II. AGRICULTURE AND FORESTRY RESOURCES.

In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
b) Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
c) Conflict with existing zoning for, or cause rezoning of, forest land as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
d) Result in the loss of forest land or conversion of forest land to non-forest use?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses. Some of these agricultural lands are under Williamson Act contracts.

Rule 11-18 would affect hundreds of facilities that cover a wide variety of industries and operations that emit toxic pollutants located throughout the Air District, including data centers, petroleum refineries, a cement kiln, gasoline dispensing facilities, hospitals, crematoria, etc. The rule would require affected facilities to reduce the health risk they pose using various risk reduction measure and controls. Rule 12-16 would affect the four petroleum refineries that are located in Contra Costa County and one that is located in Solano County (Valero) and also three refinery-related facilities located in Contra Costa County.

Regulatory Background

Agricultural and forest resources are generally protected by the City and/or County General Plans, Community Plans through land use and zoning requirements, as well as any applicable specific plans, ordinances, local coastal plans, and redevelopment plans.

Discussion of Impacts

II. a, b, c, d, and e).

Rule 11-18: The facilities and operation that would be affected by Rule 11-18 are located primarily in industrial and commercial areas where agricultural or forest resources are generally not located. Some construction activity is expected to result from compliance with Rule 11-18; but such activities are expected to occur on the premises of the affected facilities and, therefore, would not impact agricultural and forestry resources.

Rule 12-16: The affected refineries and refinery-related facilities are located in industrial areas where agricultural or forest resources are generally not located. Rule 12-16 could require air pollution control equipment on various refinery sources or changes in operations at any or all of the Bay Area refineries to ensure compliance with the emissions limits. Construction activities may be associated with compliance with Rule 12-16. Such construction activities are expected to be limited to the existing refineries. No agricultural or forest resources are located within the boundaries of the existing refineries, and construction activities would not convert any agricultural or forest land into non-agricultural or non-forest use, or involve Williamson Act contracts.

Conclusions

Based upon the above considerations, significant adverse project-specific impacts to agriculture and forest resources are not expected to occur due to implementation of either Rule 11-18 or Rule 12-16 and, therefore, will not be further evaluated in the Draft EIR.

III. AIR QUALITY.

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
b) Violate any air quality standard or contribute to an existing or projected air quality violation?				
Rule 11-18	☑	☐	☐	☐
Rule 12-16	☑	☐	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?				
Rule 11-18	☑	☐	☐	☐
Rule 12-16	☑	☐	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?				
Rule 11-18	☑	☐	☐	☐
Rule 12-16	☑	☐	☐	☐
e) Create objectionable odors affecting a substantial number of people?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑

Setting

It is the responsibility of the BAAQMD to ensure that state and federal ambient air quality standards are achieved and maintained in its geographical jurisdiction. Health-based air quality standards have been established by California and the federal government for the following criteria air pollutants: ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), particulate matter less than 10 microns in diameter (PM_{10}), particulate matter less than 2.5 microns in diameter ($PM_{2.5}$), sulfur dioxide (SO_2), and lead.

Air quality conditions in the San Francisco Bay Area have improved since the Air District was created in 1955. Ambient concentrations of air pollutants and the number of days on which the region exceeds air quality standards have fallen. The Air District is in attainment of the State and federal ambient air

quality standards for CO, nitrogen oxides (NOx), and SO_2 and the federal 24-hour standard for $PM_{2.5}$. The Air District is not considered to be in attainment with the State PM_{10} and $PM_{2.5}$ standards. The Bay Area is designated as non-attainment for the federal 8-hour and California 1- and 8-hour ozone standards.

Regulatory Background

Criteria Pollutants

At the federal level, the Clean Air Act (CAA) Amendments of 1990 give the U.S. EPA additional authority to require states to reduce emissions of ozone precursors and particulate matter in non-attainment areas. The amendments set attainment deadlines based on the severity of problems. At the state level, CARB has traditionally established state ambient air quality standards, maintained oversight authority in air quality planning, developed programs for reducing emissions from motor vehicles, developed air emission inventories, collected air quality and meteorological data, and approved state implementation plans. At a local level, California's air districts, including the BAAQMD, are responsible for overseeing stationary source emissions, approving permits, maintaining emission inventories, maintaining air quality monitoring stations, overseeing agricultural burning permits, and reviewing air quality-related sections of environmental documents required by CEQA.

The BAAQMD is governed by a 24-member Board of Directors composed of publicly-elected officials apportioned according to the population of the represented counties. The Board has the authority to develop and enforce regulations for the control of air pollution within its jurisdiction. The BAAQMD is responsible for implementing emissions standards and other requirements of federal and state laws. It is also responsible for developing air quality planning documents required by both federal and state laws.

Toxic Air Contaminants

TACs are regulated in the District through federal, state, and local programs. At the federal level, TACs are regulated primarily under the authority of the CAA. Prior to the amendment of the CAA in 1990, source-specific NESHAPs were promulgated under Section 112 of the CAA for certain sources of radionuclides and Hazardous Air Pollutants (HAPs).

Title III of the 1990 CAA amendments requires U.S. EPA to promulgate NESHAPs on a specified schedule for certain categories of sources identified by U.S. EPA as emitting one or more of the 189 listed HAPs. Emission standards for major sources must require the maximum achievable control technology (MACT). MACT is defined as the maximum degree of emission reduction achievable considering cost and non-air quality health and environmental impacts and energy requirements. All NESHAPs were to be promulgated by the year 2000. Specific incremental progress in establishing standards were to be made by the years 1992 (at least 40 source categories), 1994 (25 percent of the listed categories), 1997 (50 percent of remaining listed categories), and 2000 (remaining balance). The 1992 requirement was met; however, many of the four-year standards were not promulgated as scheduled. Promulgation of those standards has been rescheduled based on court ordered deadlines, or the aim to satisfy all Section 112 requirements in a timely manner.

Many of the sources of TACs that have been identified under the CAA are also subject to the California TAC regulatory programs. CARB developed three regulatory programs for the control of TACs. Each of the programs is discussed in the following subsections.

Control of TACs Under the TAC Identification and Control Program: California's TAC identification and control program, adopted in 1983 as Assembly Bill 1807 (AB 1807) (California Health and Safety Code §39662), is a two-step program in which substances are identified as TACs and airborne toxic control measures (ATCMs) are adopted to control emissions from specific sources. Since adoption of the program, CARB has identified 18 TACs, and CARB adopted a regulation designating all 189 federal HAPs as TACs.

Control of TACs Under the Air Toxics "Hot Spots" Act: The Air Toxics Hot Spot Information and Assessment Act of 1987 (AB 2588) (California Health and Safety Code §39656) established a state-wide program to inventory and assess the risks from facilities that emit TACs and to notify the public about significant health risks associated with those emissions. Inventory reports must be updated every four years under current state law. In its implementation of that program, the BAAQMD used a maximum individual cancer risk of 10 in one million (10/M), or an ambient concentration above a non-cancer reference exposure level, as the threshold for notification. Using the best science available at the time, only a relatively small number of facilities exceeded that threshold.

Senate Bill (SB) 1731, enacted in 1992 (California Health and Safety Code §44390 et seq.), amended AB 2588 to include a requirement for facilities with significant risks to prepare and implement a risk reduction plan to reduce the risk below a defined significant risk level within specified time limits. At a minimum, such facilities must, as quickly as feasible, reduce cancer risk levels that exceed 100 per one million (100/M). The BAAQMD adopted risk reduction requirements for perchloroethylene dry cleaners to fulfill the requirements of SB 1731. No facilities within the Bay Area currently exceed the 100/M threshold that would require risk reductions.

Targeted Control of TACs Under the Community Air Risk Evaluation Program: In 2004, BAAQMD initiated the Community Air Risk Evaluation (CARE) program to identify areas with relatively high concentrations of air pollution, including toxic air contaminants (TACs) and fine particulate matter, and populations most vulnerable to air pollution's health impacts. Maps of communities most impacted by air pollution, generated through the CARE program, have been integrated into many BAAQMD programs. For example, BAAQMD uses information derived from the CARE program to develop and implement targeted risk reduction programs, including grant and incentive programs, community outreach efforts, collaboration with other governmental agencies, model ordinances, new regulations for stationary sources and indirect sources, and advocacy for additional legislation.

Discussion of Impacts

III. a).

Neither Rule 11-18 nor Rule 12-16 is expected to conflict with or obstruct implementation of the applicable air quality plan. The 2010 Bay Area Clean Air Plan (CAP) was approved by the Air

District's Board of Directors on September 15, 2010 and is the approved air quality plan that the Air District operates under.

Rule 11-18: Rule 11-18 would require facilities that pose a health risk in excess of the risk action level threshold of ten per million (10/M) cancer risk or 1.0 hazard index for both chronic and acute risk to reduce that risk below the threshold through the implementation of a risk reduction plan approved by the Air District or demonstrate that all significant sources of toxic emissions are control by TBARCT; a significant source of toxic emission would be one that poses a health risk of 1.0/M cancer or 0.2 hazard index. The rule would be implemented in four phases based on either a facility's priority score (PS) or the toxic emissions source type as illustrated in Table 2.1. (Priority scores for all potentially affected facilities are expected to be completed by the end of 2017). Reducing TAC emissions from these facilities would be in harmony with the aims of the 2010 CAP and, therefore, Rule 11-18 would not conflict with or obstruct implementation of the 2010 CAP as it is not expected to interfere with any other District rules and regulations.

Table 2.1 – Rule 11-18 Implementation Phases

Phase	Criterion	HRAs	Risk Reduction Plans	Plan Implementation
1	Cancer PS > 250 or Non-cancer PS >2.5	2017 – 2018	2018 – 2019	2019 – 2022
2	Cancer PS > 10 or Non-cancer PS >1.0	2019 – 2021	2021 – 2022	2022 – 2025
3	Diesel Engines	2021 – 2023	2023 – 2024	2024 – 2027
4	Retail Gas Stations	2023 – 2024	2024 – 2025	2025 – 2028

Rule 12-16: Rule 12-16 would establish facility-wide emissions limits for GHGs, $PM_{2.5}$ and PM_{10}, NOx, and SO_2 at each of the five Bay Area refineries and three refinery-related facilities. Any affected facility that exceeds an emission limit would be a violation of the rule. Limiting emissions from these facilities would be in harmony with the aims of the 2010 CAP and, therefore, Rule 12-16 would not conflict with or obstruct implementation of the 2010 CAP.

III. b, c, and d).

Rule 11-18: Rule 11-18 would reduce the health risk level at which facilities must reduce their risk. There are a large variety of control technologies and measures that could be used to reduce the health risk posed by a facility. A limited listing of such measures is presented in Table 2.2 below.

Table 2.2 – Risk Reduction Measures and Target Substances

Risk Reduction Measure	Substance Group	Control Efficiency
Enclosures	Particulates	Varied
Capture and Collection Systems	VOCs and Particulates	Varied
Diesel Particulate Filter	Particulates	85%
Baghouse	Particulates	99-99.9%

Risk Reduction Measure	Substance Group	Control Efficiency
HEPA filter and pre-filter	Particulates	99.9-99.99%
Carbon Adsorption	VOCs	90-99%
Thermal and Catalytic Oxidizers	VOCs and Inorganic Gases	98-99.9%
Reduced Throughput or Operating Time	VOCS and Particulates	Varied
Alternative Technologies	Particulates	Up to 100%
Product Substitution	VOCs	Up to 100%
Relocate Source or Stack	All TAC Types	Not Applicable
Stack Modifications	All TAC Types	Not Applicable

While the primary purpose of implementing risk reduction measures such as installing air pollution control equipment or making operational changes is to reduce health risks, some types of control equipment have the potential to create secondary adverse air quality impacts. For example, increased NOx emissions could result if VOC emissions are controlled through a combustion process (e.g., afterburner) or require additional energy to operate.

Because of the potential for secondary emissions from air pollution control equipment, there is a potential that sensitive receptors could be exposed to increased pollutant concentrations, which could be significant. As a result, these potential air quality impacts will be evaluated in the Draft EIR.

Rule 12-16: A number of air quality rules and regulations that apply to refineries are enforced by the BAAQMD. These existing rules and regulations require: (1) air permits; (2) the use of best available control technology (BACT); (3) new source review for new emission sources and offsets for new emissions; (4) control of toxic air contaminants; (5) control of fugitive emission sources including storage tanks, equipment leaks, bulk loading, and wastewater separators; and (6) control of emissions from combustion sources, including process heaters, boilers, internal combustion engines, gas turbines, catalytic cracking and reforming units, and flares. Rule 12-16 could require modifications to refineries to ensure changes in operations do not result in emissions increases either through the installation of air pollution control equipment or changes in operations.

Although the primary effect of installing air pollution control equipment is to reduce emissions of a particular pollutant, e.g., VOCs, some types of control equipment have the potential to create secondary adverse air quality impacts, e.g., increased NOx emissions if VOC emissions are controlled through a combustion process (e.g., afterburner) or require additional energy to operate. Control measures aimed at reducing NOx from stationary sources may use ammonia for control (e.g., selective catalytic reduction). Ammonia use could result in increased ammonia emissions and, since ammonia is a precursor to particulate formation, increased particulate formation in the atmosphere. Because of the potential for secondary emissions from air pollution control equipment, there is a potential that sensitive receptors could be exposed to increased pollutant concentrations, which could be significant. As a result, these potential air quality impacts of Rule 12-16 will be evaluated in the Draft EIR.

III. e).

Rule 11-18: Rule 11-18 would require facilities that pose significant health risks to develop a plan to reduce that risk or apply TBARCT to all significant sources of risk at the facility. The measures that a facility could potentially implement to reduce its risk are listed above in Table 2.2 and generally would not result in the creation of objectionable odors that could affect a substantial number of people.

Rule 12-16: Rule 12-16 would establish facility-wide emissions limits for GHGs, $PM_{2.5}$ and PM_{10}, NOx, and SO_2 at each of the five Bay Area refineries and three refinery-related facilities. The rule is not expected to result in an increase in odorous emissions at the refineries. Odorous emissions are not specifically covered by Rule 12-16 and while not specifically aimed at reducing emissions of compounds that are considered odorous, e.g., hydrogen sulfide (H_2S), which is the primary odorous compound emitted from the refineries, the rule would not result in an increase in H_2S or other odorous sulfur-containing compounds. Therefore, the rule is not expected to result in an increase in the generation of emissions that could generate odors.

Conclusions

Implementation of Rule 11-18 would reduce risk from facilities that emit toxic air contaminants throughout the Bay Area. However, certain risk reduction measures have the potential to increase emissions of other pollutants, such as GHGs and criteria pollutants. Implementation of Rule 12-16 would prevent refinery emissions of GHGs and some criteria pollutants from increasing. Similarly, secondary adverse air quality impacts could occur from installing control equipment at individual refineries in response to changes that could increase emissions of criteria pollutants. Adverse impacts include increased criteria pollutant and TAC emissions from certain types of air pollution control equipment. Therefore, potential adverse secondary air quality impacts which could result from implementing either Rule 11-18 or Rule 12-16 will be evaluated in the Draft EIR. No significant impacts were identified on air quality plans or the generation of odors and these topics will not be addressed further in the Draft EIR.

IV. BIOLOGICAL RESOURCES.

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
e) Conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses. A wide variety of biological resources are located within the Bay Area.

The areas affected by the rules are located in the Bay Area-Delta Bioregion (as defined by the State's Natural Communities Conservation Program). This Bioregion is comprised of a variety of natural communities, which range from salt marshes to chaparral to oak woodland.

Rule 11-18: Hundreds of facilities located throughout the Bioregion would be affected by Rule 11-18. The facilities that would be affected by Rule 11-18 are expected to be located in developed commercial and industrial areas within the Bay Area. These commercial/industrial areas have been graded to develop the various structures, and are typically surrounded by other commercial and industrial facilities. Native vegetation, other than landscape vegetation, has usually been removed from these facilities.

Rule 12-16: Four of the refineries affected by the Rule 12-16 are located in Contra Costa County and one is located in Solano County (Valero). The refineries affected by Rule 12-16 have been developed with various permanent refinery structures, buildings, operating units and storage tanks. Native vegetation, other than landscape vegetation, has generally been removed from the refineries to minimize safety and fire hazards.

Regulatory Background

Biological resources are protected by the City and/or County General Plans through land use and zoning requirements which minimize or prohibit development in biologically sensitive areas. Biological resources are also protected by the California Department of Fish and Wildlife, and the U.S. Fish and Wildlife Service. The U.S Fish and Wildlife Service and National Marine Fisheries Service oversee the federal Endangered Species Act. Development permits may be required from one or both of these agencies if development would impact rare or endangered species. The California Department of Fish and Wildlife administers the California Endangered Species Act which prohibits impacting endangered and threatened species. The U.S. Army Corps of Engineers and the U.S. Environmental Protection

Agency (U.S. EPA) regulate the discharge of dredge or fill material into waters of the United States, including wetlands.

Discussion of Impacts

IV. a), b), and d).

Rule 11-18: The facilities affected by Rule 11-18 are expected to be located in the commercial and industrial areas within the Bay Area. These commercial/industrial areas have been graded to develop the various structures, and are typically surrounded by other commercial and industrial facilities. Native vegetation, other than landscape vegetation, has usually been removed from these facilities.

Similarly, modifications at existing facilities would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with native or resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Further, since the Rule 11-18 would primarily regulate stationary emission sources at commercial or industrial facilities, it would not directly or indirectly affect riparian habitat or other sensitive natural communities identified in local or regional plans, policies, or regulations, or identified by the CDFG or U.S. Fish and Wildlife Service. Improved air quality resulting from Rule 11-18 would be expected to provide health benefits to plant and animal species in the District.

Rule 12-16: No impacts on biological resources are anticipated from the Rule 12-16 which would apply to existing refineries. The refinery facilities have been graded and developed, and biological resources, with the exception of landscape species, have been removed. Construction of any air pollution control equipment would take place within the operating portions of existing refineries which are void of biological resources. As a result, there would be no direct or indirect impact on sensitive biological resources riparian habitats, or protected wetlands. The installation of air pollution control equipment would also not interfere with the movement of any migratory fish or wildlife species or affect migratory corridors; would not conflict with local policies or ordinances protecting biological resources; and would not conflict with an adopted habitat conservation plan.

IV. c).

Rule 11-18: No direct or indirect impacts from implementing the Rule 11-18 were identified which could adversely affect plant and/or animal species in the District. Implementing the Rule 11-18 would result in installation of new or modifications of existing equipment at commercial or industrial facilities to control or further control toxic emissions. Existing commercial or industrial facilities are generally located in appropriately zoned commercial or industrial areas, this work would not impact marshes, vernal pools, wetlands, etc. For these reasons the rule is not expected to adversely affect protected wetlands as defined by §404 of the Clean Water Act, including, but not limited to marshes, vernal pools, coastal wetlands, etc., through direct removal, filling, hydrological interruption or other means.

Rule 12-16: Compliance with the Rule 12-16 could result in the installation of additional air pollution control equipment at existing refineries. The installation of air pollution control equipment at these facilities would be consistent with industrial land uses. The operating portions of the existing refineries do not contain marshes, vernal pools, wetlands, etc. Therefore, construction would not impact these biological resources. For these reasons the rule is not expected to adversely affect protected wetlands as

defined by §404 of the Clean Water Act, including, but not limited to marshes, vernal pools, coastal wetlands, etc., through direct removal, filling, hydrological interruption or other means.

IV. e and f).

Rule 11-18: Rule 11-18 may require modifications at existing industrial or commercial facilities to control or further control emissions at these affected facilities. As a result, the rule will not conflict with any land use policies or ordinances protecting biological resources. Similarly, the rule will not conflict with any habitat conservation or natural community conservation plans, agricultural resources or operations, and would not create divisions in any existing communities.

Rule 12-16: Rule 12-16 wills not conflict with any land use plans, local policies or ordinances, or regulations protecting biological resources for the reasons already given. Similarly, the rule is not expected to conflict with any habitat conservation or natural community conservation plans, agricultural resources or operations, and would not create divisions in any existing communities.

Conclusions

Based upon the above considerations, significant adverse project-specific impacts to biological resources are not expected to occur due to implementation of either Rule 11-18 or Rule 12-16 and, therefore, will not be further evaluated in the Draft EIR.

V. CULTURAL RESOURCES.

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
d) Disturb any human remains, including those interred outside of formal cemeteries?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses vary greatly and include commercial, industrial, residential, agricultural and open space uses. Cultural resources are defined as buildings, sites, structures, or objects which might have historical architectural, archaeological, cultural, or scientific importance.

The Carquinez Strait represents the entry point for the Sacramento and San Joaquin Rivers into the San Francisco Bay. This locality lies within the San Francisco Bay and the west end of the Central Valley archaeological regions, both of which contain a rich array of prehistoric and historical cultural resources. The areas surrounding the Carquinez Strait and Suisun Bay have been occupied for millennia.

Regulatory Background

The State CEQA Guidelines define a significant cultural resource as a "resource listed or eligible for listing on the California Register of Historical Resources" (Public Resources Code §5024.1). A project would have a significant impact if it would cause a substantial adverse change in the significance of a historical resource (State CEQA Guidelines §15064.5(b)). A substantial adverse change in the significance of a historical resource would result from an action that would demolish or adversely alter the physical characteristics of the historical resource that convey its historical significance and that qualify the resource for inclusion in the California Register of Historical Resources or a local register or survey that meets the requirements of Public Resources Code §§50020.1(k) and 5024.1(g).

Discussion of Impacts

V. a, b, c and d).

Rule 11-18: Implementing Rule 11-18 is primarily expected to result in controlling stationary source emissions at commercial or industrial facilities. Affected facilities are typically located in appropriately zoned commercial or industrial areas that have previously been graded and developed. Because stationary source emissions from existing facilities does not typically require extensive cut-and-fill activities, or excavation, it is unlikely that additional stationary source control measures that may result from Rule 11-18 will: (1) adversely affect historical or archaeological resources as defined in CEQA Guidelines §15064.5; (2) destroy unique paleontological resources or unique geologic features; or (3) disturb human remains interred outside formal cemeteries.

In a small number of cases, the Rule 11-18 may require minor site preparation and grading at an affected facility to install new or modify existing equipment. Under this circumstance, it is possible that archaeological or paleontological resources could be uncovered. Even if this circumstance were to occur, significant adverse cultural resource impacts are not anticipated because there are existing laws in place that are designed to protect and mitigate potential adverse impacts to cultural resources. As with any construction activity, should archaeological resources be found during construction that results from implementing the rule, the activity would cease until a thorough archaeological assessment is conducted.

Rule 12-16: No impacts on cultural resources are anticipated from the Rule 12-16 that would apply to existing refineries. Historic resources are typically not located within refineries and no demolition activities are expected to be required. As a result, no impacts on historic resources are expected. Construction activities would be limited to areas within existing refineries boundaries, i.e., within areas that have already been graded and developed. Therefore, construction activities are not expected to impact cultural resources, including historical and archaeological resources, either directly or indirectly, or disturb human remains.

Conclusions

Based upon the above considerations, significant adverse project-specific impacts to cultural resources are not expected to occur due to implementation of Rule 11-18 and 12-16 and, therefore, will not be further evaluated in the Draft EIR.

VI. GEOLOGY AND SOILS.

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
ii) Strong seismic ground shaking?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☐	☐	☑	☐
iii) Seismic-related ground failure, including liquefaction?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☐	☐	☑	☐
iv) Landslides?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☐	☐	☑	☐
b) Result in substantial soil erosion or the loss of topsoil?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☐	☐	☑	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses. The facilities affected by the rules are located primarily in commercial and industrial areas within the Bay Area.

The affected facilities are located in the natural region of California known as the Coast Ranges geomorphic province. The province is characterized by a series of northwest trending ridges and valleys controlled by tectonic folding and faulting, examples of which include the Suisun Bay, East Bay Hills, Briones Hills, Vaca Mountains, Napa Valley, and Diablo Ranges.

Regional basement rocks consist of the highly deformed Great Valley Sequence, which include massive beds of sandstone inter-fingered with siltstone and shale. Unconsolidated alluvial deposits, artificial fill, and estuarine deposits, (including Bay Mud) underlie the low-lying region along the margins of the Carquinez Straight and Suisun Bay. The estuarine sediments found along the shorelines of Solano County are soft, water-saturated mud, peat and loose sands. The organic, soft, clay-rich sediments along the San Francisco and San Pablo Bays are referred to locally as Bay Mud and can present a variety of engineering challenges due to inherent low strength, compressibility and saturated conditions. Landslides in the region occur in weak, easily weathered bedrock on relatively steep slopes.

The San Francisco Bay Area is a seismically active region, which is situated on a plate boundary marked by the San Andreas Fault System. Several northwest trending active and potentially active faults are included with this fault system. Under the Alquist-Priolo Earthquake Fault Zoning Act, Earthquake Fault Zones were established by the California Division of Mines and Geology along "active" faults, or faults along which surface rupture occurred in Holocene time (the last 11,000 years). In the Bay area, these faults include the San Andreas, Hayward, Rodgers Creek-Healdsburg, Concord-Green Valley, Greenville-Marsh Creek, Seal Cove/San Gregorio and West Napa faults. Other smaller faults in the region classified as potentially active include the Southampton and Franklin faults.

Ground movement intensity during an earthquake can vary depending on the overall magnitude, distance to the fault, focus of earthquake energy, and type of geological material. Areas that are

underlain by bedrock tend to experience less ground shaking than those underlain by unconsolidated sediments such as artificial fill. Earthquake ground shaking may have secondary effects on certain foundation materials, including liquefaction, seismically induced settlement, and lateral spreading.

Regulatory Background

Construction is regulated by local City or County building codes and ordinances that regulate construction, grading, excavations, use of fill, and foundation work including type of materials, design, procedures, etc. which are intended to limit the probability of occurrence and the severity of consequences from geological hazards. Necessary permits, plan checks, and inspections are generally required.

All City or County General Plans include a Safety Element. The Element identifies seismic hazards and their location in order that they may be taken into account in the planning of future development. The California Building Code is the principle mechanism for protection against and relief from the danger of earthquakes and related events.

In addition, the Seismic Hazard Zone Mapping Act (Public Resources Code §§2690 – 2699.6) was passed by the California legislature in 1990 following the Loma Prieta earthquake. The act required that the California Division of Mines and Geology (DMG) develop maps that identify the areas of the state that require site specific investigation for earthquake-triggered landslides and/or potential liquefaction prior to permitting most urban developments. The act directs cities, counties, and state agencies to use the maps in their land use planning and permitting processes.

Local governments are responsible for implementing the requirements of the Seismic Hazards Mapping Act. The maps and guidelines are tools for local governments to use in establishing their land use management policies and in developing ordinances and review procedures that will reduce losses from ground failure during future earthquakes.

Discussion of Impacts

VI. a, c, and d).

Rule 11-18: The rule will not directly expose people or structures to earthquake faults, seismic shaking, seismic-related ground failure including liquefaction, landslides, mudslides or substantial soil erosion, as BAAQMD rules or regulations do not directly or indirectly result in construction of new structures. Some new structures, or structural modifications at existing affected facilities may occur as a result of installing control equipment or making process modifications. In any event, existing affected facilities or modifications to existing facilities would be required to comply with relevant California Building Code requirements in effect at the time of initial construction or modification of a structure.

New structures must be designed to comply with the California Building Code Zone 4 requirements since the Air District is located in a seismically active area. The local cities or counties are responsible for assuring that projects comply with the Uniform Building Code and can conduct inspections to ensure compliance. The California Building Code is considered to be a standard safeguard against major

structural failures and loss of life. The goal of the Code is to provide structures that will: (1) resist minor earthquakes without damage; (2) resist moderate earthquakes without structural damage but with some non-structural damage; and (3) resist major earthquakes without collapse but with some structural and non-structural damage. The California Building Code bases seismic design on minimum lateral seismic forces ("ground shaking") and operates on the principle that providing appropriate foundations, among other aspects, helps to protect buildings from failure during earthquakes. The basic formulas used for the California Building Code seismic design require determination of the seismic zone and site coefficient, which represents the foundation conditions at the site.

Any potentially affected facilities that are located in areas where there has been historic occurrence of liquefaction, e.g., coastal zones, or existing conditions indicate a potential for liquefaction, including expansive or unconsolidated granular soils and a high water table, may have the potential for liquefaction induced impacts at the project sites. The California Building Code requirements consider liquefaction potential and establish more stringent requirements for building foundations in areas potentially subject to liquefaction. Therefore, compliance with the California Building Code requirements is expected to minimize the potential impacts associated with liquefaction. The issuance of building permits from the local cities or counties will assure compliance with the California Building Code requirements. Therefore, no significant impacts from liquefaction are expected.

Because facilities affected by any Air District control equipment requirements are typically located in industrial or commercial areas, which are not usually located near known geological hazards (e.g., landslide, mudflow, seiche, or volcanic hazards), no significant adverse geological impacts are expected. In addition, although refineries and possibly other facilities are located along the shoreline and may be affected by flooding from tsunamis, modifying existing equipment or installing new equipment to further control emissions from an existing facility will not expose people to new risks from tsunamis.

Rule 12-16: The petroleum refineries affected by Rule 12-16 already exist and operate within the confines of existing industrial facilities in the Bay Area. Construction activities could be required to install air pollution control equipment associated with complying with the refinery-wide emissions limits. Any substantial construction activities associated with new refinery equipment would occur within the confines of existing refineries and would be required to comply with the California Building Code. The California Building Code is considered to be a standard safeguard against major structural failures and loss of life. Any construction at industrial facilities regulated by the rule will be constructed in compliance with the California Building Code. The goal of the code is to provide structures that will: (1) resist minor earthquakes without damage; (2) resist moderate earthquakes without structural damage, but with some non-structural damage; and (3) resist major earthquakes without collapse, but with some structural and non-structural damage. The California Building Code bases seismic design on minimum lateral seismic forces ("ground shaking"). The California Building Code requirements operate on the principle that providing appropriate foundations, among other aspects, helps to protect buildings from failure during earthquakes. The basic formulas used for the California Building Code seismic design require determination of the seismic zone and site coefficient, which represent the foundation conditions at the site. Compliance with the California Building Code would minimize the impacts associated with existing geological hazards.

Any new development at the petroleum refineries affected by the rule would be required to obtain building permits, as applicable, for new foundations and structures at any site. The issuance of building permits from the local agency will assure compliance with the California Building Code, which include

requirements for building within seismic hazard zones. No significant impacts from seismic hazards are expected since the construction of any new structures would be required to comply with the California Building Code.

Because facilities affected by any Air District control equipment requirements are typically located in industrial or commercial areas, which are not usually located near known geological hazards (e.g., landslide, mudflow, seiche, or volcanic hazards), no significant adverse geological impacts are expected. In addition, although refineries and possibly other facilities are located along the shoreline and may be affected by flooding from tsunamis, modifying existing equipment or installing new equipment to further control emissions from an existing facility will not expose people to new risks from tsunamis.

VI. b).

Rule 11-18: Although Rule 11-18 may require modifications at existing industrial or commercial facilities, such modifications are not expected to require substantial grading or construction activities. Any new air pollution control equipment is not expected to substantially increase the area subject to compaction since the subject areas would be limited in size and, typically, have already been graded or displaced in some way. Therefore, significant adverse soil erosion impacts are not anticipated from implementing Rule 11-18.

Rule 12-16: Any construction activities would be limited to the confines of existing refineries which are already graded and developed. Rule 12-16 is not expected to result in substantial soil erosion or the loss of topsoil as construction activities would be limited to areas that have been already been graded and developed, and adjacent to other existing refinery operations.

VI. e).

Rule 11-18: The CEQA environmental checklist includes a discussion of septic tanks and alternative wastewater disposal systems within the discussion of Geology and Soils. Therefore, a discussion of septic tanks and alternative septic systems is included herein for completeness. Septic tanks or other similar alternative wastewater disposal systems are typically associated with small residential projects in remote areas. The rule does not contain any requirements which generate construction of residential projects in remote areas. Rule 11-18 would only affect existing industrial or commercial facilities, which already are hooked up to appropriate sewerage facilities, and therefore no impacts on septic tanks or alternative wastewater disposal systems are expected.

Rule 12-16: Septic tanks or other similar alternative wastewater disposal systems are typically associated with small residential projects in remote areas. Rule 12-16 would only affect existing refineries that are already connected to appropriate wastewater facilities. Based on these considerations, septic tanks or other alternative wastewater disposal systems are not expected to be impacted by Rule 12-16.

Conclusions

Based upon the above considerations, significant adverse project-specific impacts to geology and soils are not expected to occur due to implementation of Rule 11-18 and 12-16 and, therefore, will not be further evaluated in the Draft EIR.

VII. GREENHOUSE GAS EMISSIONS.

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				
Rule 11-18	☑	☐	☐	☐
Rule 12-16	☑	☐	☐	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☑	☐	☐	☐

Setting

Global climate change refers to changes in average climatic conditions on the earth as a whole, including temperature, wind patterns, precipitation and storms. Global warming, a related concept, is the observed increase in the average temperature of the earth's surface and atmosphere. One identified cause of global warming is an increase of greenhouse gases (GHGs) in the atmosphere. The six major GHGs identified by the Kyoto Protocol are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), haloalkanes (HFCs), and perfluorocarbons (PFCs). The GHGs absorb longwave radiant energy reflected by the earth, which warms the atmosphere. GHGs also radiate longwave radiation both upward to space and back down toward the surface of the earth. The downward part of this longwave radiation absorbed by the atmosphere is known as the "greenhouse effect." Some studies indicate that the potential effects of global climate change may include rising surface temperatures, loss in snow pack, sea level rise, more extreme heat days per year, and more drought years.

Events and activities, such as the industrial revolution and the increased combustion of fossil fuels (e.g., gasoline, diesel, coal, etc.), have heavily contributed to the increase in atmospheric levels of GHGs. Approximately 80 percent of GHG emissions in California are from fossil fuel combustion and over 70 percent of GHG emissions are carbon dioxide emissions (BAAQMD, 2010).

Regulatory Background

In response to growing scientific and political concern regarding global climate change, California has taken the initiative to address the state's greenhouse gas emissions. California has adopted the Global Warming Solutions Act of 2006, also known as AB 32, which requires the state to reduce its GHG emissions to 1990 levels by 2020. In addition, in 2005 Governor Schwarzenegger adopted Executive Order S-3-05, which commits to achieving an 80 percent reduction below 1990 levels by 2050. The

California Air Resources Board (CARB) has begun implementation of these mandates through adoption of regulatory requirements to reduce GHG emissions (among other agency implementation actions). Major sources of GHG emissions are under CARB's AB32 cap and trade program, which established a limit on GHG emissions for each source. GHG emissions over the limit require additional GHG emission reductions or purchase of GHG emission credits from sources that had excess emission credits.

Senate Bills 1078 and 107 and Executive Order S-14-08 (2008): SB 1078 (Chapter 516, Statutes of 2002) required retail sellers of electricity to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010. In November 2008, then Governor Schwarzenegger signed EO S-14-08, which expands the state's Renewable Portfolio Standard to 33 percent renewable power by 2020. Governor Brown signed EO B-30-15 in 2015 in order to reduce GHG emissions by 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing GHG emissions to 80 percent of 1990 levels by 2050.

The Clean Energy and Pollution Reduction Act of 2015, SB 350 (Chapter 547, Statutes of 2015) was approved by Governor Brown on October 7, 2015. SB 350 will (1) increase the standards of the California RPS program by requiring that the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources be increased to 50 percent by December 31, 2030; (2) require the State Energy Resources Conservation and Development Commission to establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas final end uses of retail customers by January 1, 2030; (3) provide for the evolution of the Independent System Operator (ISO) into a regional organization; and (4) require the state to reimburse local agencies and school districts for certain costs mandated by the state through procedures established by statutory provisions.

SB 862: In June 2014, SB 862 (Chapter 36, Statutes of 2014) established long-term funding programs from the Cap and Trade program for transit, sustainable communities and affordable housing, and high speed rail. SB 862 allocates 60 percent of ongoing Cap and Trade revenues, beginning in 2015–2016, to these programs. The remaining 40 percent is to be determined by future legislatures. A minimum of 25 percent of Cap and Trade dollars must go to projects that provide benefits to disadvantaged communities, and a minimum of 10 percent must go to projects located within those disadvantaged communities. In addition, this bill established the CalRecycle Greenhouse Gas Reduction Revolving Loan Program and Fund.

Most recently, SB 32 was signed into law in September 2016 and requires the California Air Resources Board (ARB) to ensure that statewide greenhouse gas emissions are reduced to 40% below the 1990 level by 2030. ARB is developing a 2030 Target Scoping Plan to implement this charge and expects to release a draft of the plan around the end of the year.

At the federal level, the U.S. EPA has adopted GHG emissions limits for new light-duty cars and trucks. This regulation of mobile sources has in turn triggered New Source Review and Title V permitting requirements for stationary sources. These requirements include using Best Available Control Technology to control emissions from major facilities. In addition, the U.S. EPA is also in the process of adopting New Source Performance Standards for major GHG source categories (currently limited to electric utility generating units).

The U.S. Congress passed "The Consolidated Appropriations Act of 2008" (HR 2764) in December 2007, which requires reporting of GHG data and other relevant information from large emission sources and suppliers in the United States. The Rule is referred to as 40 Code of Federal Regulations (CFR) 4 Part 98 - Greenhouse Gas Reporting Program (GHGRP). Facilities that emit 25,000 metric tonnes or more per year of GHGs are required to submit annual reports to U.S. EPA.

Discussion of Impacts

VII. a).

Rule 11-18: Rule 11-18 is designed to reduce the health risk associated with facilities that emit toxic air contaminants. There are several ways the risk associated with a facility can be reduced, which are outline in Table 2. 2. Included under this listing are:

- Enclosures and collection systems for particulate matter TACs;
- Filtration for toxic aerosols and particulate matter;
- Carbon adsorption and adsorption-oxidation systems for VOCs;
- Chemical absorption for VOCs;
- Thermal and catalytic oxidation for inorganic gases (such as hydrogen sulfide) and organic compounds; and
- Combination systems for the control of halogenated VOCs;

Each of the control options listed above has associated with it the potential to increase use of fuels, for combustion sources (e.g., electricity, natural gas, or refinery fuel gas), potentially generating additional greenhouse gas emission impacts. Construction activities for new and modified control devices may also result in GHG emissions. Therefore, GHG impacts from Rule 11-18 will be evaluated in the Draft EIR.

Rule 12-16: Rule 12-16 is designed to limit facility-wide emissions of GHGs and three criteria pollutants from the five petroleum refineries located within the jurisdiction of the BAAQMD. Rule 12-16 sets limits on the amount of these pollutants each refinery could emit annually and could require the installation of additional air pollution control equipment or modification of refinery operations to ensure each refinery stays within those limits. The rule could require new construction activities and the operation of new/modified refinery equipment. While, the goal of Rule 12-16 is to minimize overall refinery emissions, however, refinery modifications could result in the increased use of fuel for combustions sources (e.g., electricity, natural gas, or refinery fuel gas), potentially generating additional greenhouse gas emission impacts. As a result, the impacts of this rule on greenhouse gases will be further evaluated in the Draft EIR.

VII. b).

Rule 11-18: Rule 11-18 would require facilities that pose a health risk in excess of a risk action level either reduce risks below the thresholds or apply TBARCT. However, these requirements would not conflict with any efforts by the state or the Air District to reduce GHG emissions. Because no potential

conflicts on GHG plans, policies or regulations were identified, this topic will not be evaluated in the Draft EIR for Rule 11-18.

Rule 12-16: As written, Rule 12-16 would have a direct impact on GHG emissions from all Bay Area refineries by setting an upper limit on the amount of GHGs each refinery can emit. The AB 32 Cap and Trade program allows covered facilities to buy and sell GHG emissions credits. Under Rule 12-16, Bay Area refineries would not be allowed to purchase GHG credits that would allow an increase in excess of the refinery-wide GHG limit. So, theoretically, under the Cap and Trade program, the GHG emissions of an individual refinery could increase while the overall goals of the program are being met. Because the GHG limits of Rule 12-16 could conflict with this aspect of the ARB's AB32 cap and trade program, the potential impacts of this conflict will be evaluated in the Draft EIR.

Conclusions

Based upon the above considerations, the potential GHG emissions associated with Rules 11-18 and 12-16 will be evaluated in the Draft EIR. No significant impacts on GHG plans, policies, or regulations were identified for Rule 11-18, so this topic will not be addressed further in the Draft EIR for Rule 11-18. However, potentially significant impacts were identified for Rule 12-16, and therefore this topic will be addressed in the Draft EIR.

VIII. HAZARDS AND HAZARDOUS MATERIALS.

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☑	☐	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☑	☐	☐	☐
c) Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☑	☐	☐	☐
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☐	☐	☐	☑
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara Counties, and potions of western Solano and southern Sonoma Counties. Because the area of coverage is vast (approximately 5,600 square miles), land uses vary greatly and include commercial, industrial, residential, and agricultural uses.

Facilities and operations within the Air District handle and process substantial quantities of flammable materials and acutely toxic substances. Accidents involving these substances can result in worker or public exposure to fire, heat, blast from an explosion, or airborne exposure to hazardous substances.

Fires can expose the public or workers to heat. The heat decreases rapidly with distance from the flame and therefore poses a greater risk to workers at specific facilities where flammable materials and toxic substances are handled than to the public. Explosions can generate a shock wave, but the risks from explosion also decrease with distance. Airborne releases of hazardous materials may affect workers or the public, and the risks depend upon the location of the release, the hazards associated with the material, the winds at the time of the release, and the proximity of receptors.

For all facilities and operations handling flammable materials and toxic substances, risks to the public are reduced if there is a buffer zone between process units and residences or if prevailing winds blow away from residences. Thus, the risks posed by operations at a given facility or operation are unique and determined by a variety of factors.

Rule 11-18 has the potential to affect a large variety of facilities that emit toxic pollutants, including petroleum refineries, chemical plants, foundries, a cement kiln, gasoline dispensing facilities, data centers, hospitals, crematoria, residential buildings, fire stations, schools and universities, military installations, etc. Rule 12-16 would affect petroleum refineries that handle and process large quantities of flammable, hazardous, and acutely hazardous materials. Accidents involving these substances can result in worker or public exposure to fire, heat, blast from an explosion, or airborne exposure to hazardous substances.

The potential hazards associated with handling such materials are a function of the materials being processed, processing systems, and procedures used to operate and maintain the facilities where they exist. The hazards that are likely to exist are identified by the physical and chemical properties of the materials being handled and their process conditions, including the following events.

- **Toxic gas clouds:** Toxic gas clouds are releases of volatile chemicals (e.g., anhydrous ammonia, chlorine, and hydrogen sulfide) that could form a cloud and migrate off-site, thus exposing the public. "Worst-case" conditions tend to arise when very low wind speeds coincide with an accidental release, which can allow the chemicals to accumulate rather than disperse.

- **Torch fires (gas and liquefied gas releases), flash fires (liquefied gas releases), pool fires, and vapor cloud explosions (gas and liquefied gas releases):** The rupture of a storage tank or vessel containing a flammable gaseous material (like propane), without immediate ignition, can result in a vapor cloud explosion. The "worst-case" upset would be a release that produces a large aerosol cloud with flammable properties. If the flammable cloud does not ignite after dispersion, the cloud would simply dissipate. If the flammable cloud were to ignite during the release, a flash fire or vapor cloud explosion could occur. If the flammable cloud were to ignite immediately upon release, a torch fire would ensue.

- **Thermal Radiation:** Thermal radiation is the heat generated by a fire and the potential impacts associated with exposure. Exposure to thermal radiation would result in burns, the severity of which would depend on the intensity of the fire, the duration of exposure, and the distance of an individual to the fire.

- **Explosion/Overpressure:** Process vessels containing flammable explosive vapors and potential ignition sources are present at many types of industrial facilities. Explosions may occur if the flammable/explosive vapors came into contact with an ignition source. An explosion could cause impacts to individuals and structures in the area due to overpressure.

For all affected facilities, risks to the public are reduced if there is a buffer zone between industrial processes and residences or other sensitive land uses, or the prevailing wind blows away from residential areas and other sensitive land uses. The risks posed by operations at each facility are unique and determined by a variety of factors. The areas affected by the rules are typically located in industrial areas.

Regulatory Background

There are many federal and state rules and regulations that facilities handling hazardous materials must comply with which serve to minimize the potential impacts associated with hazards at these facilities.

Under the Occupational Safety and Health Administration (OSHA) regulations [29 Code of Federal Regulations (CFR) Part 1910], facilities which use, store, manufacture, handle, process, or move highly hazardous materials must prepare a fire prevention plan. In addition, 29 CFR Part 1910.119, Process Safety Management (PSM) of Highly Hazardous Chemicals, and Title 8 of the California Code of Regulations, General Industry Safety Order §5189, specify required prevention program elements to protect workers at facilities that handle toxic, flammable, reactive, or explosive materials.

Section 112 (r) of the Clean Air Act Amendments of 1990 [42 U.S.C. 7401 et. Seq.] and Article 2, Chapter 6.95 of the California Health and Safety Code require facilities that handle listed regulated substances to develop Risk Management Programs (RMPs) to prevent accidental releases of these substances, U.S. EPA regulations are set forth in 40 CFR Part 68. In California, the California Accidental Release Prevention (CalARP) Program regulation (CCR Title 19, Division 2, Chapter 4.5) was issued by the Governor's Office of Emergency Services (OES). RMPs consist of three main elements: a hazard assessment that includes off-site consequences analyses and a five-year accident history, a prevention program, and an emergency response program. California is proposing modifications to the CalARP Program along with the state's PSM program in response to an accident at the Chevron Richmond Refinery. The regulations were released for public comment on July 15, 2016 and the public comment period closes on September 15, 2016.

Affected facilities that store materials are required to have a Spill Prevention Control and Countermeasures (SPCC) Plan per the requirements of 40 Code of Federal Regulations, §112. The SPCC is designed to prevent spills from on-site facilities (e.g., storage tanks) and includes requirements for secondary containment, provides emergency response procedures, establishes training requirements, and so forth.

The Hazardous Materials Transportation (HMT) Act is the federal legislation that regulates transportation of hazardous materials. The primary regulatory authorities are the U.S. Department of Transportation, the Federal Highway Administration, and the Federal Railroad Administration. The HMT Act requires that carriers report accidental releases of hazardous materials to the Department of Transportation at the earliest practical moment (49 CFR Subchapter C). The California Department of Transportation (Caltrans) sets standards for trucks in California. The regulations are enforced by the California Highway Patrol.

California Assembly Bill 2185 requires local agencies to regulate the storage and handling of hazardous materials and requires development of a business plan to mitigate the release of hazardous materials. Businesses that handle any of the specified hazardous materials must submit to government agencies (i.e., fire departments), an inventory of the hazardous materials, an emergency response plan, and an employee training program. The information in the business plan can then be used in the event of an emergency to determine the appropriate response action, the need for public notification, and the need for evacuation.

Contra Costa County has adopted an industrial safety ordinance that addresses the human factors that lead to accidents. The ordinance requires stationary sources to develop a written human factors program that considers human factors as part of process hazards analyses, incident investigations, training, operating procedures, among others.

Discussion of Impacts

VIII. a, b, and c).

Rule 11-18: Rule 11-18 has the potential to create direct or indirect hazard impacts associated with affected facility modifications employed to reduce risks. The rule is designed to reduce health risk associated with the emissions of TACs from existing stationary sources in the Bay Area. The rule is not

expected to require substantial new development. Any new air pollution control equipment or enclosures would be expected to occur within existing commercial or industrial facilities. The rule is expected to increase the control and capture of TACs, thus limiting TAC emissions and exposure to TACs and ultimately, reduce health risks.

Facility modifications associated with the rule are largely expected to include limiting throughput or hours of operations; increased use of diesel particulate filters; additional enclosures and bag houses, and thermal oxidizers or carbon adsorption systems. The hazards associated with the use of these types of air pollution control equipment and systems are minimal.

- Limiting throughput or hours of operations would not result in increased hazards as no new equipment, hazardous materials uses, or hazards would be generated.
- Diesel particulate filters and baghouses are not expected to result in additional hazards as they would simply filter exhaust.

Operation of carbon adsorption systems has potential hazards associated with the desorption cycle when there is minor risk for explosion or release of VOC into the atmosphere. Carbon adsorption systems may also represent a fire risk during operation when carbon particles are saturated with volatile organic compounds. The potential hazard impacts would depend on the flammability of the material, concentration of VOC adsorbed into the activated carbon, ambient oxygen levels, characteristics of the carbon adsorption system, and the operating conditions. Carbon adsorption units would concentrate hazardous organic compound into the spent carbon, requiring recycling or disposal.

The risk of explosion or release of VOC from carbon adsorption systems is not expected to be significant. The engineering specifications for a carbon adsorption unit are typically designed to operate within an acceptable range of temperatures for the carbon bed. Good engineering practice means this range of temperatures should not exceed the lower explosive limit (LEL) of the compound(s) being adsorbed. There is little risk of fire if the LEL is not exceeded.

Oxidation systems can be susceptible to compressor failure and flame flashbacks, particularly during startup and shutdown. As a result, oxidation systems could pose potential hazard risks primarily to workers or to a lesser extent the public in the event of explosions or fires. Oxidation systems historically have a good safety record when operated properly according to the manufacturers' instruction. Proper tune-up and maintenance is also important and necessary to avoid failures or explosions. When installed, operated, and maintained properly, oxidation systems are not expected to create fire or explosion hazards to workers or the public in general.

In addition to following good engineering practice for both oxidization systems, thermal oxidizers and carbon adsorption systems, Health and Safety Code §25506 specifically requires all businesses handling hazardous materials to submit a business emergency response plan to assist local administering agencies in the event of an emergency release or threatened release of a hazardous material. Business emergency response plans generally require the following:

- Types and quantities of hazardous materials used and their locations;
- Training programs for employees including safe handling of hazardous materials and emergency response procedures and resources.

- Procedures for emergency response notification;
- Proper use of emergency equipment;
- Procedures to mitigate a release or threatened release of hazardous materials and measures to minimize potential harm or damage to individuals, property, or the environment; and
- Evacuation plans and procedures.

Hazardous materials are expected to be used in compliance with established OSHA or Cal/OSHA regulations and procedures, including providing adequate ventilation, using recommended personal protective equipment and clothing, posting appropriate signs and warnings, and providing adequate worker health and safety training. The exposure of employees is regulated by Cal-OSHA in Title 8 of the CCR. Specifically, 8 CCR 5155 establishes permissible exposure levels (PELs) and short-term exposure levels (STELs) for various chemicals. These requirements apply to all employees. The PELs and STELs establish levels below which no adverse health effects are expected. These requirements protect the health and safety of the workers, as well as the nearby population including sensitive receptors.

In general, all local jurisdictions and all facilities using a minimum amount of hazardous materials are required to formulate detailed contingency plans to eliminate, or at least minimize, the possibility and effect of fires, explosion, or spills. In conjunction with the California Office of Emergency Services, local jurisdictions have enacted ordinances that set standards for area and business emergency response plans. These requirements include immediate notification, mitigation of an actual or threatened release of a hazardous material, and evacuation of the emergency area.

The above regulations provide comprehensive measures to reduce hazards of explosive or otherwise hazardous materials. Compliance with these and other federal, state and local regulations and proper operation and maintenance of equipment should ensure the potential for explosions or accidental releases of hazardous materials is not significant. Therefore, the rule is not expected to create a significant hazard to the public or environment.

Schools may be located within a quarter mile of commercial, industrial or institutional facilities affected by Rule 11-18. It would be expected that these facilities are taking the appropriate and required actions to ensure proper handling or hazardous materials, substances or wastes near school sites. The rule would not generate hazardous emissions, handling of hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school. Rather, the rule would be more likely to control TACs from existing facilities near school sites. Therefore, no increase in hazardous emissions from implementation of Rule 11-18 would be expected.

Rule 12-16: Rule 12-16 has the potential to create direct or indirect hazard impacts associated with refinery modifications. The requirement to limit refinery emissions of certain pollutants could result in additional construction activities at the refineries, refinery modifications, and/or changes in refinery operations. Some refinery modifications and changes in operations could generate additional hazard impacts. In particular, NOx emission reduction measures could result in the increased use of ammonia, which is a hazardous material, in selective catalytic reduction (SCR) units. These potential hazard impacts will be further evaluated in the Draft EIR.

VIII. d). Government Code §65962.5 requires creation of lists of facilities that may be subject to Resource Conservation and Recovery Act (RCRA) permits or site cleanup activities.

Rule 11-18: It is not known if the affected commercial or industrial facilities are located on the hazardous materials sites list pursuant to Government Code §65962.5. However, the rule is expected to increase the control of TAC emissions and would not interfere with site cleanup activities or create additional site contamination, and would not create a significant hazard to the public or environment.

Rule 12-16: The refineries affected by the rule may be located on the hazardous materials sites list pursuant to Government Code §65962.5. The refineries would be required to manage any and all hazardous materials in accordance with federal, state and local regulations. Rule 12-16 is not expected to interfere with site cleanup activities or create additional site contamination. Therefore, this topic is less than significant and will not be further evaluated in the Draft EIR.

VIII. e and f).

Rules 11-18 and 12-16: Neither rule is expected to result in a safety hazard for people residing or working within two miles or a public airport or air strip. No impacts on airports or airport land use plans are anticipated from the rules, which are expected to increase the control of criteria and toxic pollutant emissions. Modifications are expected to be confined to the existing commercial or industrial land uses. Therefore, no significant adverse impacts on an airport land use plan or on a private air strip are expected.

VIII. g). Rules 11-18 and 12-16: No impacts on emergency response plans are anticipated from Rule 11-18 and Rule 12-16 that would apply to existing facilities (including refineries, etc.). The facilities affected by the rules already exist and operate within the confines of existing industrial facilities. The rules neither require, nor are likely to result in, activities that would impact any emergency response plan. The existing facilities affected by the rules already store and transport hazards materials, so emergency response plans already include hazards associated with existing refinery operations. The rules are not expected to require any changes in emergency response planning. Therefore, no significant adverse impacts on emergency response plans are expected.

VIII. h). Rules 11-18 and 12-16: No increase in hazards associated with wildfires is anticipated from Rule 11-18 or Rule 12-16. The existing facilities (including petroleum refineries, etc.) affected by the rules already exist and operate within the confines of existing commercial or industrial facilities. Native vegetation has been removed from the operating portions of the affected facilities to minimize fire hazards. Neither Rule 11-18 nor Rule 12-16 is expected to increase the risk of hazards associated with wildland fires in general and specifically in areas with flammable materials. Therefore, neither Rule 11-18 nor Rule 12-16 would expose people or structures to significant risk of loss, injury or death involving wildland fires.

Conclusions

Rule 11-18: Based upon these considerations, no significant adverse hazards and hazardous materials impacts are expected from the implementation of Rule 11-18.

Rule 12-16: Based upon the above considerations, the potential refinery hazards that may be introduced due to compliance with Rule 12-16 will be evaluated in the Draft EIR (VIII. a, b, and c). No significant hazard impacts on sites listed pursuant to Government Code §65962.5, public airports or airstrips, emergency response plans or hazards associated with wildfires are expected, and these topics will not be addressed further in the Draft EIR.

IX. HYDROLOGY AND WATER QUALITY.

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☑	☐	☐	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☑	☐	☐	☐
c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
e) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
f) Otherwise substantially degrade water quality?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☑	☐	☐	☐

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
g) Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
j) Inundation by seiche, tsunami, or mudflow?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles), so that land uses and affected environment vary substantially throughout the area and include commercial, industrial, residential, agricultural, and open space uses.

The facilities affected by the rule are located within all counties under the jurisdiction of the BAAQMD. Affected areas are generally surrounded by other industrial or commercial facilities. Reservoirs and drainage streams are located throughout the area and discharge into the Bays. Marshlands incised with numerous winding tidal channels containing brackish water are located throughout the Bay Area.

The affected areas are located within the San Francisco Bay Area Hydrologic Basin. The primary regional groundwater water-bearing formations include the recent and Pleistocene (up to two million years old) alluvial deposits and the Pleistocene Huichica formation. Salinity within the unconfined alluvium appears to increase with depth to at least 300 feet. Water of the Huichica formation tends to be soft and relatively high in bicarbonate, although usable for domestic and irrigation needs.

Regulatory Background

The Federal Clean Water Act of 1972 primarily establishes regulations for pollutant discharges into surface waters in order to protect and maintain the quality and integrity of the nation's waters. This Act requires industries that discharge wastewater to municipal sewer systems to meet pretreatment standards. The regulations authorize the U.S. EPA to set the pretreatment standards. The regulations also allow the local treatment plants to set more stringent wastewater discharge requirements, if necessary, to meet local conditions.

The 1987 amendments to the Clean Water Act enabled the U.S. EPA to regulate, under the National Pollutant Discharge Elimination System (NPDES) program, discharges from industries and large municipal sewer systems. The U.S. EPA set initial permit application requirements in 1990. The State of California, through the State Water Resources Control Board, has authority to issue NPDES permits, which meet U.S. EPA requirements, to specified industries.

The Porter-Cologne Water Quality Act is California's primary water quality control law. It implements the state's responsibilities under the Federal Clean Water Act but also establishes state wastewater discharge requirements. The Regional Water Quality Control Boards (RWQCB) administer the state requirements as specified under the Porter-Cologne Water Quality Act, which include storm water discharge permits. The water quality in the Bay Area is under the jurisdiction of the San Francisco Bay Regional Water Quality Control Board.

In response to the Federal Act, the State Water Resources Control Board adopted the State Water Resources Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary in 2006. San Francisco Bay and its constituent parts, including Carquinez Strait and Suisun Bay, are considered to be enclosed bays (indentations along the coast that enclose an area of oceanic water within distinct headlands or harbors). The Plan consists of: (1) beneficial uses to be protected; (2) water quality objectives for the reasonable protection of beneficial uses; and (3) a program of implementation for achieving the water quality objectives. Together, the beneficial uses and the water quality objectives established to reasonably protect the beneficial uses are called water quality standards under the terminology of the federal Clean Water Act. The beneficial uses of the Carquinez Strait that must be protected include: municipal and domestic water supply systems, industrial service supply systems, agricultural supply systems, ground water recharge, navigation, water contact and non-contact recreation, shell fish harvesting, commercial and sport fishing, cold freshwater habitat, migration of aquatic organisms, spawning reproduction and early development, wildlife habitat, estuarine habitat, and preservation of rare, threatened. and endangered species.

Discussion of Impacts

IX. a, b, and f).

Rule 11-18: The rule is designed to reduce risk from existing stationary sources located throughout the Bay Area. Potential risk reduction measures include measures that would limit emissions of TACs. The rule is not expected to require any new development. Modifications are expected to be limited to existing commercial or industrial facilities. Physical changes are expected to be limited to new air pollution control equipment and construction of enclosures. No significant increase in wastewater

discharge is expected from the project, and therefore no impacts on water quality resources are anticipated from the rule.

Minor construction may be necessary to install control systems. Construction would likely require a couple of pieces of off-road equipment, medium-duty truck trips to deliver equipment, and a small construction crew. The construction of enclosures may require some grading and foundations work. Grading and foundation work is not expected to last more than one week per project, therefore, minimal water will be required for dust mitigation. No wet gas scrubbers are expected as a result of the rule. All existing and new facilities will still be required to have applicable wastewater discharge permits and storm water pollution prevention plans (SWPPP).

No significant increase in water use is expected as a result of the rule. The Air District anticipates that facilities will implement various control measures, but no wet gas scrubbers are expected. Thus, water concerns will be limited to construction, which is expected to involve minor construction activities within existing facilities or buildings. Minor water use for construction purposes will not substantially increase water demand or interfere with groundwater recharge or cause any notable change in the groundwater table level.

Rule 12-16: Rule 12-16 could require the installation of additional air pollution control equipment or modify refinery operations. The rule could require new construction activities and the operation of new/modified refinery equipment. The goal of Rule 12-16 is to limit overall refinery emissions of certain pollutants, however, refinery modifications could result in the increased use of water. For example, control measures for particulate matter and/or SOx emissions could require additional water use and wastewater discharge from devices like wet gas scrubbers. The potential increase and water use and the potential to deplete groundwater supplies will be evaluated in the Draft EIR.

IX. c, d, and e).

Rule 11-18: The rule does not have the potential to substantially increase the area subject to runoff since the construction activities are expected to be limited in size and would be located primarily within existing facilities that have already been graded. Additionally, facilities are typically expected to develop a SWPPP to address storm water impacts. Rule 11-18 is also not expected to substantially alter the existing drainage or drainage patterns, result in erosion or siltation, alter the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite as there will be no major construction or significant water use. Therefore, no significant adverse impacts to storm water runoff or existing drainage patterns are expected as a result of the rule.

Rule 12-16: Rule 12-16 would limit the emissions of certain air pollutant and could require the installation of additional air pollution control equipment or modify refinery operations if those thresholds are exceeded. The rule does not have the potential to substantially increase the area subject to runoff since the construction activities are expected to be limited in size and would be located within existing refineries that have already been graded and developed. In addition, storm water drainage within refineries has been controlled and construction activities are not expected to alter the storm water drainage within the refineries. Therefore, the rule is not expected to substantially alter the existing drainage or drainage patterns, result in erosion or siltation, alter the course of a stream or river, or

substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite. Additionally, the rule is not expected to create or contribute to runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of contaminated runoff. Therefore, no significant adverse impacts to storm water runoff are expected, and it will not be further evaluated in the Draft EIR.

IX. g, h, i, and j): Rules 11-18 and 12-16: Neither of the rules include the construction of new or relocation of existing housing or other types of facilities and, as such, would not require the placement of housing or other structures within a 100-year flood hazard area. (See also XIII "Population and Housing"). As a result, the rules would not be expected to create or substantially increase risks from flooding; expose people or structures to significant risk of loss, injury or death involving flooding; or increase existing risks, if any, of inundation by seiche, tsunami, or mudflow. Consequently, this topic will not be evaluated further in the Draft EIR.

Conclusions

Rule 11-18: Based upon these considerations, no significant adverse impacts to hydrology and water quality are expected from the adoption of the rule.

Rule 12-16: The potential increase in water use and the potential to deplete groundwater supplies will be evaluated in the Draft EIR. No significant adverse water quality impacts were identified for stormwater runoff, flood hazards, or inundation hazards and these topics will not be addressed in the Draft EIR.

X. LAND USE AND PLANNING.

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Physically divide an established community?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to a general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles), so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses. The facilities affected by the rules are primarily located in commercial and industrial areas throughout the Bay Area.

Regulatory Background

Land uses are generally protected and regulated by the City and/or County General Plans through land use and zoning requirements.

Discussion of Impacts

X. a, b, and c)

Rule 11-18: The rule is designed to reduce risk from existing stationary sources located throughout the Bay Area. Potential risk reduction measures include measures that would limit emissions of TACs. The rule does not include any components that would require major modifications to existing commercial or industrial facilities and therefore the rule would not result in impacts that would physically divide an established community or generate additional development.

The rule is not expected to require any new substantial construction or development. New or modified pollution control equipment or enclosures would be located within existing commercial or industrial facilities. Construction activities would be limited to the confines of existing facilities which are zoned for commercial or industrial land use. Modifications to equipment would be limited to the confines of existing facilities and are not expected to affect adjacent land uses, divide an established community, conflict with any applicable land use plan or policy or conflict with any habitat conservation plan.

Rule 12-16: Construction activities could also be required to install air pollution control equipment associated with compliance with Rule 12-16. Any substantial construction activities associated with new refinery equipment would occur within the confines of existing refineries. The land use within the refineries is typically zoned for heavy industrial uses. Land uses surrounding the refineries can vary considerably and include industrial areas, commercial areas, open space, and residential areas. Construction activities would be limited to the confines of the refineries. The installation of air monitors or air pollution control equipment would not change or impact existing land uses.

Conclusions

Based upon the above considerations, significant adverse project-specific impacts to land use and planning are not expected to occur due to implementation of either Rule 11-18 or Rule 12-16 and, therefore, will not be further evaluated in the Draft EIR.

XI. MINERAL RESOURCES.

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses and the affected environment vary greatly throughout the area. The facilities affected by the Rules 11-18 and 12-16 are primarily located in commercial and industrial areas within the Bay Area.

Regulatory Background

Mineral resources are generally protected and regulated by the City and/or County General Plans through land use and zoning requirements.

Discussion of Impacts

XI. a, and b).

Rule 11-18: Rule 11-18 is designed to reduce risk from existing stationary sources located throughout the Bay Area. Potential risk reduction measures include measures that would limit emissions of TACs. The rule is not associated with any action that would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state, or of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. Therefore, no impacts on mineral resources are expected.

Rule 12-16: Rule 12-16 would limit the emissions of certain air pollutant and could require the installation of additional air pollution control equipment or modify refinery operations if those

thresholds are exceeded. The rule is not associated with any action that would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state, or of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. Therefore, no impacts on mineral resources are expected.

Conclusions

Based upon the above considerations, significant adverse project-specific impacts to mineral resources are not expected to occur due to implementation of either Rule 11-18 or Rule 12-16 and, therefore, will not be further evaluated in the Draft EIR.

XII. NOISE.

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Exposure of persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☐	☐	☑	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☐	☐	☑	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☐	☐	☑	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☐	☐	☑	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport would the project expose people residing or working in the project area to excessive noise levels?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
f) For a project within the vicinity of a private airstrip would the project expose people residing or working in the project area to excessive noise levels?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses and the affected environment vary greatly throughout the area. The facilities affected by the rules are located in commercial and industrial areas of the Bay Area.

Regulatory Background

Noise issues related to construction and operation activities are addressed in local General Plan policies and local noise ordinance standards. The General Plans and noise ordinances generally establish allowable noise limits within different land uses including residential areas, other sensitive use areas (e.g., schools, churches, hospitals, and libraries), commercial areas, and industrial areas.

Discussion of Impacts

XII. a, b, c, and d).

Rule 11-18: Rule 11-18 is designed to reduce risk from existing stationary sources located throughout the Bay Area. Potential risk reduction measures include measures that would limit emissions of TACs. New modifications are expected to be limited to the commercial and industrial facilities. The existing noise environment at each of the affected facilities is typically dominated by noise from existing equipment onsite, vehicular traffic around the facilities, and trucks entering and exiting facility premises. No new major industrial equipment is expected to be required to be installed due to the rule so that no noise impacts associated with the operation of the rule are expected. Air pollution control equipment is not generally a major noise source. Further, all noise producing equipment must comply with local noise ordnances and applicable OSHA and Cal/OSHA noise requirements. Therefore, industrial operations affected by the rule are not expected to have a result in noise exposure that would exceed levels established by local noise control laws or ordinances.

Construction activities associated with the rule may generate some noise associated with temporary construction equipment and construction-related traffic. Construction would likely require truck trips to deliver equipment, a construction crew of up to about 15 workers, and a few pieces of construction equipment (e.g., forklift, welders, backhoes, cranes, and generators). All construction activities would be temporary and are expected to occur within the confines of existing commercial or industrial facilities so that no significant increase in noise is expected.

Rule 11-18 is not expected to generate or expose people to excessive groundborne vibration or groundborne noise. No major construction equipment that would generate vibration (e.g., backhoes, graders, jackhammers, etc.) is expected to be required. Therefore, the rule is not expected to generate excessive groundborne vibration or noise.

Rule 12-16: The petroleum refineries affected by Rule 12-16 already exist and operate within the confines of existing industrial facilities in the Bay Area. Any substantial construction activities

associated with new refinery equipment would occur within the confines of existing refineries, located within industrial areas. However, those construction activities would be required to comply with local noise ordinances, which generally prohibit construction during the nighttime, in order to minimize noise impacts. Compliance with the local noise ordinances is expected to minimize noise impacts associated with construction activities to less than significant.

Ambient noise levels in industrial areas are typically driven primarily by freeway and/or highway traffic in the area and any heavy-duty equipment used for materials manufacturing or processing. It is not expected that any modifications to install air pollution control equipment would substantially increase ambient (operational) noise levels in the area, either permanently or intermittently, or expose people to excessive noise levels that would be noticeable above and beyond existing ambient levels. It is not expected that affected facilities would exceed noise standards established in local general plans, noise elements, or noise ordinances currently in effect. Affected refineries would be required to comply with local noise ordinances and elements, which may require construction of noise barriers or other noise control devices.

It is also not anticipated that the rule will cause an increase in groundborne vibration levels because air pollution control equipment is not typically vibration intensive equipment. Consequently, Rule 12-16 is not expected to directly or indirectly cause substantial noise or excessive ground borne vibration impacts. These impacts, therefore, will not be further evaluated in the Draft EIR.

XII. e and f).

Rule 11-18: It is not known if the existing commercial or industrial facilities affected by the rule are located within existing airport land use plans. The addition of new or modification of existing air pollution control equipment or enclosures would not expose people residing or working in the project area to excessive noise levels associated with airports, as air pollution control equipment are not typically noise generating equipment. Rule 11-18 would not locate residents or commercial buildings or other sensitive noise sources closer to airport operations. As noted in the previous item, there are no components of the rule that would substantially increase ambient noise levels, either intermittently or permanently.

Rule 12-16: If applicable, the petroleum refineries affected by Rule 12-16 would still be expected to comply, and not interfere, with any applicable airport land use plans. The existing refineries are not located within existing airport land use plans. Rule 12-16 would not locate residents or commercial buildings or other sensitive noise sources closer to airport operations. As noted in the previous item, there are no components of the rule that would substantially increase ambient noise levels, either intermittently or permanently.

Conclusions

Based upon the above considerations, no significant adverse project-specific noise impacts are expected due to implementation of either Rule 11-18 or Rule 12-16; therefore, noise impacts will not be further evaluated in the Draft EIR.

XIII. POPULATION AND HOUSING.

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Induce substantial population growth in an area either directly (e.g., by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
b) Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
c) Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses and the affected environment vary greatly throughout the area. The facilities affected by the Rules 11-18 and 12-16 are generally industrial and commercial facilities within the jurisdiction of the BAAQMD.

Regulatory Background

Population and housing growth and resources are generally protected and regulated by the City and/or County General Plans through land use and zoning requirements.

Discussion of Impacts

XIII. a). According to the Association of Bay Area Governments (ABAG), population in the Bay Area is currently about seven million people and is expected to grow to about nine million people by 2035 (ABAG, 2006).

Rule 11-18: Rule 11-18 is not anticipated to generate any significant effects, either directly or indirectly, on the Bay Area's population or population distribution. The rule would affect commercial and industrial facilities. It is expected that the existing labor pool would accommodate the labor

requirements for any new or modified equipment at the facilities. In addition, it is not expected that the affected facilities would need to hire additional personnel to implement the rule. In the event that new employees are hired, it is expected that the existing local labor pool in the Bay Area can accommodate any increase in demand for workers that might occur as a result of adopting the rule. As such, adopting propose Rule 11-18 is not expected to induce substantial population growth.

Rule 12-16: Rule 12-16 is not anticipated to generate any significant effects, either directly or indirectly, on the Bay Area's population or population distribution. The rule would affect five refineries and three associated facilities located in Contra Costa and Solano counties. It is expected that the existing labor pool would accommodate the labor requirements for any modifications at the affect refineries. In addition, it is not expected that the affected refineries would need to hire additional personnel to operate and maintain new control equipment on site because air pollution control equipment is typically not labor intensive equipment. In the event that new employees are hired, it is expected that the existing local labor pool in the Bay Area can accommodate any increase in demand for workers that might occur as a result of adopting the rule. As such, adopting Rule 12-16 is not expected to induce substantial population growth.

XIII. b and c). Rules 11-18 and 12-16: Both of the rules could result in the installation of air pollution control equipment operated in commercial and industrial settings. However, Rules 11-18 and 12-16 are not expected to result in the creation of any industry that would affect population growth, directly or indirectly induce the construction of single- or multiple-family units, or require the displacement of people or housing elsewhere in the Bay Area. Based upon these considerations, significant population and housing impacts are not expected from the implementation of the rules.

Conclusions

Based upon the above considerations, significant adverse project-specific impacts to population and housing are not expected to occur due to implementation of either Rule 11-18 or Rule 12-16 and, therefore, will not be further evaluated in the Draft EIR.

XIV. PUBLIC SERVICES.

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
Fire protection?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
Police protection?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
Schools?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
Parks?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
Other public facilities?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses and the affected environment vary greatly throughout the area. The facilities affected by the rules are primarily located in commercial and industrial areas within the Bay Area.

Given the large area covered by the BAAQMD, public services are provided by a wide variety of local agencies. Fire protection and police protection/law enforcement services within the BAAQMD are provided by various districts, organizations, and agencies. There are several school districts, private schools, and park departments within the BAAQMD. Public facilities within the BAAQMD are

managed by different county, city, and special-use districts. All refineries affected by the rules maintain fire-fighting equipment and trained personnel with fire-fighting and emergency response experience. In addition, all affected refineries operated on-site security systems.

Regulatory Background

City and/or County General Plans usually contain goals and policies to assure adequate public services are maintained within the local jurisdiction.

Discussion of Impacts

XIV. a).

Rule 11-18: The rule is designed to reduce toxic health risks from stationary sources in the Bay Area. Rule 11-18 could require minor construction activities and modifications at existing facilities. The modifications are not expected to require additional service from local fire or police departments above current levels.

As noted in the "Population and Housing" discussion above, the rule is not expected to induce population growth because the local labor pool (e.g., workforce) is expected to be sufficient to accommodate any activities that may be necessary at affected facilities. Additionally, modifications to existing facilities are not expected to require an increase in employees. Therefore, there will be no increase in local population and thus no impacts are expected to local schools or parks.

The rule would not result in the need for new or physically altered government facilities in order to maintain acceptable service ratios, response times, or other performance objectives. There will be no increase in population as a result of the adoption of the rule, therefore, no need for physically altered government facilities.

Rule 12-16: Rule 12-16 would limit the emissions of certain air pollutant and could require the installation of additional air pollution control equipment or modify refinery operations if those thresholds are exceeded. As stated above, all refineries affected by the rule, maintain on-site fire-fighting equipment and trained personnel with fire-fighting and emergency response experience. While Rule 12-16 could require new construction activities and the operation of new/modified refinery equipment, the additional equipment is not expected to require additional service from local fire departments above current levels.

Refineries maintain their own security systems. Refineries are fenced and access is controlled at manned gates. Modification associated with the rule would occur within the confines of the existing refineries. Therefore, the rule is not expected to increase the need or demand for additional police services above current levels.

As noted in the "Population and Housing" discussion above, the rule is not expected to induce population growth because the local labor pool (e.g., workforce) is expected to be sufficient to accommodate any activities that may be necessary at affected facilities. Additionally, operation of new air monitoring and air pollution control equipment is not expected to require a substantial increase in

employees. Therefore, there will be no increase in local population and thus no impacts are expected to local schools or parks.

Conclusions

Based upon the above considerations, significant adverse project-specific impacts to public services are not expected to occur due to implementation of either Rule 11-18 or Rule 12-16 and, therefore, will not be further evaluated in the Draft EIR.

XV. RECREATION.

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that there are numerous areas for recreational activities. The refineries affected by the Rules 11-18 and 12-16 are located in industrial areas within the Bay Area. Public recreational land can be located adjacent to, or in reasonable proximity to, these areas.

As noted in the "Population and Housing" discussion above, the rules are not expected to induce population growth because the local labor pool (e.g., workforce) is expected to be sufficient to accommodate any activities that may be necessary at affected facilities. Additionally, operation of new air pollution control equipment is not expected to require additional employees. Therefore, there will be no increase in local population and thus no impacts are expected to local schools or parks.

Regulatory Background

Recreational areas are generally protected and regulated by the City and/or County General Plans at the local level through land use and zoning requirements. Some parks and recreation areas are designated and protected by state and federal regulations.

Discussion of Impacts

XV. a and b). Rules 11-18 and 12-16: As discussed under "Land Use" above, there are no provisions of the rules that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments; no land use or planning requirements will be altered by either Rule 11-18 or Rule 12-16. Air pollution control equipment, if necessary, would be installed within the confines of existing facilities, including refineries, and would not impact existing recreational facilities.

As noted in the "Population and Housing" discussion above, the rules are not expected to induce population growth because the local labor pool (e.g., workforce) is expected to be sufficient to accommodate any activities that may be necessary at affected facilities. Additionally, operation of new air pollution control equipment is not expected to require a substantial increase in employees. Therefore, there will be no increase in local population and thus no impacts are expected to local recreational facilities.

Conclusions

Based upon the above considerations, significant adverse project-specific impacts to recreation are not expected to occur due to implementation of either Rule 11-18 or Rule 12-16 and, therefore, will not be further evaluated in the Draft EIR.

XVI. TRANSPORTATION / TRAFFIC.

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☐	☐	☐	☑
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☐	☐	☐	☑
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
d) Substantially increase hazards because of a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
e) Result in inadequate emergency access?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles). Transportation systems located within the Bay Area include railroads, airports, waterways, and highways. The Port of Oakland and three international airports in the area serve as hubs for commerce and transportation. The transportation infrastructure for vehicles and trucks in the Bay Area ranges from single lane roadways to multilane interstate highways. The Bay Area currently contains over 1,300 directional miles of limited-access highways, which include both interstates and state highways. In addition, the Bay Area has over 33,000 directional miles of arterials and local streets, providing more localized access to individual communities. Together, these roadway facilities accommodate nearly 17 million vehicle trips a day. There are over 11,500 transit route miles of service including heavy rail (BART), light rail (Muni Metro and VTA Light Rail), commuter rail (Caltrain and ACE), diesel and electric buses, cable cars, and ferries. The Bay Area also has an extensive local system of bicycle routes and pedestrian paths and sidewalks. At a regional level, the share of workers driving alone was about 68 percent in 2010. The portion of commuters that carpool was about 11 percent in 2010, while an additional 10 percent utilize public transit. About 3 percent of commuters walked to work in 2010. In addition, other modes of travel (bicycle, motorcycle, etc.), account for three percent of commuters in 2010 (MTC, 2013). Cars, buses, and commercial vehicles travel about 149 million miles a day (2010) on the Bay Area Freeways and local roads. Transit serves about 1.6 million riders on the average weekday (MTC, 2013).

The region is served by numerous interstate and U.S. freeways. On the west side of San Francisco Bay, Interstate 280 and U.S. 101 run north-south. U.S. 101 continues north of San Francisco into Marin County. Interstates 880 and 660 run north-south on the east side of the Bay. Interstate 80 starts in San Francisco, crosses the Bay Bridge, and runs northeast toward Sacramento. Interstate 80 is a six-lane north-south freeway which connects Contra Costa County to Solano County via the Carquinez Bridge. State Routes 29 and 84, both highways that allow at-grade crossings in certain parts of the region, become freeways that run east-west and cross the Bay. Interstate 580 starts in San Rafael, crosses the Richmond-San Rafael Bridge, joins with Interstate 80, runs through Oakland, and then runs eastward toward Livermore. From the Benicia-Martinez Bridge, Interstate 680 extends north to Interstate 80 in Cordelia. Interstate 780 is a four lane, east-west freeway extending from the Benicia-Martinez Bridge west to I-80 in Vallejo.

Regulatory Background

Transportation planning is usually conducted at the state and county level. Planning for interstate highways is generally done by Caltrans.

Most local counties maintain a transportation agency that has the duties of transportation planning and administration of improvement projects within the county and implements the Transportation Improvement and Growth Management Program, and the congestion management plans (CMPs). The CMP identifies a system of state highways and regionally significant principal arterials and specifies level of service standards for those roadways.

Discussion of Impacts

XVI. a and b).

Rule 11-18: Construction: The rule is designed to reduce health risks from stationary sources in the Bay Area. Any new or modified pollution control equipment is expected to be located in commercial, industrial, or institutional facilities and may require construction activities. Construction impacts were considered for the control measures found in Table 2-1. Control measures that do not require equipment, such as reducing operating time, are not expected to generate any additional traffic. The BAAQMD estimates that approximately 30 facilities per year are expected to meet reductions by implementing either a baghouse or an enclosure. The construction of enclosures is expected to require the most construction equipment and workers. This could require up to 34 delivery and/or disposal trucks and up to about 45 construction worker trips on a peak construction day (during the building construction phase for enclosures). Given the size of the Bay Area, this amount of construction traffic would not be noticeable, particularly since construction activities would be expected at existing commercial, industrial and institutional land uses and would be temporary. The rule is not expected to require modification to circulation for temporary construction activities. As a result, construction traffic from Rule 11-18 would not have significant impacts on the performance of the circulation system or on standards established for congestion management.

Operational: Waste products may be generated from the use of several types of control technologies. Wastes could include: spent carbon generated from the carbon adsorption process; spent metal catalysts from the catalytic oxidation process; and dry solids from filtration controls. The majority of wastes will likely need to be transported to disposal or recycling facilities. The catalysts in catalytic oxidizers need to be replaced every few years so this potential waste product was considered to contribute to the waste transport impacts.

For a "worst case" analysis, it was assumed that about 180 facilities per year would be required to install a control device to comply with the rule. These facilities at any given day would generate an additional one-two truck trips per day in the entire Air District for delivery and disposal. These potential truck trips are not expected to significantly adversely affect circulation patterns on local roadways near affected facilities. In addition, this volume of additional daily truck traffic is negligible over the entire area of the Air District. Finally, the number of waste disposal transport trips substantially overestimates the number of anticipated trips because owners/operators at affected facilities may use other types of add-on control equipment and most are expected to limit throughput rates or operating times which would have no impact on traffic. No increase in worker traffic is expected as the operation of air pollution control equipment of the type expected under the rule is not expected to require any additional employees. Therefore, operational traffic under the Rule 11-18 is expected to be less than significant.

Rule 12-16: The petroleum refineries affected by the rule already exist and operate within the confines of existing industrial facilities in the Bay Area. Construction activities could be required to install air pollution control equipment associated with compliance with the emissions limits contained in the rule. Any substantial construction activities associated with new refinery equipment would occur within the confines of existing refineries. Construction activities are temporary and the related construction worker traffic and delivery trucks would cease following completion of construction. No substantial increase in workers or average daily vehicle or truck trips is anticipated as a result of Rule 12-16. Therefore, the

rule is not expected to result in traffic that would exceed, either individually or cumulatively, the current level of service at intersections in the vicinity of the refineries. The work force at each affected facility is not expected to substantially change as a result of the rule and any permanent increase in operation-related traffic is expected to be minimal. Thus, the traffic impacts associated with Rule 12-16 are expected to be less than significant.

XVI. c).

Rule 11-18: The rule is not expected to involve the delivery of materials via air, so no increase in air traffic is expected. The addition of new or modified air pollution control equipment is not expected to change air traffic patterns or result in a change in location that results in substantial safety risks.

Rule 12-16: Rule 12-16 would not result in a change in air traffic patterns or increase air traffic. Actions that would be taken to comply with the rule, such as installing new air pollution control equipment, would not influence or affect air traffic patterns. Further, air pollution control equipment is expected to be lower in height than other existing structures at the refinery and would not impact navigable air space. Thus, Proposed Rule 12-16 would not result in a change in air traffic patterns including an increase in traffic levels or a change in location that results in substantial safety risks.

XVI. d and e).

Rule 11-18: Rule 11-18 is not expected to increase traffic hazards or create incompatible uses. The rule does not involve construction of any roadways or other transportation design features, so no changes to current roadway designs that would increase traffic hazards are expected. Emergency access at the commercial and industrial facilities affect by the Proposed Rule 11-18 is not expected to be impacted by the rule. Each affected facility is expected to continue to maintain their existing emergency access. The rule is not expected to increase vehicle trips or to alter the existing long-term circulation patterns. The rule is not expected to require a modification to circulation, thus, no long-term impacts on the traffic circulation system are expected to occur.

Rule 12-16: Rule 12-16 would not alter traffic patterns or existing roadways, as it is not expected to generate any substantial increase in traffic. The rule would not create any traffic hazards or create incompatible uses at or adjacent to refineries. Any construction activities associated with the rule would be temporary and located within the confines of the existing refineries. The rule is not expected to require circulation modifications, thus, no long-term impacts on the traffic circulation system are expected to occur. The rule does not involve construction of any roadways, so there would be no increase in any roadway design feature that could increase traffic hazards. Emergency access at each refinery would not be impacted by implementation of Rule 12-16. Further, each affected refinery would continue to maintain their existing emergency access gates and installation of new refinery equipment is not expected to impact emergency access.

XVI. f).

Rule 11-18: The rule is not expected to affect the performance of mass transit or non-motorized travel to street, highways and freeways, pedestrian or bicycle paths. No conflicts with any congestion management programs, to include level of service and travel demand measures, or other standards

established by county congestion management agencies for designated roads or highways, are expected. No changes are expected to parking capacity at or in the vicinity of affected facilities as the rule only pertains to equipment located within existing commercial and industrial facilities. Therefore, no significant adverse impacts resulting in changes to traffic patterns or levels of service at local intersections are expected.

Rule 12-16: Activities resulting from Rule 12-16 would not conflict with policies supporting alternative transportation since the rule does not involve or affect alternative transportation modes (e.g. bicycles or buses). Any construction activities associated with Proposed Rule 12-16 would be conducted at existing refineries and would be temporary so once completed, transportation, including alternative transportation modes, would not be effected.

Conclusions

Based upon the above considerations, significant adverse project-specific impacts to transportation/traffic are not expected to occur due to implementation of either Rule 11-18 or Rule 12-16 and, therefore, will not be further evaluated in the Draft EIR.

XVII. UTILITIES / SERVICE SYSTEMS.

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☑	☐	☐	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☑	☐	☐	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements needed?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☑	☐	☐	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☑	☐	☐	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☐	☐	☑	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☐	☐	☑	☐

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles), so that land uses and the affected environment vary greatly throughout the area.

Given the large area covered by the BAAQMD, public utilities are provided by a wide variety of local agencies. The affected facilities have wastewater and storm water treatment facilities and discharge treated wastewater under the requirements of NPDES permits.

Water is supplied to affected facilities by several water purveyors in the Bay Area. Solid waste is handled through a variety of municipalities, through recycling activities, and at disposal sites.

There are no hazardous waste disposal sites within the jurisdiction of the BAAQMD. Hazardous waste generated at area facilities, which is not reused on-site or recycled off-site, is disposed of at a licensed in-state hazardous waste disposal facility. Two hazardous waste disposal facilities are located in California: (1) The Clean Harbors facility in Buttonwillow (Kern County); and (2) the Waste Management facility in Kettleman Hills. Hazardous waste also can be transported to permitted facilities outside of California. The nearest out-of-state landfills are U.S. Ecology, Inc., located in Beatty, Nevada and USPCI, Inc., in Murray, Utah.

Regulatory Background

City and/or County General Plans usually contain goals and policies to assure adequate utilities and service systems are maintained within the local jurisdiction.

Discussion of Impacts

XVII. a, b, d and e).

Rule 11-18: Rule 11-18 is designed to reduce health risks from stationary sources in the Bay Area. The facilities affected by the rule already exist and already use water, generate wastewater, treat wastewater, and discharges wastewater under existing wastewater discharge permits. The potential water use and wastewater impacts associated with implementation of Rule 11-18 are addressed under Hydrology and Water Quality (see Section IX a.) and have been determined to be less than significant.

Rule 12-16: The refineries affected by Rule 12-16 already exist and already use water, generate wastewater, treat wastewater, and discharge wastewater under existing wastewater discharge permits. The rule may potentially require additional air pollution control equipment. The potential water use and wastewater impacts associated with implementation of Rule 12-16 are addressed under Hydrology and Water Quality (see Section IX a.).

XVII. c).

Rule 11-18: Implementation of Rule 11-18 may require new or modified pollution control equipment within the confines of existing facilities. These modifications would not alter the existing drainage system or require the construction of new storm water drainage facilities. Nor would the changes required by the rule create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. Therefore, no significant adverse impacts on storm drainage facilities are expected.

Rule 12-16: Rule 12-16 may result in the installation of air pollution control equipment, but would not alter the existing drainage system or require the construction of new storm water drainage facilities. Nor would the rule create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. Therefore, no significant adverse impacts on storm drainage facilities are expected.

XVII. f and g).

Rule 11-18: The rule would reduce health risk posed by existing commercial or industrial facilities. The primary method for reducing these health impacts would be to reduce emissions of TACs, including the use of control technology like baghouses and catalytic oxidizers. Baghouses and catalytic oxidizers will generate solid waste, but they are not expected to require annual replacement events. The baghouses and spent catalyst are only expected to generate a few tons of waste per change out. It is assumed that any hazardous material will be taken to the U.S. Ecology Beatty Nevada hazardous waste facility for treatment and disposal. U.S. Ecology, Inc. is currently receiving waste, and is in the process of extending the operational capacity for an additional 35 years (U.S. Ecology, 2015). Clean Harbors in Grassy Mountain, Utah is also available to receive hazardous waste and is expected to continue to receive waste for an additional 70 years (Clean Harbors, 2015). Therefore, the rule impacts on hazardous waste landfills are less than significant.

The rule is not expected to generate any significant increase in solid waste. Therefore, no significant adverse impacts are expected to solid waste as a result of the rule.

Rule 12-16: No significant impacts on waste generation are expected from the implementation of Proposed Rule 12-16 because the rule would potentially result in the installation of additional air pollution control equipment which is not expected to create substantial quantities of solid or hazardous waste. Waste streams from refineries would be processed similarly as current methods, so no significant impact to land disposal facilities would be expected. Therefore, no significant impacts to hazardous waste disposal facilities are expected due to the rule. Facilities are expected to continue to comply with all applicable federal, state, and local statutes and regulations related to solid and hazardous wastes.

Conclusions

Rule 11-18: Based upon these considerations, no significant adverse impacts to utilities/service systems are expected from the adoption of the rule.

Rule 12-16: The potential water and wastewater impacts associated with implementation of Rule 12-16 are addressed under Hydrology and Water Quality (see Section IX above). Based upon the above considerations, no additional significant adverse impacts are expected to storm water drainage, solid waste disposal or landfills due to implementation of Rule 12-16. Therefore, the impacts on utilities will not be further evaluated in the Draft EIR (except for the water and wastewater impacts that will be addressed under Hydrology and Water Quality).

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?				
Rule 11-18	☐	☐	☐	☑
Rule 12-16	☐	☐	☐	☑
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
Rule 11-18	☑	☐	☐	☐
Rule 12-16	☑	☐	☐	☐
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?				
Rule 11-18	☐	☐	☑	☐
Rule 12-16	☐	☐	☑	☐

Discussion of Impacts

XVIII. a).

Rule 11-18: Rule 11-18 does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory, as discussed in the previous sections of the CEQA checklist. The rule is designed to reduce health risks from commercial or industrial facilities in the Bay Area, thus providing a beneficial air quality impact and improvement in air quality. As discussed in Section IV, Biological Resources and Section V, Cultural Resources, no significant adverse impacts are expected to biological or cultural resources.

Rule 12-16: Rule 12-16 does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory, as discussed in the previous sections of the CEQA checklist. Rule 12-16 may require the installation of emission control equipment. As discussed in Section IV, Biological Resources and Section V, Cultural Resources, no significant adverse impacts are expected to biological or cultural resources, as any construction activities are expected to remain within the confines of existing refineries which have already been graded and developed.

XVIII. b and c).

Rule 11-18: The rule is designed to reduce health risks from commercial, industrial and institutional facilities in the Bay Area, thus providing a beneficial air quality impact and improvement in air quality. However, construction and operation of air pollution control equipment has the potential to increase emissions of other emissions, including GHGs and criteria pollutants. The potential secondary adverse air quality impacts associated with implementing Rule 11-18, including any cumulative air quality impacts will be evaluated in the EIR. The rule is expected to reduce TAC emissions, thus reducing the potential health impacts.

Rule 12-16: Rule 12-16 may require the installation of emission control equipment, if the emissions limits are exceeded. The rule could require construction and installation of new air pollution control equipment which could result in secondary air emissions as well as additional GHG emissions. Therefore, the air quality and cumulative impacts associated with implementation of Rule 12-16 will be evaluated in the Draft EIR.

Chapter 3

References

Association of Bay Area Governments, 2006. Projections 2007, December 2006.

BAAQMD, 2010. Bay Area 2010 Clean Air Action Plan, September 15, 2010.

Metropolitan Transportation Commission (MTC), 2013. Environmental Impact Report Plan Bay Area Draft. Metropolitan Transportation Commission and Bay Area Association of Governments. April, 2013.

APPENDIX A

BAAQMD REGULATION 11, RULE 18: REDUCTION OF RISK FROM AIR TOXIC EMISSIONS
&
BAAQMD REGULATION 12, RULE 16: PETROLEUM REFINING FACILITY-WIDE EMISSIONS LIMITS

COMMENT LETTERS RECEIVED ON THE NOP/IS

COMMENTS:

The following comments were received on the NOP/IS for the BAAQMD Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions and BAAQMD Regulation 12, Rule 16: Petroleum Refining Facility-Wide Emissions Limits Project. The names of the commenters are provided in Table A-1.

TABLE A-1

List of Commenters

CASA	Greg Kester, California Association of Sanitation Agencies
CAP	Cathy Helgerson, Citizens Against Pollution
CBE et al.	Devorah Ancel, Sierra Club; Kevin Bundy, Center for Biological Diversity; Laurence G. Chaset, Sustainable Energy Futures for 350 Bay Area; Roger Lin, Communities for a Better Environment; David Pettit, Natural Resource Defense Council
CCEEB	Bill Quinn, California Council for Environmental and Economic Balance
Phillips 66	Don Bristol, Phillips 66
WSPA	Catherine Reheis-Boyd, Western States Petroleum Association

CALIFORNIA ASSOCIATION of SANITATION AGENCIES

1225 8th Street, Suite 595• Sacramento, CA 95814 • TEL: (916) 446-0388 • www.casaweb.org

December 2, 2016

SUBMITTAL VIA EMAIL TO: vdouglas@baaqmd.gov

Mr. Victor Douglas
Principal Air Quality Specialist
Technical Services
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

SUBJECT: COMMENT LETTER ON PROPOSED BAAQMD REGULATION 11, RULE 18: REDUCTION OF RISK FROM AIR TOXIC EMISSIONS AT EXISTING FACILITIES

Dear Mr. Douglas:

The California Association of Sanitation Agencies (CASA) appreciates the opportunity to comment on the Bay Area Air Quality Management District's (BAAQMD) proposed Regulation 11, Rule 18 (Rule 11-18). CASA is an association of local agencies, engaged in advancing the recycling of wastewater into usable water, generation of renewable energy, biosolids and other valuable resources. Through these efforts we help create a clean and sustainable environment for millions of Californians.

It appears that the proposed Rule 11-18 has been developed in reaction to community concern about only a few existing facilities, and the BAAQMD's proposed regulatory response impacts more agencies than necessary to reach its air quality goals. BAAQMD staff estimate that hundreds of facilities could be affected by this rule (Notice of Preparation/Initial Study; Regulation 11, Rule 18 and Regulation 12, Rule 16; Page 1-9 October 2016). While CASA appreciates the outreach that BAAQMD staff has done, there are dozens of POTWs that have not been engaged on this issue, and have only very recently become somewhat aware of this significant regulatory initiative. Based on this sector, it seems likely that there are far more, perhaps hundreds, of potentially impacted facilities who are not aware nor have considered the impact and cost of this Regulation, and have thus not had the opportunity to provide meaningful comments for your consideration. Therefore, we ask that the BAAQMD consider a more robust effort to meet in workshop formats with all affected facilities to review the basis for the Regulation, describe the proposed compliance routes, and collectively understand its potential impacts. CASA has further concerns that the action taken by the BAAQMD may be mimicked in other Air Districts and thus believes it is critical that any action be fully vetted and supported by science.

CASA's specific comments on the proposed Rule 11-18 are as follows:

1) Public notification by BAAQMD for Rule 11-18 should clarify that emissions have not increased

Despite there being no change in a POTW's emissions levels, incorporating the updated California Air Pollution Control Officers Association (CAPCOA) risk factors and guidelines may result in the first notification the public receives about an existing facility within its vicinity. This notification could result in greater public anxiety about health risks from existing stationary sources. Providing a clear explanation that the changes in facility risk estimates are due exclusively to changes in risk assessment methodology, not actual increases in emissions (and health risk), should be incorporated in the public notification. CASA, along with many other public and private entities raised this issue in a letter to CAPCOA on October 27, 2016. Please let me know if you would like a copy of that letter.

CASA recommends the public notification of risk include language providing context to the risk values to improve public understanding and reduce potential anxiety.

2) Proposed rule should not inadvertently discourage renewable energy production

While the purpose of the proposed Rule 11-18 is to reduce toxic air contaminants and protect public health, it may discourage the production and beneficial use of biogas for the generation of renewable energy or fuel, resulting in a wasted (flared) resource. Most CASA members already beneficially use biogas generated from anaerobic digestion of sewage sludge to generate renewable electricity. Not only does this practice offset the treatment plant's dependence on fossil fuel based energy, it reduces the resulting anthropogenic greenhouse gas emissions.

The production of biogas, production of renewable energy, and the reduction of greenhouse gas emissions support statewide greenhouse gas reduction goals set under Assembly Bill 32 and Senate Bill 32. Furthermore, the State Air Resources Board would like to see POTWs accept additional organic waste streams (specifically, diverted food waste and fats, oils, and grease from landfills) for co-digestion with sewage sludge to increase generation of biogas, in turn increasing renewable energy/fuel production in support newly adopted mandates under Senate Bill 1383 (reducing methane emissions across the state). However, the proposed Rule 11-18 may restrict use of biogas since its combustion may contribute to a slight increase in some toxic air contaminants, potentially forcing POTWs to purchase fossil fuel based electricity or natural gas. This would result in an increasing in fossil fuel based greenhouse gas emissions statewide and is in direct contradiction with the Governor's goals for 2020, 2030, and beyond. The practice of diverting this organic waste from landfills for co-digestion at wastewater treatment plants is increasing across the state making Rule 11-18 a significant factor in achieving these goals moving forward.

CASA recommends BAAQMD consider providing exceptions in Rule 11-18 for projects that contribute toward achieving state goals for

reductions in greenhouse gas emissions through the diversion of organic waste from landfills, and increased production of biogas for the generation of renewable energy or fuel.

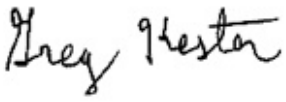
3) BAAQMD should consider cross-media environmental impacts

POTWs are regulated by a number of different governmental agencies whose goals can result in contradictory impacts to the municipal wastewater treatment sector. While regulatory actions may be seen as effective when each media (air, water, land) is addressed separately, the deficiencies become evident when the regulations are viewed holistically for protecting the overall environment and public health. CASA hosted a cross-media roundtable with state regulatory agencies including the Air Resources Board in 2008 highlighting these issues. A regulatory checklist was developed as an outcome of that meeting which was intended to highlight cross-media issues during regulatory development. CASA would be pleased to provide a copy of the checklist to the BAAQMD. There are increasing concerns about cross-media impacts and the potential operational and financial effects they will have on POTWs that are trying to provide an essential public service while maintaining compliance with regulations supporting contradictory goals.

CASA recommends a holistic approach and asks BAAQMD to address the cross-media environmental impacts of the proposed Rule 11-18 and in future proposed regulations.

Thank you for the opportunity to comment on the draft Rule 11-18. CASA supports BAAQMD's intent to protect the Bay Area's air quality, but asks BAAQMD to carefully address our concerns. CASA also strongly supports the comments provided to you by the Bay Area Clean Water Agencies (BACWA). Please feel free to contact me with any questions at gkester@casaweb.org or at 916-844-5262.

Sincerely,



Greg Kester
Director of Renewable Resource Programs

cc: Roberta Larson, Executive Director, California Association of Sanitation Agencies
Dave Williams, Executive Director, Bay Area Clean Water Agencies
Debbie Webster, Executive Officer, Central Valley Clean Water Association
Steve Jepsen, Executive Director, Southern California Alliance of POTWs

To: Bay Area Air Quality Management District – Victor Douglas

From: Cathy Helgerson – CAP – Citizens Against Pollution

Regarding Draft Comments – Regulation 12, Rule 16 Petroleum Refining Facility – Wide Emissions Limits and Regulation 11 Rule 18

Project Description

1.0 Project Description – 1.1 Introduction Paragraph 1 – States that Petroleum refineries are significant sources of harmful pollutants. Comment: This is very true and people are getting sick and dying.

Paragraph 3 - Mentions Communities for a Better Environment (CBE) and several associated operations have recommended that the Air District adapt new Regulation 12, Rule 16: Petroleum Refining Facility Wide Emissions Limits (Rule 12-16 or "Refining Caps Rule") This rule would set numeric limits on specific refinery emissions, Rule 12-16 would apply only to the Bay Area five petroleum refineries and three facilities associated with the refineries.

Paragraph 4 - Air District Recommends Regulation 11 Rule 18 would apply to all facilities whose emissions of Toxic Air Contaminants (TAC) may result in a significant risk to nearby residents and workers- this would include petroleum refineries. It goes on to state – The purpose of 1118 is to set Toxic Air Contaminant Caps for those facilities causing the highest health impacts across the bay area and to require these facilities to reduce that health risk.

Paragraph 5 – EIR – Environmental Impact Report it is said will cover both Rules. The Board of Directors could adopt either rule, both rules, or neither rule it would be up to them.

1.1.1 Draft Rule 12-16 – Reflects a policy recommendation from CBE and their associated organizations. The rule as proposed by CBE, would limit the emissions of climate pollutants and three criteria pollutants greenhouse gases (GHG's) particulate matter (PM), oxides of nitrogen (NOX), and sulfur dioxide (SO2) from petroleum refineries and three associate facilities. The Draft Rule would establish facility – wide emissions limits for the covered pollutants at each of the affected to ensure that each facility does not increase emissions due to changes in operation, crude or product slates, or increases in product production. Each facility emission limit would be set at maximum – annual emissions reported for that facility in the period from 2011 through 2015 with an additional allowance or "threshold factor" of seven percent over the maximum annual emission rate for each pollutant.

Comment; It mentions that each facility emissions limit would be set at the maximum – annual emissions reported for that facility in the period from 2011-2015 with an additional allowance or "threshold factor" of seven percent over the maximum annual emission rate for each pollutant. The facilities do their own reporting and submit reports how can we be sure that their reports are honest and accurate? The TAC – Toxic Air Contaminants Reporting Systems is not an enforcement agency it just states what the pollution levels of each pollutant that is not enough. The EPA TRI System if reporting is also a reporting system nothing else we need an enforcement agency system. If the EPA does not investigate the facility and its records to make sure the facility has sent in their reports the matter goes

unnoticed. This happened to Lehigh Southwest Cement and Quarry they failed to report the emissions with the TRI System requirements and they were fined. The EPA Region 9 just happened to see if Lehigh had reported to the TRI Department their emissions levels and they had not. I asked the EPA if they were going to check each year to see if Lehigh sent in their reports and I was told that they could not. I believe because I was asking about Lehigh that the EPA decided to check into this and I am glad they did.

The emissions ae high overall and then to add an additional allowance or "threshold Factor" of seven percent over the maximum annual emissions rate for each pollutant is very wrong.

Question: How do these Regulations and Rules effect the Lehigh Southwest Cement and Quarry operation?

1.1.2 Draft Rule 11-18, as proposed by the Air District staff, would ensure that emissions of Toxic Air Contaminates (TACs) from existing facilities do not pose an unacceptable health risk to people living and working nearby. It states that the rule would require facilities with a cancer risk in excess of 25 in a million (25/M) to reduce that risk below (10/M). It mentions further reductions.

Comment: It states if the facility could not devise a means to reduce the risk below 10/M, the facility would be required to install best available retrofit control technology for toxic pollutants (TBARCT) on every significant source of TAC's at the facility. Who can determine the cancer risks? There is no mention of any cumulative effects from all the pollutants this seems to be continually overlooked. The Best Available Technology determination on equipment is left up to the facility to explore. I would like to know can the Air District actually determine that Lehigh for instance has found the Best Available Technology. Lehigh Southwest Cement and Quarry is also operating under a grandfathered protection rule and the plant is old and has not been retrofitted and upgraded as it should be so the public suffers continually. They are also using Petroleum Coke to fire up and operate the kiln this product Petroleum Coke is a waste material of Petroleum and is also radioactive. I have been told that it is worse than coal there needs to be a better way. The public is suffering cancer it is at epidemic stages everyone is getting it and other health problems. The public must be protected from this ongoing pollution. There needs to be a 24/7 surveillance cameras set up at each facility to make sure that the polluters are not out of serious compliance. The film and reports off of the surveillance cameras and monitor reports should be relayed to the Air District and the EPA immediately. Lehigh Southwest Cement is spewing pollution they must be sited and or closed down by the inspector.

1.2 Agency Authority – California Environmental Quality Act (CEQA) mentioned. The Air District is the lead agency they will prepare a Draft Notice of Preparation (NOP), and Environmental Impact Report (EIR) and Initial Study (NOP/IS) to address the potential environmental impacts associated with the draft rules. Comment: It seems that a great deal of information has been left out of this draft. The problem of enforcement from the agencies is evident stronger rules must be administered along with real enforcement and that is just not happening.

1.3 Project Location – Santa Clara County is included so we must of course look at all for toxic pollutants (TBARCT) on every significant source of TAC's at the facility.

Comment: Question – Who can determines the cancer risks and how is it really accurate? There is no mention of any cumulative effect from all the pollutants this seems to be always overlooked. The Best Available Technologies available seem to be not enough people are still sick and dying.

Lehigh Southwest Cement and Quarry is also operating under a grandfathered protection rule and the plant is old and has not been retrofitted and upgraded so that it can be considered under the New Plant Rules and Regulations. There needs to be methods to require a facility that is outdated with its facility to be required to upgrade otherwise the public is continually subjected to a lower standard which is dangerous. They are also using Petroleum Coke to heat the kiln which is a waste material of Petroleum and is also radioactive and a serious pollutant. The Question is how will this be monitored no mention of the serious effects of this waste material and the emissions coming from the kiln that is causing serious health problems. I have even heard that this Pet Coke is worse than coal someone needs to look into this matter.

The pollution from these polluters is creating serious climate change issues and things are getting worse and worse we the public must demand action from the agencies this matter cannot wait.

I live in Cupertino near the Lehigh Southwest Cement and Quarry, and the Stevens Creek Quarry both of these companies with their pollution is destroying the Silicon Valley, the SF Bay Area and my home. There is dust and pollution in the Air, Water and on and in the Soil causing horrible health problems and even death this must stop. This pollution cumulates in our bodies and is the cause of so many health issues and problems. Human life, aquatic life, animal life and even plant life are threatened by this pollution we must all take responsibility in this matter, and ask the agencies to enforce stronger restrictions on these polluters. The paying of fines due to their pollution is not enough closing down the facilities and putting the polluters in jail seems to be necessary in order to really protect the public. The companies write off the fines they pay as a way of doing business this is just outrageous and cannot continue.

This pollution in California and the world is causing the great drought we are experiencing and even thou we are having some rain it will not be enough. I also suspect the US Government and the State of California is seeding the clouds and I have viewed jet stream myself to that effect. The chemicals that the jets are emitting to the clouds to make rain are just that chemicals and they are harming the public with these chemicals this should not continue.

The Air District needs to look at what the dust and water pollution is doing to the Stevens Creek Reservoir, creeks and the aquifer below our valley and homes. This pollution has polluted our groundwater and the wells that bring our water to our homes.

The Air District should not just consider the air pollution issues going out into the air, but they must consider pollution in water and soil that is coming from the air. They must also work together with the other agencies to make sure that this pollution does not continue to destroy communities and our world.

1.4 Back Round – Draft Rule 12-16 would affect the five petroleum refineries.

Comment: First I would like to say that I feel so sorry for the poor people that are living right next door to these polluters it is just horrible. I do not know how they can breath and how they have survived. There needs to be a compensation made for their loss maybe paying for their hospital bills but of course once the agencies make them provide compensation then they would also be in line of large law suites.

There is proof out there that pollution causes cancer and other health problems and even death but it seems no one wants to explicitly attach that proof or information to the polluters. They are allowed to keep polluting because as in Lehigh Southwest Cement and Quarry we need cement and so it seems that cement production is more important than people's lives. I would also suppose that we need Petroleum Refineries for oil so again we are faced with a very difficult situation how do we mine for resources without polluting the public?

There needs to be new technologies provided out there and these new technologies must be implemented immediately in order to save lives. These Petroleum and Cement companies are very wealthy and rich and could pay for the Best Available Technology but how can we leave the decision up to them? They may not be willing to retrofit a plant as is the case with the Lehigh Southwest Cement and Quarry instead they do the least amount of changes hoping that no one will tell them they have to retrofit completely or build a new plant. They do not want to be under the Rules pertaining to new plants because with their old equipment they cannot meet the new standards.

I believe that a special Division or Department with the agencies should look at and really find out what is the very best equipment and technology available. The facilities must upgrade their facilities accordingly and if they cannot they must close their doors. If we can send a man to the moon then we should be able to stop pollution and climate change.

I was reading the letter from Don Bristol with the Phillips 66 Company commenting on the Regulations and Rules he mentioned that Refinery owners and operators including Phillips 66 have vested rights in currently held enforceable permit limits. The vested rights issues are killing us there needs to be a change in Government with the Rules and Regulations, so as to protect the public from this dangerous pollution. There must be stop to contamination of our Cities from the heartless polluters who care only about the profits and revenue gained by the production of their products.

Draft Rule 11-18 would affect up to 1,000 facilities that emit TAC's. The Draft States that the Air District has determined that these emissions need to be reduced in order to be more protective of public health. These facilities include data centers, petroleum refineries, a cement kiln, gasoline dispensing facilities act. These facilities emit a variety of TAC's that can adversely impact public health. TAC's include compounds such as diesel particulate matter (DPM), benzene, polycyclic aromatic hydrocarbons (PAH's) and, 1.3-butadiene.

Comment: The Drafted Rule 12-16 and 11-18 cover many dangerous pollutants but there is nothing in the Draft that mentions how the Air District will specifically implement these new Rules and Regulations. I would like to see a more involved description of the overall implementation strategy. Putting generalizations on paper is not enough I want expressive details. The TAC's list has been around for a long time and the pollutants and the levels of pollution has not been addressed the way it should be.

The people are sick and dying a great more needs to be done if humanity is to survive we need strong enforcement tactics and technology needs to catch up in order to protect the public. There is no real enforcement if polluters do nothing but pay a fine. The Government makes out financially from these fines, but pays later for the hospitalization of persons who are left to suffer from this pollution.

Trying to set caps on these polluters is not enough because it leaves out the cumulative effect. How do we know that these caps actually are set honestly? People are sick and dying things are getting worse and worse climate change is real what are we to do?

Page 6 States the regulatory approach for Draft Rule 12-16 and 11-18 are summarized below and include the following basic elements.

Regulation 12, Rule 16 part of the basic element states that each facility emissions limit would be set at the maximum-annual emissions reported for that facility in the period from 2011 through 2015, and include an additional allowance or "threshold factor" that would equal seven percent over the maximum for GHGS, PM2, PM10, NOx, and SO2.

Comment: The Annual Emissions Inventory with the facility-wide emissions limits for each covered pollutant are set at what they are why would we want to start there? The facilities report their own emission levels like the fox watching he chickens how do we know what they are reporting is honest? There needs to be standards that actually stop the pollution and these standards actually protect the public. It seems that the maximum-annual emissions are set to allow the facilities to continue to produce their products because if the levels were lower the facility may not be able to operate. The real goal is to develop technology that will eliminate pollution overall with zero emissions wishful thinking yes but necessary. It seems the Regulations and Rules sure look good on paper can are they do the job.

1.5 Proposed Project Description – the description of Draft Regulation 11, Rule 18 and regulation 12, Rule 16 are provided below.

1.51 Regulations 12 rule 16

1.5.1.1 Pollution Coverage – The Draft Refining Cap Rule would limit the emissions of climate pollutants (GHG's) and three criteria pollutants (PM-both PM10 and PM2.5, NOx, and SO2) from refineries and other refining related facilities to a specific baseline plus and allowance; there by establishing a "CAP" for each of these emissions facility could not exceed.

Comment: Greenhouse Gases (GHGs) is real Lehigh Southwest Cement and Quarry contributes to this problem especially with the burning of Petroleum Coke how will this problem be solved? It would take the development of new technology and new thinking coming into place.

The agencies are not working together to stop this ongoing pollution and they seem to think that just lowering the pollution levels in their eyes is enough how can that be when so many people are sick. I will continue to mention the cumulative effect and how this plays into the serious health issues. There is also the Chemical Cocktail mixing of pollutants combining these pollutants makes them even more hazardous and dangerous.

Particulate Matter PM is also a complex issue there is an assortment of Tiny Airborne Particles that vary in size and mass (ultrafine, fine and course, physical state (solid or liquid), chemical compositions, toxicity, and how they behave in the atmosphere.

Comment: These Airborne Particles are destroying our lungs, bloodstream, brain and other vital organs, and individual cells. They trigger asthma attacks, chronic bronchitis, impaired lung development in children and adults, heart attack, stroke, and premature death. If the agencies know all this than why is it that the pollution still is allowed to flow into our cities and homes.

Nitrogen Oxides (NOx) – States these contaminants can damage vegetation and negatively impact the health of humans and animals.

Comment: Cancer in humans and animals is on the rise it is at epidemic stages, two out of three people are getting cancer. We must stop this pollution, or all of us will have health problems and will die as a result of this pollution. It mentions how this pollution can harm vegetation trees that are so valuable to our existence and our vegetable gardens what we eat is also becoming contaminated.

The dust from Lehigh Southwest Cement and Quarry and the Steven Creek Quarry is every place contaminating the Air, Water and Soil where we live. The dust is even eating the paint off of my car can you imagine what it is doing to our bodies.

Sulfur Oxides (SOx) – Heating and burning fossil fuels (such as coal and oil) release the sulfur present in these materials causing major air pollution problems the most common sulfur oxide is SO2.

Comment: This heating and burning of fossil fuels which can form Sulfur Oxide and in turn cause sulfuric acid in the presents of moisture. This process causes acid rain which causes all kinds of problems to our environment and to human existence.

1.5.1.2 Affected Facilities – Lets no limit it to just those.

1.5.1.3 The Emissions Units – Comments: Do not use old data maximus – year actual emissions reported in 2011-2015 plus additional allowances or threshold factor, of seven percent that is intended to account for normal year – to – year variations in emissions. There needs to be real life saving levels taken from monitors used for this purpose to record actuals to date emissions levels. The facilities report the levels themselves and submit them to the Air District so how can we be sure that the levels they report are accurate or honest? The problem with the Air District is they have to lower emissions to the point of allowing Lehigh and other polluters to continue to operate, so if the levels are to low and they cannot operate the Air District must allow higher levels of pollution to be emitted. I am sorry but my solution to the problem is to close down the Lehigh Cement and Quarry and the Steven Creek Quarry and clean up with a Super Fund Site once cleaned turning the properties into State and or Federal Parks.

Table 1 – The Enforceable Emission Limits on Refinery – Wide Emissions – Comments: This table reflects the information tables sent to the Air District by the Facilities themselves. Regulation 11, Rule 18 States that the Air District would screen all facilities that report toxic emissions and conduct health risk assessments (HRA) for facilities with a cancer risk prioritization score of 10 or greater or a non cancer

prioritization score of 1.0 or greater. The HRA's would incorporate the New Office of Environmental Health Hazard Assessment (OEHHA) protocol and health risk value adopted in March 2015, the Risk Management Guidelines adapted in July 2015 by the California Air Resource Board (ARB) and the California Air Pollution Control Officers Association CAPCOA) and the revised Air District HRA guidelines. It talks about the first phase of the rule, facilities that pose a cancer risk in excess of 25/M or a chronic or acute hazard index in excess of 2.5 must either reduce the facility cancer risk below 10/M and reduce the chronic and acute hazard below 1.0; or install TBARCT on all significant sources of toxic emissions. In the second phase, facilities not already addressed in the first phase that pose a health risk in excess of 10/M or a chronic or acute hazard index in excess of 1.0 must either except GHGs, which are based on 2011 through 2014 emissions due to the current unavailability of 2015 data reduce the facility cancer health risk below 10/M and reduce the chronic and acute hazard indexes below 1.0; Install TBARCT on all significant sources of toxic emissions.

Comment: The Air District is not clear on a TBARCT Installation this should be explained in the draft clearly. The question is with regards to enforcement how will all of this be enforced this definitely needs to be spelled out in order to make sure that the public is truly protected. It seems to be extremely evident that no one really knows if this will really work or not and seems to be impossible. If this was ever possible why had the agencies not implemented it before? I believe with the present technologies that there is no way a polluter like Lehigh can reduce emissions to accommodate these rules. The public is also asked to wait till 2020, 2030 or even longer to finally complete the requirements. The public's health is in grave danger and we keep pushing the years further out till a person really wonders if it will ever really happen. How can we also think that the information compiled from the facilities and the Air District is honest and correct? The facilities may lie about the emission reports they turn in in order to save themselves. We cannot use these levels to determine CAPS there needs to be a health and safety real limits set. I think that until we can stop or control the emissions completely that the public will always be at risk of serious health issues and even to the point of death.

1.5.14 – Changes in Monitoring Methods – The proposed rule would incorporate a means to address potential changes in the quantities of emissions reported due solely to changes in monitoring methodologies to ensure constant compliance with the emissions limits.

Comment: The changes in the monitoring Methods should be again spelled out in the report and they are not my question is why not? There would need to be new and advanced technologies implemented because what is in place is not working. The TRI reporting system is flawed and really without merit. It is susceptible to very incorrect information submitted by Lehigh and other polluters. I was informed by the Air District that the facilities even add to the pollution levels they say they are emitting so as not to be called by the EPA. I find this hard to believe, but who knows what is really taking place if Lehigh and other polluters are sending in their own information and the EPA is taking this information and putting it in the TRI System. Note: The TRI System is hard to access and very difficult to read this needs to change.

The public needs to see that the information coming from the facilities is real. The monitors put in place at the facilities need to report directly to the Air District and the EPA. The information must be reported truly and honestly and there should be no way that the facilities can lie about their pollution. Once this

information is registered off of the monitors at the facilities and there is a violation the Air District inspectors need to go out and write up the polluters right away. There should be fines imposed and also a possibility that the facility can be shut down until they are in compliance. If the facility cannot control their emissions and they are always out of compliance then they should be shut down.

1.5.2 Regulation 11, Rule 18

1.5.21 Administrative Procedures – It states that the Draft Toxic Risk Reduction Rule would utilize the annual toxic emissions inventories reported to the Air District by sources that emit toxic compounds. From the Toxic Emissions Inventory date, Air District would conduct a site-specific Health Risk Screening Analysis (HRSA) in order to assess the potential for adverse health effects. From these HRSA; the Air District would categorize each facility to determine cancer risks

Comment: There seems to be again no mention of the cumulative effect levels that should determine the cancer risk from ongoing pollution exposures. Number scores do not reflect the real danger.

1) Basing the amount of toxic pollution emitted from based on reports submitted by the facility is endangering the public. How do we know based on the TAC and TRI reports if in fact they are reporting honestly? The need for installing surveillance equipment is evident and should be put on each facility's recording equipment. The emissions information should be relayed from each monitor to the Air District and the EPA directly without delay. The inspector is available 24/7 and is able to go right away to stop the emissions that are causing the violation. The inspectors are not available after 5:00 PM Monday through Friday and also not available Saturday and Sunday this is leaving the public subjected to dangerous pollution. The inspector may have to shut down the facility completely until the violation can be corrected and if it cannot the facility should be closed for good.

2) There is another serious matter that needs to be taken into consideration and that is the cocktail effect mixing all these pollutants together is forming an even further danger to the public and it must stop. There needs to be more research done on this effects and it needs to take place soon, again to protect the public who are not aware of the dangers and leave their lives in the hands of the agencies.

3) Proximity of the facility the Lehigh Southwest Cement and Quarry and the Steven Creek Quarry are very near a large populous The City of Cupertino especially is subject to thousands and thousands of pounds of pollution coming from the Lehigh Southwest Cement and Quarry and the Steven Creek Quarry. The Air, Water and Soil is completely contaminated with this pollution and it is a grave danger to the public, this matter goes completely unnoticed by the Agencies, Cities, County and the General Public. I attended a meeting in Cupertino at the Cupertino City Hall sponsored by Santa Clara County. Joe Simitian a Board member was hosting this meeting. This meeting was only a tip of the iceberg a great deal of information was never brought up and discussed. The meeting is not an open forum and the public pretty much has a gag order not to speak at the meeting. The public is allowed to submit cards and then the SCC Staff and Joe Simitian decide what cards are to be considered for discussion and how. This in my opinion this is not what our Democracy was based on and I am appalled, dismayed, disheartened and disappointed with all the agencies that will not stop the pollution and continue to let the polluters go on polluting our cities. The playing down by the agencies of the seriousness of this

pollution is more than a person or persons can take and it needs to stop. The hiring of police and strong arm men to guard the agencies personnel and Santa Clara County representatives from anyone who would speak up and tell the truth at meetings is a disgrace. I must say that something needs to be done about the lingering complacency that the agencies keep presenting to the public Lehigh Southwest Cement and Quarry and the Steven Creek Quarry are not in compliance.

The analysis it is stated in order to complete the work in a timely manner that an independent contractor must be hired. I am concerned how do we know the work will be conducted accurately and honestly?

4) It states that any other factors that the Air District deems to be important.

Comment: Well than I would like to include the Ammonia emissions coming from the Lehigh Southwest Cement and Quarry which should be considered a serious pollutant and the Air District seems to think it is not. The Ammonia is added to control the NOX this is a danger to the public and it is not properly regulated. The TAC listing of pollutants and their acceptable levels does not really reflect the serious damaging pollution that is going out into the public again taking into cumulative effect is left out and the public suffers.

It states the Air District would compile two lists of facilities and determine the cancer risks to children and infants,

Comment: It does not mention and what is seriously left out is the damage these pollutants cause to the fetus. The pollution causes many birth defects and even death to the fetus and young children. I know the damage done to my unborn fetus first hand my daughter was born with brain damage and only had brain stem functioning, she suffered greatly, was hospitalized 28 times, for weeks at a time and finally died at 3-1/2 years old. They said she died from toxic shock syndrome and I believe that the pollution coming from Lehigh Southwest Cement caused this problem. There is gray dust all over my home and property, and I am subjected to breathing it into my lungs and eating this dust. This dust is also taking the paint off of my car which acts like sand paper. The pollution is affecting the Air, Water and Soil and the Air District can no longer play down the terrible health issues that this pollution is causing the public. When my daughter was born they had to perform an emergency C-section on me and I could have also died and I have the scar to remind me of this time. I have had cancer twice and have lost both breasts after three surgeries. I have asthma, diabetes, planters' foot and must also take a pill that kills the estrogen in my body to keep the cancer from coming back.

My husband had cancer and suffered from serious depression he died 3 years ago from Coronary Arrest, Liver Disease, and Alcohol abuse. My dog also died of cancer to the liver years ago and I believe that this was also caused by the Lehigh Southwest Cement and the Stevens Creek Quarry that are polluting the Air, Water and Soil in the Silicon Valley and the SF Bay Area. My son was diagnosed with Dyslexia and Add I call him my miracle son because I had infertility problems and suffered two miscarriages all of this I attribute to the pollution with the above polluters.

1.5.222 Health Risk Assessments – It states that a HRA (Health Risk Assessment consists of four basic steps: 1) Hazard identification; 2) Exposure Assessment, 3) Dose Response Assessment; and 4) Risk Characterization. The Air District conducts HRAs using standardized mythologies for each of these steps.

Comment: The question is how can these four basic steps be determined if the polluters monitor themselves? The polluters turn in their own reports and also calibrate their own machines and monitors so how can we be sure they are telling anyone the truth? The determination of all four basic steps that would consist of a Health Risk Assessment would have to include doctors and scientists that would be able to add their statistics. There would need to be an intense honest investigation that would show all functions of testing that would include the cumulative effect in order to keep the public from harm. There are many things left out of the investigation processes and it is very important that the public is informed of the true levels of pollution that is seriously affecting them.

1.5.2.3 Pollutant Coverage – The Toxic Risk Reduction rule would address TAC emissions from existing stationary sources.

Comment: I believe until the Air District and the other agencies really do their own testing with their own monitors that cannot be tampered with that it is impossible to really know what is really being emitted from the polluter facilities. The pollutants mentioned are very carcinogenic – Benzene, 1,3-Butadiene, Polycyclic Aromatic Hydrocarbons (PAHs) and Diesel Particulate Matter (DPM) but there are many more. The cocktail and the cumulative effect is a serious matter and again nothing is mentioned in the Draft this should not be overlooked.

1.5.2.4 Source Coverage

Comment: Let us not forget the Lehigh Southwest Cement and Quarry in Cupertino that is polluting the Silicon Valley and the SF Bay area. The Toxic Health Reduction Rule will need to be fine- tuned and specializing in the elimination of the pollution as a whole. Reducing emissions in anyway will not solve the serious problem of the cumulative effect. The pollution is harming humans, animals and aquatic life we the people need to request that our Government invest in new technologies that will eliminate pollution completely. Is this wishful thinking I suppose so but after all we sent a man to the moon we should be able to resolve this problem. The economic issues should not be holding back the saving of people's lives and the planet from pollution, climate change and the drought here in California.

The 6,000 facilities out there should all be considered for regulating but the Air District as only mentioned 1,000 facilities. The Rule and Regulation looks good on paper but what will it really mean to the public especially if it is many years down the line. The public suffers health issues while the Air District try to figure out what to do and how to do it this should be the highest priority and it is not. The reason given is due to the lack of funding and manpower we just can't do the job faster. What is wrong with our Government why are not seeing that everyone is getting cancer other health issues and even death?

The problem has been that there really is no real enforcement the facility in violation just pays a fine and then go right back to polluting again writing off the fine as a cost of doing business. It seems no one

will stop the crimes that are being committed against the people no one ever goes to jail. The future of humanity is at risk and all the agencies seem to do is try and postpone, delay and refuse to really impose penalties against the Lehigh Southwest Cement and Quarry and the Stevens Creek Quarry. When there is any kind of fine most of the money goes back to the Government. Santa Clara County even refuses to impose a fine on Lehigh because of the tax revenue and the property tax revenue they receive each year. The public is not so blind that we do not see what is really taken place.

The biggest problem we face here in the Silicon Valley is that Lehigh Southwest Cement and Quarry run out of limestone and decide to put in a new quarry pit which will destroy 30 thousand trees and 600 acres of land. This will also destroy the homes for many animals who live in th

Please remember there is no one who is immune to cancer and the other health problems we are or will be all suffering. Cancer cases are at epidemic levels everyone will be getting it and the other serious illnesses. The human race will be lost if we do not change the way we do business and save the planet it is our home the only one we have and everyone needs to be involved. The planet will be here in 50 years but will the human race I suppose that is up to each and every one of use to start to SAVE THE PLANET NOW!

I hope that the Air District will really take the time to not only read my comments but that they will also ask the same questions and use the information to change the way that they think about pollution. I also hope anyone reading my comments will get even more involved and also that you will be telling and helping others to do the same.

Please save the Silicon Valley and the SF Bay area from the Lehigh Southwest Cement and Quarry and the Stevens Creek Quarry by creating a movement to shut them down. My dream is to have the State or Federal Government buy the properties via eminent domain, issue a Super Fund Cleanup, and then turn the properties into State and Federal Parks. I would like to address the public if you are reading my comments and feel the same way I do please contact your State and Federal Representatives.

Thank you,


















Communities for a Better Environment

Sierra Club San Francisco Bay Chapter

350 Bay Area

Asian Pacific Environmental Network

Sunflower Alliance

Richmond Progressive Alliance

Crockett-Rodeo United to Defend the Environment

Benicians for a Safe and Healthy Community

Rodeo Citizens Association

Interfaith Climate Action Network of Contra Costa County

Community Science Institute—CSI for Health and Justice!

Greenaction for Health and Environmental Justice

California Nurses Association

11 November 2016

Eric Mar, Chair of the Board
John Gioia, Stationary Source Committee Chair
Members of the Board of Directors
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

Attention: Jack Broadbent, Air Pollution Control Officer
Gregory Nudd, Air District staff
Eric Stevenson, Air District staff
Victor Douglas, Air District staff

Re: **Initial Study (IS) Released 14 October 2016 and Draft Staff Report (DSR) Released 27 October 2016 for Proposed Rules 12-16 and 11-18, and Request for Comment on Scope of California Environmental Quality Act (CEQA) Review**

Dear Chair Mar, Committee Chair Gioia, and Board members,

Communities for a Better Environment (CBE), the Sierra Club, 350 Bay Area, the Asian Pacific Environmental Network (APEN), the Richmond Progressive Alliance (RPA), the Sunflower Alliance, Crockett-Rodeo United to Defend the Environment (C.R.U.D.E.), Benicians for a Safe and Healthy Community, the Rodeo Citizens Association (RCA), the Interfaith Climate Action Network of Contra Costa County, the Community Science Institute—CSI for Health and Justice!, Greenaction for Health and Environmental Justice, and the California Nurses Association (CNA) comment on the Initial Study, Draft Staff Report, and request for scoping comment cited above in support of proposed Rule 12-16.

Introduction

Oil refining is the largest industrial emitter in the Air District's jurisdiction of the most harmful types of air pollution known—fine particulate matter and greenhouse gases. Four years ago the Air District admitted there is ***no limit*** on refinery-wide emissions, found refining lower quality oil could ***increase*** refinery emissions, and planned to set up, by June 2013, a backstop to ***prevent*** that foreseeable emissions increase. The enforceable emission limits in proposed Rule 12-16 would "cap" these emissions to set that backstop. Setting these limits is urgent as the oil industry's push to build long-lasting infrastructure for inherently higher-emitting grades of oil threatens imminent and irreversible harm.

We appreciate the District staff's recent work to develop the specific numeric limits now proposed in Rule 12-16, and the Board's direction to its management to complete a full analysis of this measure. Rule 12-16 is reasonable, effective, a necessary complement to other air quality and climate protection measures, and urgently needed. It would close a gaping loophole that has left facility-wide emissions from oil refineries unlimited. It is needed to prevent the biggest industrial emitters of the most harmful air pollutants known from causing severe and irreversible climate and health impacts by locking in bottom-of-the-barrel oil infrastructure that could increase those emissions for another generation.

However, the Initial Study and Draft Staff Report released by District staff management present grossly inaccurate, biased, and misleading analysis that must be corrected. They assert conclusions regarding the need for Rule 12-16, its effectiveness, and your authority to adopt it that are proven false by factual information they fail to disclose or analyze. Worse, as we document herein, this crucial information that is omitted and ignored includes facts the District already knew, and even its own previous findings.

Oil industry pressure has affected the timing and transparency of this rule development process. Air District staff management has long delayed this urgent measure to keep refinery emissions from increasing, telling the public only that it was explaining secretly, in closed sessions with its Board, why it agreed with the oil industry's claim that refinery emissions must be allowed to increase. Now the excuse for that delay appears to be only the false conclusion of analysis biased by systematic nondisclosure of relevant facts.

As you know, the Air District Board has directed its staff to complete a full analysis and rule development package for Rule 12-16 that the Board can properly consider for adoption as expeditiously as possible. We hope to stand with the Air District Board in continuing to demand disclosure and consideration of all information that is relevant to a full analysis of this measure, as required by scientific principles and the California Environmental Quality Act (CEQA).

The Air District developed Rule 12-16.

Finding that a switch to lower quality grades of oil could increase refinery emissions significantly, the Air District initiated rulemaking to set a "backstop" against increasing refinery emissions in 2012[1] and resolved to develop Rule 12-16 for this purpose in 2014.[2] After considering extensive public comment on many options for this backstop, the Air District decided to consider setting the performance-based emission limits now proposed. Meanwhile, this air district and others had already been managing and updating their criteria for the facility health risk assessment and risk reduction program contemplated by proposed Rule 11-18, for decades, pursuant to the state law that established this program, and without the need for rules like Rule 11-18.[3]

Concealing these facts,[4] the Initial Study (IS) and Draft Staff Report (DSR) label Rule 12-16 as a recommendation by "CBE and associated organizations" only, and Rule 11-18 as the District staff's new idea. This error presents an incomplete, inaccurate, and biased description of the rules that hides information about the need for them, the Air District's role in developing them, and its multi-year rulemaking record for Rule 12-16 that must be known to complete accurate analysis under CEQA.

Rule 12-16 addresses extremely harmful air pollution.

Particulate matter (PM) and greenhouse gas (GHG) air pollution cause the worst current and potential local, regional, and global harm of all the air pollutants known. A strong scientific consensus holds that failure to curb GHG emissions quickly could lead to climate impacts so extreme that human societies as we know them might become untenable,[5] and the Air District itself has reported elsewhere that:

> Exposure to $PM_{2.5}$ is by far the leading public health risk from air pollution in the Bay Area, accounting for more than 90 percent of premature mortality related to air pollution. *Bay Area Air Quality Management District, 2016.*[6]

Incredibly, the IS and DSR fail to disclose the full extent of known and potential PM and GHG impacts, even though Rule 12-16 would limit GHG and PM air pollution. These extremely severe existing and potential effects must be disclosed in CEQA review. Moreover, this error inserts a further bias into the IS and DSR analyses because the approach they inappropriately portray as an alternative to Rule 12-16, proposed in Rule 11-18, does not control GHG or $PM_{2.5}$.[7] The DSR simply cannot credibly conclude, as it purports to conclude in this inappropriate comparison, that preventing increases in the most harmful emissions is less protective than allowing those emissions to increase.

---

[1] Regulatory Concept Paper, Petroleum Refining Emissions Tracking Rule. Draft: May 30, 2012.
[2] Resolution 2014-07, adopted unanimously by the BAAQMD Board 15 October 2014.
[3] *See* BAAQMD, 2013. Toxic Air Contaminant Control Program Annual Report 2013.
[4] Such errors were not corrected despite prior comment: *See* CBE's 11 Sep. 2016 comments.
[5] *See* Fifth Assessment Report (AR5), Intergovernmental Panel on Climate Change (IPCC), 2014.
[6] Draft Control Measure SS1: Fluid Catalytic Cracking in Refineries, 2016 Clean Air Plan and Regional Climate Protection Strategy (quoting the Air District's 2010 Clean Air Plan).
[7] Nearly thirty years after the State Toxic Hot Spots Program began there is still no defined method for Rule 11-18 health risk assessments to include $PM_{2.5}$, as the DSR admits at 39.

Rule 12-16 limits exceptionally harmful polluters.

Oil refining emits more GHG and PM than any other industrial sector in the Bay Area.[8] Indeed, the summary figures in the DSR, indicating that the five major refineries here collectively emit 45% of $PM_{2.5}$, 34% of NOx, 51% of SO_2, and 38–67% of the GHGs[9] emitted by all industrial sources in the region combined, are consistent with this finding. But omitting this comparison of industrial sectors despite the fact that different sectors require different technologies and control measures, the IS and DSR obscure this finding.

The portrayal in the IS and DSR of refinery emissions as smaller than mobile source emissions presents an inaccurate and misleading comparison because it conflates source categories in two important ways. From a District rulemaking perspective, it ignores the fact that the District has authority to control refinery emissions, not tailpipe emissions. Equally important for environmental health and climate protection, it ignores the link between emissions from refiners' production and their products.

Accounting for the polluting products refiners profit from in competition with cleaner alternative fuels, even the DSR's partial estimates link Bay Area refineries to 46% of $PM_{2.5}$, 87% of NOx, 57% of SO_2, and 56% of the GHGs[10] emitted by all sources in the region. From the perspective of preventing unsustainable and irreversible climate impacts, these figures indicate that achieving the 40% emissions cut required by 2030 and the 80% cut required by 2050 could become impossible in the Bay Area if long-term increases in refinery emissions are allowed to become locked into place now. The need for refinery emissions control analysis to address this environmental effect context is beyond reasonable dispute, but the IS and DSR omit and ignore this context.

By protecting frontline communities Rule 12-16 protects everyone.

Abundant evidence in the District's rule development record demonstrates that refinery emissions disparately impact nearby low-income communities of color. Some examples:

- At a distance of 2.5 miles away the average areal emission intensity (e.g., tons/mile^2) of Bay Area refinery $PM_{2.5}$, NOx, and SO_2 emissions is 3–30 ***times*** that for ***all*** emission sources within the Bay Area, averaged over the region as a whole.[11]
- Peer reviewed measurements show that refinery emissions contribute significantly to locally elevated outdoor ***and*** indoor $PM_{2.5}$ air pollution concentrations outside ***and*** inside the homes of low-income residents of color in Richmond.[12]
- Analyses of Air District data link locally elevated hourly air concentrations of SO_2 and H_2S to episodic emissions from Bay Area refineries.[13]

[8] Based on District and ARB data: *See* CBE et al. 9/21/15 comments in rules 12-15/12-16 record.
[9] GHG range accounts for GHG from electricity generation elsewhere to supply the Bay Area.
[10] GHG estimate accounts for GHG from electricity generation elsewhere to supply Bay Area.
[11] Based on District emissions data: *See* CBE 11/23/15 comments in rules 12-15/12-16 record.
[12] *See* CBE 11/23/15 comments in rules 12-15/12-16 record, and Attachment 44 thereto.
[13] *See* CBE 11/23/15 comments in rules 12-15/12-16 record, and attachments 45 and 46 thereto.

- Refineries are strong sources of ultra-fine PM that, compared with coarser PM, has a more toxic composition, penetrates deeper into the lungs, bloodstream and cells, and is more abundant and concentrated in ambient air near its sources.[14]
- Fallout from large, visibly unmistakable "black smoke" PM plumes caused by Chevron's Richmond Refinery Crude Unit fire of 6 August 2012 forced ≈ 15,000 people to seek emergency room care in Richmond and surrounding communities.[15]

Ignoring all this evidence, however, the IS and DSR argue against significant localized impacts of refinery emissions, asserting a grossly incomplete and inaccurate analysis that insists on misleading "facts" based on assumptions the District knows to be false. The District knows that accurate analysis of the dispersion of emitted pollutants in the ambient air must account for the amounts of those pollutants emitted, but the IS omits and ignores this source-strength factor despite prior comment[4] pointing out the error. Correcting this error would reverse its false conclusion that the emissions accumulate only in the ambient air of the region's inland valleys instead of accumulating in those locations ***and*** near the bayside refineries, in nearby residents' ambient and indoor air.

Worse, the District knows its regional ambient air monitoring network was not designed to measure, and does not measure, air hot spots near refineries and other strong emission sources reliably and accurately—but the DSR asserts that these regional monitors do just that in its false argument against significant localized refinery emission impacts. This is the same error that led Air District management to assert that Chevron's August 2012 fire caused no significant air quality impact while thousands rushed to hospitals choking on Chevron's air pollution. The regional monitors were not set up to measure the local air impacts of that incident and did not measure those impacts.[16] In fact, the District decided to make the refiners pay for new monitoring of nearby ambient air based on its own findings[17] that its regional monitors do ***not*** say what the DSR now claims they say.

Rule 12-16 prevents clearly foreseeable harm.

The Air District has ample evidence to support its finding[2] that a switch to lower quality oil threatens to increase refinery emissions significantly. Peer reviewed science shows that the severe processing needed to maintain engine fuels production from lower quality oil increases refinery energy intensity, thereby increasing refinery emissions of combustion products including GHG, PM, NOx, and SO_2.[18] Refining greater amounts of bitumen-derived "tar sands" oil would further lower the quality of the average Bay Area refinery crude feed.[18] The oil industry reports plans to refine more tar sands oil here,[18] and multiple projects for new or modified infrastructure enabling those plans have been proposed for imminent construction across the regional oil industry.[19]

---

[14] *See* CBE 10/21/15 and 11/23/15 comments in the rules 12-15/12-16 record, including attachments 6, 42 and 43 and *esp*. 4 (Air District corroboration of these findings).
[15] *See* CBE 11/23/15 comments in the rules 12-15/12-16 record, *esp.* Attachment 47 thereto.
[16] *See* San Pablo–Rumril Station data (https://www.arb.ca.gov/adam/weekly/weeklydisplay.php).
[17] *See* Rule 12-15 rulemaking record.
[18] *See* CBE 10/21/15 comments in the rules 12-15/12-16 record, including attachments thereto.
[19] *See* CBE et al. 6/10/16 comments in the rule 12-16 record, and BAAQMD permit files.

Further wounding the Air District's credibility, however, the IS and DSR dispute the District's own finding that an oil switch now threatens to increase refinery emissions significantly[2] by dismissing the likelihood, severity, and timing of this threat while omitting and ignoring the evidence the District possesses that supports this finding. The IS only mentions the objective of Rule 12-16 to prevent potential increases in refinery emissions due to changes in refinery oil feed quality (twice: *see* IS at 1-3, 1-10), omitting and ignoring evidence in the District's record and even this finding. The DSR's cursory discussion of this potential toxic and climate threat goes further, labeling the threat only theoretical and small (DSR at 6, 8), and omitting the potential emission impacts and benefits from preventing these impacts from its analysis, then falsely concluding that Rule 12-16 would have little or no benefit. (DSR at 20, 24, 39, 40).

Again, the IS and DSR improperly omit and ignore evidence the District already has that, when properly reported and analyzed, reverses their false conclusions about Rule 12-16.

Rule 12-16 prevents irreversible harm.

Allowing refinery emissions to continue at current rates or to increase through 2030–2050 could foreclose the opportunity to meet critical climate and health protection targets in the Bay Area. (*See* page 4 above.) Crucially, the "infrastructure inertia" created by major capital projects for new fossil fuel plants represents a commitment to new and continuing emissions for 30–50 years,[20] a dead-end in the path to a sustainable climate,[21] and a fundamental threat to future generations' environment and economy.[22] The District has acknowledged that Bay Area refineries are likely to switch crude slates,[23] that a switch to higher-emitting oil could be inextricably linked to new infrastructure projects[24] like those they now plan,[25] and that this new refinery infrastructure can be expected to have the capacity to operate for several decades.[26]

Thus, enabling the industry's planned switch to higher emitting oil feedstock and the long-lasting new infrastructure to refine it by allowing refiners' emissions to increase now could result in irreversible climate and health impacts. Therefore, one of the key objectives of proposed Rule 12-16 is to:

---

[20] *See* Davis et al., 2010. Future CO_2 emissions and Climate Change from Existing Energy Infrastructure. *Science* **329:** 1330–1333. DOI: 10.1126/science.1188566.

[21] *See* Williams et al., 2015. *Pathways to Deep Decarbonization in the United States;* Energy+ Environmental Economics (E3). California ARB Chair's Presentation Series, 13 May 2015.

[22] Professor Lord Stern's 28 October 2016 speech to the Royal Society entitled *The Criticality of the Next 10Years: Delivering the Global Agenda and Building Infrastructure for the 21st Century.*

[23] 2016 CAP Draft Measure SS9 ("crude slates being refining by Bay Area refineries have been changing recently, and they are expected to continue to change in the future as California's crude oil resources start to become depleted and refineries look to other sources of crude oil.")

[24] *See* DSR at 8 ("The refineries would likely need to make changes to their facilities in order to accommodate different sources of crude oil with different compositions while maintaining current production levels.")

[25] *See* CBE et al. 6/10/16 comments in the rule 12-16 record, and BAAQMD permit files.

[26] *Id.* (*esp.* project descriptions in EIRs that BAAQMD permits are based upon).

> Compliment other climate, health, and safety measures, by ensuring that new commitments to long-lasting infrastructure for refining higher-emitting and more hazardous oils, which could foreclose the long-term emission reduction and safety potential of these other measures, will not be encouraged or enabled by allowing Bay Area refinery GHG, PM, NOx, or SO_2 emissions to increase.[27]

Despite purporting to compare Rule 12-16 with other policies which would not close the loophole allowing refinery-wide emissions to increase, and would thereby allow this infrastructure inertia impact, the IS and DSR ignore this irreversible impact, omit any analysis of infrastructure inertia, and fail even to mention[4] the objective quoted above.

Rule 12-16 is a necessary complement to other policies.

Rule 12-16 would set numeric limits on facility-wide emissions of GHGs, $PM_{2.5}$, PM_{10}, NOx, and SO_2 from refinery energy use at levels that prevent any significant increase in those emissions, thereby supporting the ability of other policy measures to cut harmful air pollution. The IS and DSR, however, present a false comparison of this rule with those other policies that is based on incomplete, inaccurate, and misleading analysis.

First, the IS and DSR omit a key fact that the District knows: ***no*** other policy sets any limit on facility-wide mass emissions from any Bay Area refinery.[1] Thus, no other policy addresses the irreversible refinery infrastructure emissions impacts described above,[20–27] which the IS and DSR also fail to disclose. These omissions obscure a unique and critical role of Rule 12-16 among air quality, environmental health and climate policies.

Second, the IS and DSR assert potential impacts of Rule 12-16 based on incomplete, misleading, and false comparisons with New Source Review (NSR) and cap-and-trade. NSR may not detect emissions increases from refining lower quality oil[28] and exempts too many refinery sources to prevent the significant increases in facility-wide emissions switching to lower quality oil could cause, necessitating a backstop against increasing refinery emissions,[1] District staff has found. Rule 12-16 would set such a backstop. California's cap-and-trade policy allows refineries to increase emissions using credits, gives them credits free, and is not authorized beyond 2020,[29] so it cannot address the irreversible infrastructure impacts Rule 12-16 addresses. Further, unlike Rule 12-16, cap-and-trade does not provide multi-pollutant combustion emissions control, which District staff has found to be more effective and efficient than pollutant-by-pollutant measures.[30] Finally, AB 197 requires prioritizing efficient direct control measures—like Rule 12-16.

---

[27] *See* CBE's 11 Sep. 2016 comments on the draft Rule 12-16 project description at page A-8.
[28] 2016 CAP Draft Measure SS9 at 2 (modifications to change crude slates "may be difficult or impossible for the Air District [and the public] to discover … Refineries are complex operations, and any modifications associated with crude slate changes may be relatively subtle and not immediately obvious. ... Air District staff is investigating potential amendments to … include any significant crude slate change" among the triggers for NSR review of such modifications.)
[29] *See* ARB's *Preliminary Draft Proposed Regulation Order and Staff Report* dated 1 July 2016.
[30] *See* 2016 CAP Draft Measure SS11 at 2.

The IS and DSR omit and ignore all of this information which, when considered, reverses their inaccurate conclusion that Rule 12-16 could conflict with NSR and cap-and-trade.

Third, the IS and DSR present a false comparison of the proposed rules' effectiveness. Proposed Rule 11-18 would not address emissions of PM or GHGs that Rule 12-16 would address. Equally important, Rule 11-18 could not prevent the imminent and potentially severe emission impacts that Rule 12-16 could prevent, because Rule 11-18 would use a reactive approach that waits for further health assessments before beginning, well after 2020, to consider applying emissions control. The IS and DSR omit and ignore this information that shows Rule 11-18 cannot substitute for Rule 12-16—a fact that reveals their analysis assuming the opposite to be a false comparison.

Finally, the IS and DSR omit the District's own findings indicating that the refinery-wide emissions backstop now proposed as Rule 12-16 is a necessary complement to other rules that seek to reduce emissions from selected refinery sources.[2] Simply put, preventing increases in refinery-wide emissions complements the other measures by allowing them to reduce refinery emissions incrementally over time and enhancing their ability to do so. Indeed, the District Staff's projection that these other measures will reduce refinery-wide criteria pollutant emissions by approximately 15 % that is reported in the DSR[31] ***relies*** on this backstop—another fact that the IS and DSR obscure by omitting District findings.

Rule 12-16 is reasonable.

Rule 12-16 would allow each refining facility to emit up to 107 % of its actual maximum annual emissions over the most recent five-year period when its emissions were reported. Reported production by Bay Area refineries reached 97.7 % of their maximum crude capacity during this period,[32] they produced more gasoline and diesel than needed here and exported significant amounts of these fuels to foreign countries in this period,[33] and other adopted measures are expected to reduce emissions from these refineries.[31] Thus, Rule 12-16 itself would not be expected to require any change in refinery equipment, operation, workforce, production rate, or fuel supply. But despite these facts, and failing to disclose many of them, the IS and DSR paint this measure as unreasonably risky.

---

[31] DSR at 9 (recently adopted measures projected to cut refinery-wide criteria emissions by 15%).

[32] The California Energy Commission reports gross crude oil receipts for processing by the five Bay Area refineries of 292.347 million barrels in 2014 and 285.412 MM b in 2015 (Per. comm., G. Schremp, CEC to G. Karras, CBE, 3 Aug 2016: forwarded to BAAQMD on 8 Sep 2016); the U.S. Energy Information Administration (a source the DSR relies upon) reports total operable capacity of atmospheric crude distillation units (b/cd) at these five refineries was 299.253 MM b in 2014. (EIA Refinery Capacity Report as of 1 Jan 2015.) Their operable crude utilization rate, defined by EIA as this gross input divided by this operable capacity, was thus 97.7 % in 2014.

[33] Bay Area refineries exported an average of 74,500 b/d of gasoline and diesel in 2013 (EIA data reported to BAAQMD by CBE on 25 Apr 2016) and produced these fuels at total rates averaging 611,880 b/d in 2014 and 2015 (CEC data reported to BAAQMD on 25 Apr and 19 Oct 2016), suggesting they currently export roughly 12 % of their combined gasoline and diesel production. Excess Bay Area refinery production accounted for 96 % of all gasoline exports from California refineries during the first 8 months of 2016 (CEC data reported to BAAQMD on 19 Oct 2016).

The DSR states that Bay Area-specific refinery production data are not available, that Rule 12-16 "may constrain" the domestic fuel supply market, and that this constraint would have worsened a "dramatic" gas price spike during the Torrance refinery outage in 2015. (DSR at 22, 23.) All of these statements appear inaccurate and misleading. The District had these specific data.[32–33] These data show that Rule 12-16 would allow Bay Area refineries to process ***more*** crude than they processed during the 2015 outage,[32] use ***more*** of their production capacity than they can reliably use for long periods,[34] and collectively produce roughly 12 % ***more*** gasoline and diesel than the domestic fuel market demands from them.[33] Instead of falsely blaming gas price spikes on air quality rules, the IS and DSR should have evaluated the local and global emission impacts from this excess refinery production for export—impacts Rule 12-16 would help to curb.[4]

Even though Rule 12-16 allows emissions at current rates, the IS and DSR also link it to "potentially significant" environmental impacts from the side effects of new equipment that they say it could require to reduce criteria pollutant emissions.[35] They do not explain why their analysis ignores the District staff's own finding that ***other*** recently adopted measures are projected to cut refinery-wide criteria pollutant emissions by ≈ 15 %,[31] or how Rule 12-16 itself would require new equipment to reduce emissions that already would be 15–22 % below[36] its applicable emission limits.

A major switch to refining lower quality oil or to increasing production for export would have to overwhelm the already-required emission reductions before Rule 12-16's PM, NOx, or SO_2 limits might be exceeded—and these scenarios, while clearly foreseeable, would require major infrastructure projects.[18–26] Rule 12-16 would prevent severe and irreversible emission impacts in these scenarios. Further, because it would prevent increased emissions it would discourage such harmful projects and encourage projects using lower-emitting production systems, thereby encouraging the prevention of the types of emission mitigation side-effects the IS asserts. Finally, and also ignored by the IS and DSR,[4] these emission impact prevention, irreversible impact prevention, and new emission mitigation impact prevention effects are among the objectives and intended results of Rule 12-16.

[34] Compare note 32 above (2014 Bay Area refinery capacity utilization of 97.7 %) with the DSR at 23 ("Peak refining utilization [on a weekly basis at West Coast refineries from 2010–June 2016] appears to be about 93.5 percent. Given the few times when that peak was achieved, it's unlikely to be sustained over a long period due to unplanned outages and planned maintenance.").
[35] *See* IS at 2-40 (SCR equipment assumption) and 2-46 (wet scrubbing equipment assumption).
[36] Low end of 15–22% range based on other rules' reduction; high end (22%) also includes the 7% "operating variation" included in calculation of Rule 12-16 limits (*see* § 12-16-302).

Conclusion

Rule 12-16 is reasonable, effective, a necessary complement to other air quality and climate protection measures, and urgently needed. It would close a gaping loophole that has left facility-wide emissions from oil refineries unlimited. It is needed to prevent the biggest industrial emitters of the most harmful air pollutants known from causing severe and irreversible climate and health impacts by locking in bottom-of-the-barrel oil infrastructure that could increase those emissions for another generation.

However, the Initial Study and Draft Staff Report released by District staff management assert conclusions regarding the need for Rule 12-16, its effectiveness, and your authority to adopt it that are proven false by factual information they fail to disclose or analyze. Worse, as we document herein, this crucial information that is omitted and ignored includes facts the District already knew, and even its own previous findings.

Oil industry pressure has affected the timing and transparency of this rule development process. Air District staff management has long delayed this urgent measure to keep refinery emissions from increasing, telling the public only that it was explaining secretly, in closed sessions with its Board, why it agreed with the oil industry's claim that refinery emissions must be allowed to increase. Now the excuse for that delay appears to be only the false conclusion of analysis biased by systematic nondisclosure of relevant facts.

As you know, the Air District Board has directed its staff to complete a full analysis and rule development package for Rule 12-16 that the Board can properly consider for adoption as expeditiously as possible. We hope to stand with the Air District Board in continuing to demand disclosure and consideration of all information that is relevant to a full analysis of this measure, as required by scientific principles and the California Environmental Quality Act.

Respectfully,

Andrés Soto and Greg Karras
Communities for a Better Environment (CBE)

Luis Amezcua
Sierra Club San Francisco Bay Chapter

Richard Gray
350 Bay Area

Ratha Lai
Asian Pacific Environmental Network (APEN)

Janet Scoll Johnson
Richmond Progressive Alliance (RPA) *continued*

Steve Nadel, Charles Davidson, and Earl Koteen
Sunflower Alliance

Nancy Reiser
Crockett-Rodeo United to Defend the Environment (C.R.U.D.E.)

Katherine Black
Benicians for a Safe and Healthy Community

Janet PyGeorge
Rodeo Citizens Association (RCA)

Rev. Will McGarvey
Interfaith Climate Action Network of Contra Costa County

Denny Larson
Community Science Institute—CSI for Health and Justice!

Bradley Angel
Greenaction for Health and Environmental Justice

California Nurses Association (CNA)

Copy: Clifford Rechtschaffen, Office of Governor Edmund G. Brown
Richard Corey, California Air Resources Board
Refinery Action Collaborative of Northern California
Interested organizations and individuals

California Council for Environmental and Economic Balance
101 Mission Street, Suite 1440, San Francisco, California 94105
415-512-7890 phone, 415-512-7897 fax, www.cceeb.org

December 2, 2016

Mr. Victor Douglas
BAAQMD
375 Beale Street, Suite 600
San Francisco, CA 94105

RE: Proposed Regulation 11, Rule 18 and Regulation 12, Rule 16

Dear Mr. Douglas,

We appreciate the opportunity to submit these comments on behalf of the California Council for Environmental and Economic Balance. CCEEB is a non-profit and non-partisan coalition of business, labor, and public leaders that advances strategies for a sound economy and a healthy environment. We have many members that operate facilities in the air basin and are subject to proposed Regulation 11, Rule 18 (Reg. 11-18). CCEEB has been active in this rulemaking since July, and we thank staff for expanding its outreach to stakeholders over the past couple of months. Reg. 11-18 is a significant new rule and will likely have significant compliance costs for many businesses. We offer a number of initial questions and suggestions on Reg. 11-18 below, and look forward to working with staff to further refine this rule.

In terms of proposed Regulation 12, Rule 16 (Reg. 12-16), CCEEB must repeat our concerns as stated in our letter to you from September 9, 2016, and we include by reference those comments here. Additionally, CCEEB agrees with analysis in the draft staff report that calls into question the District's authority to implement Reg. 12-16. We include in our comments here more details about our reasoning for this position.

Comments on Regulation 11, Rule 18

Clarify Authority in Staff Report

In meetings with stakeholders, staff has explained that Reg. 11-18 is not based on District authority under AB 2588, the Air Toxics "Hot Spots" Information and Assessment Act (1987), and as such, it differs from the statewide program codified in Sections 44300-44394 of the California Health and Safety Code. CCEEB asks that staff clarify its authority for Reg. 11-18 and identify the relevant state and federal codes, particularly those sections related to establishing Best Available Retrofit Control Technology for Toxics (TBARCT). We note that other air districts in California continue to regulate existing facilities under AB 2588,

based on regularly updated emission inventories and health risk assessments (HRAs), in addition to review of new and modified sources under New Source Review.[1]

Provide Opportunity for Facilities to Conduct HRAs and Enhance Review Process

The October 14, 2016 Initial Study for Reg. 11-18 indicates the District will use independent contractors to conduct HRAs due to a lack of staff resources necessary to carry out this work. CCEEB recommends that Reg. 11-18 be revised to provide an opportunity for facility operators to voluntarily conduct and submit HRAs for the purposes of complying with the rule. Any facility-submitted HRA would follow District HRA guidelines and be subject to review and approval by District staff. The advantages of facility-submitted HRAs are efficiency and accuracy; facility operators will have detailed knowledge of and data on equipment, operations, emissions monitoring and modeling, inventory reporting, emission factors, proximity of workers and nearby residents ("receptors"), and local meteorology. Such facility-specific information would help facilitate the efficient and accurate preparation of HRAs. Should staff find it necessary to reject a submitted HRA, the District could require the facility to resubmit the HRA with amendments.

Allowing facilities to conduct and submit HRAs is a standard practice. For example, Regulation 2-5-401 requires a permit applicant to submit an HRA, following the District's HRA guidelines. Similarly, under AB 2588, the state Legislature requires facilities to submit HRAs (H.&S.C. Section 44360(b)(1)). CCEEB believes that facility-submitted HRAs would in no way diminish the stringency or transparency of Reg. 11-18; rather, it would increase transparency, streamline the review process, and focus staff resources on reviewing HRAs or preparing HRAs for only those that choose to have the District do this analysis. Additionally, the BAAQMD could submit HRAs to the Office of Environmental Health Hazard Assessment (OEHHA) for review and comment, as is done under AB 2588 and H.&S.C. Section 44361.

Need Process to Reconcile Potential Disputes over Risk Reduction Plan Disapprovals

CCEEB wishes to work with staff to develop a dispute resolution process in cases when a facility needs to challenge or question a final action to disapprove a risk reduction plan. While we hope such instances would be rare in occurrence, CCEEB believes a dispute resolution mechanism is warranted given the unclear process to be used to make TBARCT determinations and the current lack of guidance available on what would be considered TBARCT for new and modified sources.

Explain Interaction of New Source Review Rules with Reg. 11-18

The District's New Source Review rules (Regs. 2-1, 2-2 and 2-5) require new or modified sources to apply for a project permit. Under Regulation 2, Rule 5 (Reg. 2-5), any source

[1] From the October 2016 Draft Staff Report (page 28): "The Air District adopted its Air Toxics New Source Review program at about the same time it started its activities to assess existing facilities under the Hot Spots Act. As a result, sources that existed in the late 1980's have been reviewed under the Hot Sports program and sources that were constructed or modified after the late 1980s have been reviewed under the Toxics NSR program."

with an estimated risk greater than 1-in-a-million and/or a chronic hazard index greater than 2.0 would be required to apply Best Available Control Technology for Toxics (TBACT).

Proposed Reg. 11-18 would require an existing facility to reduce risks below 10-in-a-million. To do so, a facility would likely need to apply for an NSR permit for a new or modified source, which in turn could trigger TBACT requirements. If a facility could not reduce below the Reg. 11-18 risk action levels, it would be required to install Best Available Retrofit Control Technology for Toxics (TBARCT) on all "significant sources," which, by definition, would also trigger TBACT under Reg. 2-5. We ask staff to explain how this process would work in practice, and to clarify whether a significant source would need to apply TBARCT, TBACT, or both.

Establish a Technical Working Group and Define TBARCT as Part of Rulemaking

CCEEB reiterates our request that the District establish a technical working group to help advise staff in developing a process to make TBARCT determinations and in defining TBARCT for specific sources. We believe such an effort is being planned, and thank staff for considering our past comments.

We also repeat our request that TBARCT be defined as part of the Reg. 11-18 rulemaking, as we see this as necessary for preparing the socioeconomic analysis as required by state H.&S.C. Section 40728.5, including analyses to determine the range of probable costs, the impact of the rule on regional employment and the economy, the availability of cost-effective alternatives, and the emission or risk reduction potential of the rule. Moreover, understanding what would be considered TBARCT helps inform regulated businesses as to what would be required under Reg. 11-18 and what compliance options would available to them, which in turn could prompt useful public participation and comments on the draft rule. This is especially important given that Reg. 11-18 is remarkable both in terms of the total number of facilities affected as well as the many different facility types that will become subject to the rule.

In addition, we note that the current unavailability of TBARCT guidelines discourages early actions to reduce risk. Facilities that take early action and install risk reduction technologies voluntarily in attempt to decrease risk below the notification thresholds could be burdened with additional cost if these reductions turn out later not to meet the TBARCT standard.

More generally, CCEEB believes that the District should allow adequate time to develop sound, scientifically based rules, and to conduct a fair and transparent public participation process. Conversely, we are concerned if rules are rushed to hearings before staff has fully developed implementation details and compliance pathways.

Modify Reference to MACT in Definition of TBARCT

Reg. 11-18 defines TBARCT as the most stringent of certain retrofit emission controls, including, "[t]he most stringent emission control for a source type or category specified as

MACT by U.S. EPA…" Reg. 11-18-204.4. "MACT" is simply defined as "[a]n emission standard promulgated by U.S. EPA pursuant to Section 112(d) of the Clean Air Act." [Reg. 11-18-212.] However, for many source categories that could be subject to Reg. 11-18, EPA has promulgated both new source and existing source MACT standards under Section 112(d) of the Clean Air Act. Clearly, the District's intent is that TBARCT can be no less stringent than an existing source MACT standard. However, TBARCT cannot and should not be defined in reference to new source MACT standards, which may be unachievable, infeasible, or prohibitively costly for existing sources subject to TBACT. CCEEB would ask that the District revise the definition to clarify that, for existing sources that have not previously been subject to the new source MACT standard promulgated by EPA for that source type or category, TBARCT shall be no less stringent than any relevant existing source MACT standard.

Provide Public Information Templates as Part of Staff Report

The draft staff report indicates that the District will provide facility information to the public via email notices, social media, the District's website, opt-in mailings, and community meetings. However, the draft report does not describe how these communications will be managed or what content will be provided. Risk communication is an important but too often contentious subject; context is key.

Facilities have a direct and significant interest in how their operations are viewed by their neighbors, and many have ongoing community outreach and public relations efforts. The District should be sensitive to this dynamic, and avoid risk communication that is confusing or unduly politicizes toxic risks. It is also critical that the District put risks from air toxics into context so that it is readily and clearly understood.

CCEEB requests that staff provide templates for how toxic risks from facilities will be described and communicated, such as through an appendix to the staff report. We also request that staff include in this simple background information, including but not limited to the degree to which risks from air toxics have been steadily decreasing in the air basin, the proportionate contribution of different source types (mobile, stationary, and area) to ambient risks, as well as an explanation of the difference between background or ambient risk and risk from a single, local source.

Finally, CCEEB recommends that facility information be limited to only those facilities above risk action levels, and that only final, District-approved documents be released. This helps interested public focus on facilities with the highest risks, rather than having to sort through documents for a 1000+ facilities, many of which may not pose real public health concerns. At a minimum, we ask staff to remove reference to draft HRAs since the preparation, review, and approval of HRAs follow strict, objective scientific guidelines and are not meant to be changeable or subjective based on public comments.

How Would APCO Shorten Risk Reduction Plan Time Periods?

Reg. 11-18-402.2 states that the APCO may shorten the three-year time period allowed to implement risk reduction plans if (a) the APCO finds that it is "technically feasible and economically practicable," or (b) the facility is in a CARE designated area and exceeds a significant risk threshold (i.e., either a cancer risk threshold of 1-in-a-million, a chronic HI of 0.20, or a acute HI of 0.20). CCEEB asks staff to clarify how the APCO would determine what is "technically feasible and economically practicable," and how or on what basis the APCO would determine the appropriate time period.

For facilities in CARE communities, how short would the time period be, and would it be the same for all facilities in those areas? Would the APCO use discretion, shortening the time period for some facilities but not others, or in some communities but not others, and if so, what criteria would these decisions be based on? What if a facility in a CARE community could not reduce risks in the shortened time period? Would an extension be needed? We note that CARE designations closely follow transportation corridors, congestion, and emissions of air toxics and other pollutants from mobile sources, particularly diesel particulate matter. In many cases, the incremental contribution of a stationary source facility could be de minimis.

What Would Prompt an Updated Risk Reduction Plan?

Reg. 11-18-405 gives the APCO the authority to require the facility to update its risk reduction plan "if information becomes available…regarding the health risks posed by a facility or emissions reduction technologies that may be used by a facility that would significantly impact health risks…" We ask staff to clarify this section in the rule and in the staff report. Specifically, we ask staff to explain what new information it is anticipating in regards to health risks. For example, is the concern that actual health risks are above what was estimated in the emissions inventory and HRA? And if so, what level of an increase would prompt the APCO to act? What happens if the increase was due to an increase in production but still within permit limits and the facility was on track to meet all Reg. 11-18 requirements?

In terms of "emission reduction technologies," does this mean that the APCO could force a facility to change its plan whenever a new control technology or risk reduction measure becomes available? What if risk reduction projects were already underway? What time period would be given to the facility, or would the clock restart after the updated plan was approved? Would the District determine economic impacts based just on the updated plan, or would it calculate total costs for the initial approved plan plus added costs for updating the plan? Could the APCO apply Reg. 11-18-405 multiple times, so that a facility was caught continuously updating a plan (and investing in risk reduction projects) whenever new technologies became available? What if the facility demonstrates that it will get below the risk reduction threshold in the time provided – could it then dispute the requirement to update its plan or seek a variance from the Hearing Board? CCEEB has serious concerns with this language as written and would like to better understand what is intended.

CEQA Analysis Should Include the Original 25-in-a-million Alternative

In July, staff presented a proposal for Board approval that set a first phase of Reg. 11-18 with a risk reduction threshold of 25-in-a-million. While we recognize that staff has revised its proposal and is no longer recommending the phased approach in the draft rule, we ask again that the 25-in-a-million option be included in the CEQA analysis as an alternative and that it be used to compare compliance costs and incremental health benefits, and to establish reasonable cost ranges in the socioeconomic report.

Comments on Regulation 12, Rule 16

District Staff Are Correct that Reg. 12-16 Would Be Inconsistent with District's Authority

The draft staff report provides staff's analysis that the fixed numeric caps on refinery emissions proposed by draft Regulation 12, Rule 16 are inconsistent with the requirements of the federal Clean Air Act (CAA) and California law. [*Draft Staff Report, Draft Regulation 12, Rule 16: Petroleum Refining Facility-Wide Emissions Limits and Draft Regulation 11, Rule 18: Reduction of Risks from Air Toxic Emissions at Existing Facilities*, Oct. 2016 ("draft staff report"), pages 17-20.]

In particular, staff notes that both the CAA and California law require permitting programs that allow for criteria pollutant emissions to increase at one location so long as those emissions are offset by reductions elsewhere. *Id*. at 17. CCEEB agrees with staff's analysis of this inconsistency. Additionally, by essentially imposing a construction moratorium upon refinery expansion when none is authorized or warranted under the CAA, Reg. 12-16 would stand as an obstacle to the accomplishment and execution of the full purposes of the objectives of Congress in enacting the CAA and designing a program for controlling emissions from new and modified sources. *See Hines v. Davidowitz*, 312 U.S. 52, 67 (1941).

As the draft staff report indicates, proposed Reg. 12-16 would address pollutants of primarily regional or global concern by limiting those pollutants from one particular sector, even though the concentrations of criteria pollutants are roughly the same in refinery communities as in other urbanized areas of the region. *See* draft staff report at page 18. California law imposes several requirements for new rules, including that the air district demonstrate the rule's "necessity" (Cal. Health & Saf. Code § 40727(b)(1)). The District would be challenged to demonstrate the necessity of a rule targeting an individual sector and its emissions, when the impacts from that sector are, as staff acknowledges, indistinguishable on a regional scale from those of other sectors. In light of the regional and global impacts associated with the emissions targeted by Reg. 12-16, CCEEB also agrees that the theoretical co-benefits associated with regulating criteria and greenhouse gas (GHG) emissions, so as to limit localized refinery communities' exposure to pollution (*see* draft staff report at page 20), cannot provide legal justification for such a rule.

CCEEB also agrees with staff that the Reg. 12-16 caps on GHG emissions would fail to satisfy state law because facility-specific caps are fundamentally inconsistent with the Air Resources Board Cap-and-Trade Program. *See* draft staff report at page 19. The State's Cap-and-Trade Program has been carefully designed to achieve the maximum technologically feasible and cost-effective reductions in GHG emissions through use of market forces, while also minimizing emissions leakage. *See* Cal. Health & Saf. Code §§ 38562(a), (b)(8). Placing caps on facilities in the Bay Area would frustrate the efficiency goals of the Cap-and-Trade Program, as recognized by District staff. *See* draft staff report at page 19 ("There is a fundamental inconsistency between a 'cap and trade' program that by its nature contemplates changeable caps versus one that fixes caps at one level, in that the latter has the potential to frustrate the efficiency goals of the former."). It would also potentially result in emissions leakage to sources elsewhere in the state or out-of-state, thus achieving no net reduction in GHG emissions. Even assuming the District were legislatively delegated the authority to promulgate such a rule, doing so would run afoul of the requirement that district rules must be consistent and in harmony with existing State law (*see id*. § 40727(b)(4)), and not be arbitrary, capricious, or without a reasonable or rational basis. *See S. Cal. Gas Co. v. S. Coast Air Quality Mgmt. Dist*., 200 Cal. App. 4th 251, 267-68 (2011).

CCEEB thanks staff for considering our comments on proposed Regulations 11-18 and 12-16 and we look forward to seeing your response. We also appreciate recent staff efforts to notify and engage potentially affected industry on Reg. 11-18, and we continue to support a full public participation process for rule development. CCEEB is committed to working with the staff and the Board of the District in refining Reg. 11-18 and addressing the questions and concerns we outline in this letter. Please contact me or Janet Whittick of CCEEB at any time should you have questions or wish to discuss our comments further. I can be reached at (415) 512-7890 ext. 115 or billq@cceeb.org; Ms. Whittick is available at ext. 111 or janetw@cceeb.org.

Sincerely,



Bill Quinn
CCEEB Chief Operating Officer and Bay Area Partnership Project Manager

cc: Mr. Jaime Williams, BAAQMD
Mr. Eric Stevenson, BAAQMD
Mr. Gerald D. Secundy, BAAQMD
Ms. Janet Whittick, CCEEB

Phillips 66
San Francisco Refinery
1380 San Pablo Avenue
Rodeo, CA 94572
phone 510.799.4411
fax 510.245.4476

December 2, 2016

ESDR-364-16
05-C-03-G

VIA Email

Mr. Victor Douglas (VDouglas@baaqmd.gov)
Manager, Rule Development Section
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

RE: Phillips 66 Company: Comments on BAAQMD's Notice of Preparation for DEIR Draft Regulation 12, Rule 16 and Draft Regulation 11, Rule 18

Mr. Douglas:

Phillips 66 Company (Phillips 66) is providing comments in this letter related to the Notice of Preparation (NOP) for two new Bay Area Air Quality Management District (District) rules currently being developed – Regulation 12, Rule 16: Petroleum Refining Facility-Wide Emission Limits (Reg. 12-16) and Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Reg. 11-18).

In addition, Phillips 66 supports and adopts the comments of the Western States Petroleum Association (WSPA) and the California Council for Environmental and Economic Balance (CCEEB) on the above-referenced Regulations submitted on December 2, 2016.

Due to the complicated nature of the proposed Regulations referenced above, Phillips 66 requests that additional time be allowed to provide comments and work with District staff.

Regulation 12, Rule 16

The California Environmental Quality Act ("CEQA") requires that the District's Environmental Impact Report for the project consider the entire project. As you are aware, the CEQA Guidelines define a "project" to be the whole of an action, which in this case includes all regulations associated with Board Resolution 2014-07 targeting emissions reductions from refineries. .

Proposed Regulation 12, Rule 16 will likely curtail refinery production below levels already achievable in practice and currently permitted, which infringes on Phillips 66's vested rights. The proposed rule severely inhibits (or may altogether prevent) the ability of Bay Area refineries to build new equipment or process units that may be required to meet future Federal and/or California Air Resource Board (CARB) fuel standards or to respond to increases in demand. This may make one or more refineries obsolete and potentially force their closure.

The proposed rule is not necessary, and, in fact, District Staff itself recognizes the difficulty that the Board will have in making the finding of "necessity" required by California Health and Safety Code section 40727(a): "[a]t the very least, it would be difficult to legally justify the necessity for the [proposed rule]…" (*BAAQMD Draft Staff Report, Draft Regulation 12, Rule 16: Petroleum Refining Facility-Wide Emissions Limits* (October 2016), p. 17). Phillips 66 also believes that the Board will not be able to make the required finding of "consistency," which is a view shared by District Staff in the *BAAQMD Draft Staff Report* ("Staff is concerned that a fixed numeric cap on refinery emissions may not be consistent with requirements of the Federal Clean Air Act (CAA) and the California Health and Safety Code (H&SC)"). Further, the proposed rule is arbitrary and capricious in that it imposes a specific regulatory regime on one particular sector of the regulated community – *i.e.*, refining – without any support whatsoever that such disparate treatment is either necessary or appropriate. Again, this view is echoed by District Staff at pages 17 and 18 of the *BAAQMD Draft Staff Report* ("Staff is also concerned that there is no support for imposing a particular regulatory approach on one sector of the regulated community without factual support for such selective treatment").

Adoption of the proposed Regulation 12, Rule 16 would be beyond the Board's legal authority. District Staff has arrived at this same conclusion (*BAAQMD Draft Staff Report*, pages 3, 19, and 20). If the Board adopted this proposed rule, it would be a transparent attempt to utilize legislative authority that the Board does not rightfully have, which will have been hijacked by the Board solely to impose the Board's own purported policy choices on a discreet sector of the economy and regulated community.

The District needs to evaluate the environmental, socioeconomic and other factors associated with restricting refinery operations. The potential to affect fuel supply in the Bay Area must be thoroughly evaluated. For instance, the District must evaluate the GHG impacts of importing gasoline from outside the State or from foreign countries should a fuel shortage be caused or exacerbated by proposed Reg 12-16.

Regulation 11, Rule 18

The District must provide a thorough scientific justification for why a risk threshold of 10 in a million (10/M) was arbitrarily chosen. The District's own Community Air Risk Evaluation (CARE) study estimated that average background air quality in the Bay Area is roughly 50 times greater than the proposed risk threshold of 10/M. The District must determine if the Rule is implemented whether or not all reducing risk from all facilities to below 10/M would even have a significant effect on the overall risk from background air quality.

District staff had previously reported a 25/M risk threshold to the Board, but this threshold has been removed and replaced with the 10/M threshold without any explanation. Phillips 66 requests that District staff provide an analysis of the number of facilities with a risk greater than 25/M compared to the estimate of over 1,100 facilities with a risk of greater than 10/M reported in the *BAAQMD Draft Staff Report*. This information must be presented as part of the project alternatives and the EIR and staff report must analyze any additional benefits and costs associated with reducing the risk threshold from 25/M to 10/M. The District must show that these thresholds are necessary and cost effective.

The *BAAQMD Draft Staff Report* explains that the District will use the annual toxic emissions inventories reported to the District to conduct site-specific HRAs for sources that emit toxic compounds. Section 11-18-403.3, in turn, requires the Risk Reduction Plan to include a source characterization that includes "summary data from the applicable APCO-approved air toxic emission inventory." However,

proposed Rule 11-18 provides no further clarity with respect to the emissions inventory component. To help ensure consistency in emission inventory and health risk assessment methods across facilities, Phillips 66 requests that Rule 11-18 clarify that the emission inventory is based on actual emissions.

The BAAQMD should provide guidance and a more thorough review of proposed Regulation 11, Rule 18 (Reg 11-18) in relation to the changes proposed to Regulation 2-5 and the recent changes to Regulation 2 Rules 1 and 2 (Regs 2-1& 2). These regulations will all potentially have effects on the other regulations and should be thoroughly reviewed to determine if there are any inconsistencies or other potential issues.

- For instance, potential risk reductions required by Reg 11-18 may require permits and review via Regs 2-1 & 2 and Reg 2-5. What are the effects if Reg 2-5 required TBACT on a project being conducted for Reg 11-18 compliance, when currently Reg 11-18 only requires TBARCT?
- What if a project is required by proposed Reg 11-18 risk reduction requirements but is not issued a permit pursuant to proposed Reg 2-5 because the potential to emit only for the project is included in the Reg 2-5 analysis? Is the facility then out of compliance with Reg 11-18?

TBARCT should be better defined as part of the Reg 11-18 rulemaking. Defining TBARCT is necessary to prepare the socioeconomic analysis and determine the range of probable costs, define the impact of the rule on regional employment and economy, determine the availability of cost-effective alternatives and quantify the emission or risk reduction potential of the rule. Moreover, this would help inform regulated businesses about what would be required and what compliance options are available, which in turn could prompt useful public participation and comments on the draft rule. The current definition of TBARCT in 11-18-204 does not adequately consider cost-effectiveness, as it requires installation of the most stringent retrofit emissions controls available.

As Sections 11-18-301 and 11-18-403.6 are currently written, they could be interpreted to mean that all sources of risk anywhere in the facility must be below the significant risk thresholds or have TBARCT. Based on conversations with District staff, Phillips 66 believes the intent of the Reg was to control only those sources of risk that affect the receptors with impacts above risk action levels in Section 11-18-214, not all sources at the facility. Accordingly, Philips 66 suggests the following edits to clarify the proposed text in Sections 11-18-301.2 and 11-18-403.6.1:

- 11-18-301.2 "Demonstrate to the satisfaction of the APCO that all <u>facility</u> sources of risk ~~at the facility~~ <u>that impact any receptor where the health risk from the facility exceeds one or more of the risk action levels in Section 11-18-214</u> either:
  - 2.1 Are controlled with current TBARCT, or
  - 2.2 Do not pose a health risk that equals or exceeds of one or more of the significant risk thresholds set forth in Section 11-18-217."

- 11-18-403.6.1 "A demonstration that all <u>facility</u> sources of risk ~~at the facility~~ <u>that impact any receptor where the health risk from the facility exceeds one or more of the risk action levels in Section 11-18-214</u> are either controlled with TBARCT, or do not pose a health risk in excess of the significant risk threshold, or"

Lastly, the District's choice of facility prioritization for implementation of the proposed Rule appears arbitrary. Multiple times in the *BAAQMD Draft Staff Report*, CARE communities are noted as the areas with the highest risk; however, the District did not consider the CARE communities when determining the prioritization. Further, diesel PM is the largest contributor to Bay Area risk as illustrated in Figure 5 of the *BAAQMD Draft Staff Report*, however, the primary stationary source of diesel PM emissions,

diesel engines, are not proposed to be addressed by the rule until the third implementation phase, and reductions from these sources won't be implemented until 2024 at the earliest. The District should prioritize implementation of facilities that are located in CARE communities because they are the areas with the highest overall risk.

If you have any questions regarding these comments, please contact me at (510) 245-5825.

Sincerely,



Don Bristol
Environmental Superintendent

Attachment

cc: Eric Stevenson, BAAQMD (via e-mail: EStevenson@baaqmd.gov)
Greg Nudd, BAAQMD (via e-mail: GNudd@baaqmd.gov)

Western States Petroleum Association
Credible Solutions • Responsive Service • Since 1907

Catherine Reheis-Boyd
President

December 4, 2016

Mr. Victor Douglas via email (vdouglas@baaqmd.gov)
Principal Air Quality Specialist
Bay Area Air Quality Management District (BAAQMD)
939 Ellis Street
San Francisco, CA 94109

Re: WSPA Comments on Draft Proposed Rules for Regulation 11, Rule 18 and Regulation 12, Rule 16

Dear Mr. Douglas:

The Western States Petroleum Association (WSPA) is a non-profit trade association representing twenty-six companies that explore for, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy supplies in California, Arizona, Nevada, Oregon, and Washington. Our members in the Bay Area have operations and facilities regulated by the Bay Area Air Quality Management District (District).

WSPA has significant concerns with regard to the District's proposed Regulation 11, Rule 18 (Rule 11-18) and Regulation 12, Rule 16 (Rule 12-16), as described more fully in Attachments A and B. In addition, it is unclear whether the District intends to develop and propose both draft Rules to the Board for consideration, such that both Rules could presumably be adopted by the District, or whether the District intends to propose Rules 11-18 and Rules 12-16 as alternative suggestions for reducing emissions from petroleum refineries, such that only one of the two Rules would be adopted. To the extent that both rules may be adopted by the Board, the District needs to assess the impacts, feasibility, and costs of complying with both sets of requirements before proposing the draft Rules to the Board for adoption. In addition, WSPA requests that more time be allowed to provide comments on these proposals due to their complex nature and wide scope.

WSPA appreciates the BAAQMD's consideration of our comments and we look forward to your responses. If you have any questions, please contact me at this office, or Bob Brown of my staff at (925) 708-8679 or email bbrown@wspa.org.

Sincerely,



Attachments:

Attachment A: WSPA Comments on Proposed Regulation 11, Rule 18
Attachment B: WSPA Comments on Proposed Regulation 12, Rule 16

Attachment A
WSPA Comments on Proposed Regulation 11, Rule 18

CALIFORNIA HEALTH & SAFETY CODE REQUIREMENTS

The California Health & Safety Code requires the District to make six statutory findings before amending a rule: necessity; authority; clarity; consistency; nonduplication; and reference Cal. Health & Safety Code § 40727. As Rule 11-18 is currently drafted and structured, the District will not be able to meet these statutory requirements, particularly with respect to the elements of necessity, consistency, and clarity.

The Stringency of Draft Rule 11-18 is Not Necessary

Draft Rule 11-18 will require all facilities, including non-refinery entities, with a calculated risk level of 10 per million (10/M) to develop a Risk Reduction Plan to implement controls that will reduce the facility's risk level. The stated purpose of draft Rule 11-18 is to "ensure that facilities that emit toxic air contaminants do not pose an unacceptable health risk to nearby residents, workers, or students." § 11-18-101. However, the District has not explained why a risk of 10/M is the appropriate threshold for acceptable versus unacceptable risk. The District recognizes that Rule 11-18 is "more stringent than most" other air programs being implemented in California to address toxic emissions from existing facilities, but fails to explain the basis for regulating so much more stringently.

The District must provide a more reasoned and scientific explanation for its proposal to decrease the risk level of 10/M from the current risk level of 100/M for existing facilities. While Cal. Health & Safety Code §§ 39002 and 39013 provide the District with authority to control air pollution from stationary sources, the District must nevertheless balance that authority with the necessity of a rule. The District's Staff Report states that the risk action levels in § 11-18-214, which are based on the OEHHA's 2015 Health Risk Guidelines, "reflect the most health protective levels achievable and correspond to the health risk levels that the Air District uses for the existing 'Hot Spots' program." At the outset, the OEHHA itself has identified the risk levels proposed in the 2015 Health Risk Assessments Guidelines as conservatively *high* estimates of risk (because they take the most sensitive populations into consideration).[1]

More to the point, this reasoning does not explain why such conservative risk thresholds are necessary in light of the Bay Area's air quality, which the District itself has acknowledged has improved dramatically. As the Staff Report notes, over the last few decades TAC emissions from stationary sources in the Bay Area have decreased by 87%, and the average Bay Area risk from exposure to TACs has been reduced by 83%. Staff Report, at 25-26. Furthermore, these figures do not account for the additional reductions that will occur as WSPA's members implement the additional controls imposed over the past year through the District's Refinery Strategy, which the District has calculated will further reduce refinery emissions by 15%.

The District proposes to calculate a facility's health risk in accordance with OEHHA's 2015 Health Risk Assessment (HRA) Guidelines, which lower the risk screen trigger levels for carcinogenic TACs as compared to OEHHA's prior guidelines, and thereby result in higher risk calculations for the same level

[1] OEHHA's Guidance Manual for Preparation of HRAs identifies that "...there is a great deal of uncertainty associated with the process of risk assessment....The assumptions used in these guidelines are designed to err on the side of health protection in order to avoid underestimation of risk to the public....Risk estimates generated by an HRA should not be interpreted as the expected rates of disease in the exposed population but rather as estimate of potential for disease, based on current knowledge and a number of assumptions...."

of TAC emissions from regulated sources. At the same time, as discussed above, actual health risks associated with TAC emissions are lower than they have ever been within the District. Staff Report, at 25-26. This significant progress calls for a balanced approach to regulation. Indeed, other air districts with worse air quality (e.g., more criteria pollutants in non-attainment), including the South Coast and San Joaquin Valley Air Districts, have determined that a higher risk threshold is protective of human health given the recent changes in the OEHHA guidelines. The District should avoid inciting unnecessary confusion and fear among the public based on dramatically overstated risks or require installation of unnecessary controls for operations that do not pose actual significant risks to the public,, or if the added controls do not make a perceivable improvement in the overall risk of the area around the source. Analysis should also be completed on the effects of all the regulated facilities dropping to a risk less than <10/M to determine if these estimated reductions at stationary sources make any perceivable difference to the receptors.

WSPA believes that it is especially appropriate to reconsider the risk threshold in § 11-18-214.1, because, unlike the hazard indices which are based upon conservative estimates of the level of air pollution concentrations that might cause a health effect, the risk limit does not have a scientific basis. Past risk thresholds (including the District's existing 100/M threshold under AB2588) have been based on what regulators believed was possible for facilities to achieve. Along the same lines, the District claims that the 10/M level was chosen because it reflects "the most health protective levels achievable" (Staff Report page 30). However, the Staff Report does not provide any data or analysis to support this claim. Rather, the District here seems to simply assume that a 10/M will be "achievable" by existing facilities.

The District assumes too much. The achievability of reducing an existing facility's TAC emissions to below the 10/M risk level will depend on several factors, such as the District's definition of "source," its emission calculation methods, its dispersion models, its risk calculation models, and changes in acute and chronic reference exposure levels. If the District chooses to adopt hazard indices and risk thresholds that were derived based on what levels are "achievable," it must provide a thorough assessment documenting that those levels are in fact scientifically, technologically, and economically achievable under the proposed rule as written.

WSPA suggests that the District consider a risk reduction threshold for risk of 25/M. This value was reported to the Board initially on July 20, 2016 and later removed from consideration without any written analysis or justification. The District should further assess the feasibility and cost-effectiveness of a 25/M threshold, along with the incremental costs and benefits of going from 25/M to 10/M.

Draft Rule 11-18 is Not Consistent with the Proposed Amendments to Rule 2-5

WSPA requests revisions to Rule 11-18 for consistency with the proposed amendments to Regulation 2, Rule 5 (Rule 2-5). Rule 2-5 exempts new and modified internal combustion engines smaller than 50 hp and treats retail gasoline facilities differently; however these same sources either by themselves or in conjunction with other sources at the same facility could trigger the need for a Risk Reduction Plan under Rule 11-18. WSPA suggests that the District consider exempting sources from Rule 11-18 that were already subject to or listed as exempt from Rule 2-5. WSPA also requests revision to Rule 11-18 to allow similar treatment of gasoline dispensing facilities as under the proposed amendments to Rule 2-5.

In addition, draft Rule 11-18 is unlikely to provide any emissions reductions for certain existing source types that are already implementing analogous TBARCT controls for toxics. These source types would include retail gasoline dispensing facilities subject to BAAQMD Rule 8-7, and gasoline bulk terminals subject to BAAQMD Rules 8-5, 8-18, and 8-33. WSPA therefore suggests that the District consider exempting any facilities from draft Rule 11-18 that are already subject to requirements that reflect TBARCT.

Draft Rule 11-18 is Not Sufficiently Clear

Several of the provisions of proposed Rule 11-18 are not sufficiently clear to be understood, as required by Cal. Health & Safety Code § 40727(a) and (b)(3).

Applicability. The applicability of draft Rule 11-18 depends entirely on the District's calculation of a facility's health risk. With the exception of the requirement in § 11-18-401 for facilities to submit "any information necessary to complete an HRA of the facility" at the District's request, the draft rule does not describe the procedures, or limits, to the District's determination of applicability. The Staff Report explains that the District will use emissions inventory data to screen for facilities with a priority score of ten or greater or a non-cancer priority score of one or greater, and then conduct health risk assessments (HRAs) for those facilities in accordance with the most recent versions of OEHHA's HRA Guidelines, CARB AB2588, and the CARB/CAPCOA Risk Management Guidelines. In addition, the Staff Report suggests that facilities will be consulted to validate the HRA model and site-specific factors. None of this is apparent from the language of the draft rule. WSPA therefore requests that the District incorporate provisions in proposed Rule 11-18 that address the District's responsibilities and procedures for determining rule applicability. This would include clarifying that (i) the HRAs to be prepared by the District will be done consistently with the OEHHA 2015 Health Risk Assessment Guidelines, and (ii) facilities will be provided with an opportunity to review and comment on both the inputs to and results of HRAs prior to being required to submit Risk Reduction Plans. WSPA also requests that data in Table 2-5-1 of Rule 2-5 be referenced in Rule 11-18.

In addition, WSPA requests that the draft rule incorporate an HRA review process that provides sufficient time for source testing and ambient air testing, and that a Hearing Board appeal process be added to the rule's provisions, much like with permit determinations.

Absent input from facilities, the District may incorrectly characterize facility emissions and/or health risk, which could lead to the District requiring facilities to install control equipment on sources that testing may show do not pose a health risk.

Cargo Carrier Emissions. The District should clarify that emissions from cargo carriers (e.g., ships and trains) are excluded from draft Rule 11-18. As discussed in prior WSPA comments on the District's Refinery Strategy rules, most cargo carriers are owned and operated by other companies. Attempting to require facilities to incorporate emissions from cargo carriers into nearby refinery emissions inventories will likely produce inaccurate data. Furthermore, as currently drafted, § 11-18-204 specifically exempts cargo carriers from TBARCT requirements. As a result, including cargo carrier emissions in the emissions inventories of adjacent facilities may potentially trigger HRA and TBARCT requirements for the adjacent facility. and even though those sources themselves are in fact exempt from the control requirements. If the District is concerned about diesel particulate emissions from cargo carriers, please take into consideration that CARB is in the process of writing an ATCM that will reduce diesel particulate matter from cargo carriers.

Toxic Emissions Inventories. The Staff Report explains that the District will use the annual toxic emissions inventories reported to the District to conduct site-specific HRAs for sources that emit toxic compounds. Section 11-18-403.3, in turn, requires the Risk Reduction Plan to include a source characterization that includes *"summary data from the applicable APCO-approved air toxic emission inventory."* However, proposed Rule 11-18 provides no further clarity with respect to the emissions inventory component. To help ensure consistency in emission inventory and health risk assessment methods across facilities, WSPA requests that Rule 11-18 state explicitly that the HRA will be completed with the most recent available facility reported actual site stationary source emission inventory. WSPA

requests clarification that for refineries, the emission inventories will be done consistently with the District's refinery emission inventory guidelines, and that the same methods will be used across industries where applicable, such as emergency diesel engines.

Risk Action Levels/Risk Reduction Plan. During Rule 11-18 workshops, District Staff indicated that facilities would not be required to install TBARCT on all sources if controls could be installed to reduce health risks below the risk action levels in § 11-18-214. WSPA requests clarification that the Risk Reduction Plan may explain how a facility will reduce risk below the risk action level, rather than install TBARCT on all sources above the significant risk threshold.

Significant Risk Thresholds. The significant risk thresholds in § 11-18-217 are far below the risk action levels in § 11-18-214. As a result, it is likely that a source with risk above the § 11-18-217 thresholds nevertheless may not contribute to risk at a receptor above the § 11-18-214 facility-wide action level. WSPA requests clarification that TBARCT would only be required on sources that contribute risk greater than the thresholds in § 11-18-217 at receptors having risk above the action levels in Section 11-18-214.

WSPA's understanding of the language in §§ 11-18-301.2 and 11-18-403.6.1 is that the District's intent was that "*each permitted source at the facility that contributes to the risk at any receptors where the facility wide risk is above the risk action levels, is either controlled with TBARCT or does not pose a health risk in excess of any of the significant risk thresholds.*" As the draft rule is currently written, however, sources which have risk impacts below the significance thresholds in § 11-18-217 at the receptors with facility-wide risks above the risk action levels would require some type of emission control, even if they do not meet the significant risk thresholds. WSPA requests that the District modify the language of the draft Rule to clarify that TBARCT is not required on a source if the health risk from the source remains below the significant risk thresholds.

Summary Data. WSPA suggests removing from 11-18-403.3.2 the requirement to include summary data for data from the HRA in the Risk Reduction Plan. As the HRA is to be prepared by the District, a facility would need to request the information from the District (the source of the HRA), and then submit the information back to the District in the Plan.

Risk Reduction Plan v. TBARCT. Section 11-18-403.6 has subsections that are confusing and should be clarified. Sections 11-18-403.6.1 and -403.6.2 are linked with an "or" conjunction, however subsections -403.6.2 and -403.6.3 are linked with an "and" conjunction. It is unclear whether TBARCT is required by the due date of the Risk Reduction Plan or by three years from the date of Plan submittal if health risk cannot be reduced below the risk action levels; and if the District intends the former, it is very likely not possible to install TBARCT on all sources by the date of Plan submittal. Also, it is unclear how a facility would *"develop risk reduction measures…to comply by the specified date"* in § 11-18-403.6.3 when a facility demonstrates that compliance is technically infeasible or would result in an unreasonable economic burden. *See* § 11-18- 403.6.2. WSPA requests the District modify these subsections of the Rule to clarify its intent.

Definitions. The definitions in Rule 11-18 reference sources in other rules. If a definition changes in a source rule, it is unclear whether the definition in Rule 11-18 would change automatically. A source rule could potentially change without thorough consideration of effects on Rule 11-18. Thus, WSPA requests that the definitions in Rule 11-18 stand alone and the source citations be deleted from Rule 11-18.

TBARCT. WSPA requests that the District revise the definition of TBARCT to ensure that costs, non-air-quality impacts, and energy requirements are considered. As currently written, the definition of TBARCT outlines four methods by which TBARCT may be determined. One option (§ 204.3) expressly requires the consideration of costs, non-air-quality health and environmental impacts, and energy

requirements. The other three do not. Thus, for example, § 204.1 would require use of the most effective technology that has ever been used successfully on that type of equipment, even if site-specific considerations make that technology economically infeasible, and even if the technology would have potentially damaging non-air impacts in an ecologically sensitive area. The District should revise the definition of TBARCT to ensure that all appropriate factors are considered in making the determination.

Section 11-18-204.4 should also be revised to clarify that the District is referring to the controls identified in a MACT standard or an ATCM are those for existing sources, not new sources. EPA's MACT standards for new and existing sources are based on entirely different data sets and impose different levels of control; the fact that EPA has concluded that a specific emissions limit is achievable for a new source that is designed to use a specific technology does not prove that an existing source can be retrofitted to achieve that same level of control (indeed, the persistence of less-stringent MACT limits for existing sources demonstrates that such retrofits are typically *not* possible).

At a broader level, the breadth and vagueness of the definition of TBARCT, and the lack of clarity regarding the District's ability to consider costs in this determination, makes it nearly impossible for the District to properly evaluate the costs associated with Rule 11-18, as currently drafted. Further, there is no indication of what the District may consider to be "technically infeasible" or pose an "unreasonable economic burden." Without much more clear explanation of the parameters of the proposed requirements, WSPA and its members will not be provided a reasonable opportunity to submit data and analysis supporting or opposing the economic and technical feasibility of the draft rule.

Exemptions. The proposed regulation is unlikely to provide any emissions reductions for certain existing source types that are already implementing analogous TBARCT controls for toxics. These source types would include retail gasoline dispensing facilities subject to BAAQMD Rule 8-7, gasoline bulk terminals subject to BAAQMD Rules 8-5, 8-18, and 8-33. WSPA therefore suggests that BAAQMD consider exempting any facilities from Reg. 11-18 that are already subject to requirements that reflect TBARCT.

Prioritization. The District's choice of priorities appears arbitrary. For example, the District specifically notes that diesel particulate matter is the largest contributor to risks in the Bay Area, as illustrated in Figure 5. However, diesel engines are not addressed by the rule until the third implementation phase, and reductions from these sources will not be implemented until 2024, at the earliest.

Section 11-18-405. Section 11-18-405 requires that Risk Reduction Plans be updated if "*health risk posed by a facility...would significantly impact health risks to exposed persons.*" It is unclear whether "*significantly impact*" is a subjective term, or whether the District is referring to the "significant risk thresholds" that are 10-20% of the risk action levels in § 11-18-214. The District should revise this language to clarify that the obligation to update the Risk Reduction plan is triggered only if new information (i) causes a facility to exceed the threshold for preparing such a plan for the first time, or (ii) increases the risk associated with the site by more than the significant risk threshold. The District should also consider in its cost-effectiveness calculations the costs to update these plans and implement new emission reduction technologies pursuant to this requirement.

TIMING ISSUES

Draft Rule 11-18 Should Provide Longer Compliance Timeframes

Several of the provisions proposed in Rule 11-18 require compliance with very tight compliance windows that do not appear to be achievable. The Rule 11-18 Staff Report Table 5 also indicates that the compliance plan implementation due dates will depend upon the industry type or prioritization score. WSPA requests the same plan implementation due date for all Bay Area facilities. A large, complex

facility needs more time to plan and install control equipment than a facility that operates one diesel engine. Yet the District plans to require some of the most complex facilities to achieve plan implementation by the year 2019 while a facility that may pose the same health risk to a nearby receptor operating a single diesel engine will not reduce health risk until the year 2027.

Section 11-18-401 requires facilities to submit to the District "*any information necessary to complete an HRA of the facility*" within 30 days of a request. This is an overly ambitious time schedule, given the level of effort needed to obtain the latest emissions information, building dimensions, and other similar information. Facilities may also need to conduct source tests or ambient air sampling to provide accurate data to feed into the HRA. WSPA requests that this timeframe be extended to 180 days. At a minimum, this provision should be amended to allow additional time for extensive requests. Additionally, this requirement is unbound, providing no maximum frequency or criteria for the APCO to request information from a facility to conduct an HRA. This can lead to inequitable or unwarranted regulation of a facility.

Section 11-18-402 sets a deadline to submit a draft Risk Reduction Plan within 180 days of notification from the District that a plan is required. This compliance window does not provide facilities with sufficient time to review the accuracy of the District's HRA, or sufficient time to prepare a Risk Reduction Plan meeting the requirements of § 11-18-403. The time needed to evaluate all potential risk reduction measures for a large, complex facility, including the need to re-run HRAs, analyze impacts, and conduct feasibility analyses for engineering requirements, will require considerably more time than 180 days. WSPA is requesting that this timeframe be extended to three years.

Section 11-18-402 requires implementation of a Risk Reduction Plan "*as soon as feasible*, but by no later than three years" from the date the *draft* Plan was submitted for review. The deadline for implementation should be tied to the date the plan is approved by the District, not the date the draft plan was submitted to the District. Given the extremely tight deadlines imposed by the draft Rule, facilities will need to act quickly to design, order, install, and otherwise implement the required control measures. If the District does not give notice that it disagrees with the facility's Risk Reduction Plan or determination of TBARCT until several months after the Plan is submitted, the facility will likely have already made irreversible financial commitments (*e.g.*, ordering new controls) for equipment that the District has rejected. If regulated facilities are to be able to comply with these requirements effectively and in a timely manner, they require certainty of the requirements that will apply and sufficient time to plan, order, and install equipment. Additionally, multiple process unit shutdowns may be needed to install control devices. Indeed, given the scope of the review and planning required (conducting the necessary engineering studies, evaluating various installation scenarios, obtaining permits, getting CEQA approval, procurement, turnaround planning, construction, start-up optimization, and other requirements), WSPA requests that the three-year timeframe be extended to at least five years from when the Plan is approved, and no earlier than the implementation due date of less complex facilities with only diesel engines.

In addition, the baseline requirement of § 11-18-402 is to implement the Risk Reduction Plan "as soon as feasible" but in no event later than three years from the date of the draft Plan's submittal. However, § 11-18-402.2provides the District with the discretion to "shorten the time period proposed by the facility owner/operator for Plan implementation" to less than three years if the District considers that a shorter timeframe is technically feasible or economically practicable or, alternatively, if the facility impacts a CARE designated area. This provision is unnecessary. Facilities will already be under an obligation to prepare Risk Reduction Plans geared to reducing the facility health risk in as short a timetable as possible, which will require an assessment of the technical and economic feasibility of reducing health risk as quickly as possible. The District will have ample opportunity to discuss questions or suggestions District staff may have with respect to the Plan during the review and comment process. The requirement to implement the Risk Reduction Plan "*as soon as feasible*" renders the provision in § 11-18-402.2.1

allowing the District to require implementation of the Plan "*more quickly*" nonsensical. WSPA suggests that § 11-18-402.2 be removed. Again, WSPA is concerned the Section 402.2 language gives the District unilateral authority to reject the plans of facility project teams in the case of a disagreement.

Assuming § 11-18-402.2 is removed, the definition of "Community Air Risk Evaluation (CARE) Designated Area" in § 11-18-208 should also be removed as the term only applies to § 11-18-402.2.2. If the District chooses to reject WSPA's requests, § 11-18-208 should be revised to be more specific. The first sentence of the definition is ambiguous due to the phrases "*other areas*" and "*may*."

California Environmental Quality Act

The California Environmental Quality Act ("CEQA") requires the District to consider the whole of the action; both direct and indirect environmental impacts from the entire project. Public Resources Code, § 21000 et seq. CEQA is further implemented by the CEQA Guidelines, Title 14, California Code of Regulations, § 15000 *et seq.* Rule 11-18 is being considered for review in an EIR that will also review Rule 12-16, which is part of a suite of regulations identified by the District as the Petroleum Refinery Emissions Reduction Strategy. The combined suite of regulations is part of a larger plan to reduce purported refinery emissions in the Bay Area by at least 20% within just a few years.

CEQA prohibits "segmenting" projects to create the appearance of a lesser degree of impact. The District however consistently limits its analyses to individual rules, excluding consideration of the rules it has recently adopted as part of this "strategy" (Rules 6-5, 8-18, 11-10, 12-15 and 9-14) and the future rules that it is currently developing pursuant to this same strategy. In fact, the District's October 14, 2016 Notice of Preparation does not even mention that Rule 12-16 is part of the suite of regulations that make up the Refinery Project. Rule 11-18 is clearly a component of the Petroleum Refinery Emissions Reduction Strategy, notwithstanding that the rule applies to other stationary sources. The Rule's origin is rooted in the District Board's 2014 resolution to reduce emissions from refineries by 20%, and it is being advanced as an alternative suggestion to draft Rule 12-16, which is squarely directed at refineries. Therefore, the impacts of Rule 11-18 on refineries should be analyzed together with the suite of regulations that make up the Petroleum Refinery Emissions Reduction Strategy. Without a true analysis of the whole project, it is impossible to quantify and understand the magnitude of the impact the adopted and proposed changes will have on the regulated industry.

The District cannot piecemeal the analysis of environmental impacts from the Petroleum Refinery Emissions Reduction project that are clearly derived to work toward the common goal of a 20% reduction target. Furthermore, the District must ensure that its analysis and findings are based upon creditable substantive evidence, that a reasonable range of alternatives are considered, that the project decisions meet the purpose and need, significant impacts are avoided or mitigated and that the whole of the actions is identified and analyzed.

ADMINISTRATIVE COMMENT

Section 11-18-402 refers to "risk action levels set forth in Section 11-18-213." The reference should be to Section 11-18-214, not -213. WSPA would ask the District to review this for amendment.

Attachment B
WSPA Comments on Proposed Regulation 12, Rule 16

As the District is aware, WSPA submitted comments on the District's Project Description for Rule 12-16 on September 9, 2016. The draft Rule language now being workshopped does not address the many issues that WSPA raised in our September comment letter. WSPA continues to have significant concerns with the conceptual goal of draft Rule 12-16 and with the practical implementation of the rule's provisions. WSPA hereby incorporates by reference the various comments it has previously made to the District on the conceptual basis of draft Rule 12-16.

While WSPA has a number of specific concerns with the District's analysis (discussed in more below), WSPA strongly supports the concerns voiced in the Staff Report that the proposed rule conflicts with the District's authority under the federal Clean Air Act ("CAA") and the California Health & Safety Code ("H&SC"), will interfere with the State's cap and trade program for GHGs, is not necessary, and will not provide significant real benefits. Staff Report at 17-20, 38-40.

LEGALITY

WSPA's concerns over the legality of emissions caps have already been transmitted to the District separately. WPSA incorporates by reference the comments it submitted in July 2016 and September 2016.[2]

In general, WSPA agrees with District Staff's assessment that draft Rule 12-16 would not withstand judicial scrutiny. As the District acknowledges in the Staff Report, draft Rule 12-16 is inconsistent with existing federal and state air programs, selectively targets petroleum refineries without a showing of necessity, would not be in harmony with the state cap and trade program for greenhouse gas emissions, arbitrarily limits specific refinery emissions to levels that are not necessary to protect local communities, and is beyond the District's statutory authority.

The Staff Report suggests that the District is continuing to develop draft Rule 12-16 with the goal of proposing the rule to the Board for adoption. It is unclear why draft Rule 12-16 is continuing to be developed when District Staff believe that the rule "would likely be found to be beyond the Air District's authority and/or arbitrary and capricious by a Court." Staff Report, at page 3. The structure of the draft rule and its underlying policy objectives are unquestionably unjustified, for the reasons set forth in WSPA's prior comment letters and the District's own Staff Report. Given the significant concerns District staff and the Bay Area refineries have expressed over the legality of the draft rule's provisions, the District should not continue planning to propose Rule 12-16 to the Board for adoption. To the extent that the District must report to the Board on the development of CBE's idea, District staff should simply prepare a report describing the rulemaking, staff's analysis of the draft language that was developed, staff's conclusion that the rule would be illegal if adopted, and an explanation why the draft Rule is not being proposed to the Board.

[2] Marne S. Sussman (Pillsbury Winthrop Shaw Pittman LLP), letter to Honorable Chair Mar, and Members of the Board of Directors, Bay Area Air Quality Management District, "Re: Legal Issues Pertaining to Refinery Emission Cap Option for Proposed Regulation 12-16", July 19, 2016; Kevin Buchan (WSPA), letter to Mr. Gregory Nudd, "Subject: WSPA Comments on BAAQMD's Draft Project Description for Regulation 12, Rule 16 and Regulation 11, Rule 18," September 9, 2016.

GHG Caps are Ineffective and Counterproductive

Greenhouse gas emissions are a global issue, not a local community-based issue. Local greenhouse gas (GHG) caps for refineries in the Bay Area Air Quality District are likely to simply shift GHG emissions elsewhere. This has been recognized by District staff, the District's Advisory Council, the California Air Resources Board (ARB), and the Intergovernmental Panel on Climate Change (IPCC). WSPA summarized comments by District Staff, the District Advisory Council, ARB and the IPCC previously.[3] The October 2016 Staff Report for Rule 12-16 provides additional support that caps may result in increased GHG emissions from shipping imported fuels to California.[4]

Moreover, Bay Area refineries are very energy efficient. ARB published a summary report in mid-2013 showing that the 5 Bay Area refineries subject to ARB's "*Regulation for Energy Efficiency and Co-Benefits Assessment of Large Industrial Facilities*" have implemented hundreds of projects to reduce GHG emissions. The ARB report states that approximately 78% of the estimated 2.8 million metric tonnes per year of GHG reductions associated with these projects have already been achieved.[5] A third party review by San Francisco State University concluded that the refinery project reports demonstrated "*a thorough effort*."[6] The results of ARB's refinery energy efficiency audits strongly suggest that opportunities for significant energy efficiency gains in this sector are limited at best.
To the extent that the District wants to set caps that curtail fuel production at Bay Area refineries, this will simply result in more fuels being produced at other refineries. For refineries outside the state, there is a very real possibility those refineries may be less energy efficient; this would be counterproductive to the District's objective.

Additionally, the application of the localized GHG caps under the jurisdiction of the BAAQMD would result in severely disadvantaging the local refineries relative to refineries located elsewhere in the event new CARB or EPA fuel standards are enacted that would require new process units. EPA and CARB periodically update the motor fuel specifications to ensure that the cleanest fuels possible are available. The application of a facility GHG Cap at historic levels may lead to the shutdown of one or more of the regional refineries because Reg. 12-16 will not allow any increases in GHG emissions regardless of any net environmental benefit. The EIR for this rule should carefully consider this aspect of the rule and estimate the global GHG emission impacts.

Caps Based on Historical Emissions are Technically Problematic

Not only are the proposed emissions caps in §§ 12-16-301 to -305 duplicative of existing federal and state programs targeted at reducing toxic emissions, they are also technically problematic and could potentially require refineries to cut production altogether or risk non-compliance.

As WSPA has previously described, facilities purchase capital equipment today based on what may happen in the future. The District, and every other air permitting jurisdiction in the United States, issues air permits based on the impacts of a facility's *potential* emissions. In California, refineries pay to offset the *potential* emissions at the time the equipment is permitted. For the District to now propose capping emissions based on actual emissions levels from 2010-2014 raises significant Takings concerns and

[3] *See* WSPA Comment Letter, September 9, 2016.
[4] Draft Regulation 12, Rule 16: Petroleum Refining Facility-Wide Emissions Limits AND Draft Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities, Draft Staff Report, October 2016, p.23.
[5] Energy Efficiency and Co-Benefits Assessment of Large Industrial Sources; Refinery Sector Public Report; California Air Resources Board Stationary Source Division; June 6, 2013: http://www.arb.ca.gov/cc/energyaudits/eeareports/refinery.pdf
[6] Air Resources Board staff presentation, Energy Efficiency and Co-Benefits Assessment Public Reports Workshop, June 30, 2015, slide 30: https://www.arb.ca.gov/cc/energyaudits/meetings/063015/presentation.pdf.

conflicts with these other District regulatory programs (which continue to exist). Further, the proposed emissions caps in §§ 12-16-301 to -305 would be inconsistent with refineries' existing permit limits, which in most cases were specifically designed (and paid for) by the refineries to ensure necessary operational flexibility.

The specific historical emissions baselines chosen are similarly problematic. First, refineries have found that the values in the proposed regulation that are supposedly based in reported emissions do not match the official records of reported emissions. Second, as the District's own Staff Report makes clear, the selected baseline period encompasses a period of artificially low demand, coming out of the last Recession. Staff Report at page 21, Figure 3. As a result, Rule 12-16, as currently drafted, would "lock in" this temporary drop in demand as a permanent, facility-wide cap. At a minimum, the District's economic analysis must evaluate the significant impacts of imposing the cap at such an artificially low level that does not reflect current or anticipated future demand.

The methodology by which this cap is calculated and revised also raises significant concerns. As currently drafted, Rule 12-16 would require ongoing revisions to these caps (each of which would require Board approval) whenever the methods used to calculate emissions changed. Yet the proposed baselines in §§ 12-16-301 to -305 are themselves based on annual emissions calculations from years 2010-2014 that were developed using different emissions calculation methodologies than are being used today. In other words, the current rule is comparing apples and oranges: the District calculated historic actual emissions (the values that the proposed caps are based on) differently than it currently requires actual emissions to be calculated, and differently than it will require the caps be recalculated in the future when the methodologies change once again; yet these changes are never evaluated for consistency against the original methodology that was used to calculate the initial cap. As a result, the caps under which the Refineries will be required to operate will routinely fluctuate based solely on methodology changes, which may not accurately reflect the "real" emissions that the caps purportedly reflect. For most sources, the District's current emissions inventory guidelines (Guidelines) significantly deviate from the methods that the District has used in previous years. The Guidelines require reporting emission sources, including cargo carriers, road dust, and equipment maintenance emissions, which the District has not included in previous emission inventories. The Guidelines specify emission factors that may not have been used in previous emission inventories. Similarly, in the case of California's GHG reporting rule, there have been changes with respect to which sources are reported and how they had to go through a regulatory approval process.

The nature of the Guidelines themselves further exacerbates this concern. The District's current Guidelines are not yet finalized, meaning that WSPA and its members cannot fully and fairly evaluate how the final Guidelines may change the calculation methodologies as compared to the prior reported emissions inventories on which the caps are based. Furthermore, these Guidelines can be changed at any point in the future without a public Board action – and frequently, as the District's own practice has made clear, without involving or informing stakeholders. Thus, the refineries may not have sufficient time to respond or even be informed of changes to the Guidelines that affect compliance with the limits. Board approval of changes to the limits that incorporate changes to the Guidelines may never occur, or may occur at a date too late for refineries to comply with the annual limit.

Similarly, the "*Determination of Compliance Procedure*" in § 12-16-601 refers to an as-yet unwritten part of the District's Manual Of Procedures. If the compliance procedure is not finalized by rule adoption, it may not be possible for the refineries to comply. Sufficient time is needed to implement compliance.

Finally, the January 1, 2018 compliance deadline does not provide enough time for refineries to comply with Rule 12-16. The refinery emissions estimates using the Guidelines may not even be finalized by January 1, 2018 due to the iterative review, corrective action, APCO Action and public inspection process

provided in § 12-15-402. Once the emission calculation methods and estimates are finalized, baseline emissions would need to be updated in order to obtain Board approval of changes to the limits. The emission estimation method must be finalized for a refinery to implement a compliance program. The refineries cannot reasonably plan to comply with Rule 12-16 by January 1, 2018, when the actual emissions limits – or, indeed, even the methodology by which those limits will be determined – may well be unknown as of that date.

California Environmental Quality Act

The California Environmental Quality Act ("CEQA") requires the District to consider the whole of a Project; both direct and indirect environmental impacts from the entire project. Public Resources Code § 21000 *et seq*. CEQA is further implemented by the CEQA Guidelines, Title 14, California Code of Regulations, § 15000 et seq. Rule 12-16 is part of a suite of regulations identified by the District as the Petroleum Refinery Emissions Reduction Strategy. The combined suite of regulations is part of a larger plan to reduce purported refinery emissions in the Bay Area by at least 20% within just a few years.

CEQA prohibits "segmenting" projects to create the appearance of a lesser degree of impact. However, the District consistently limits its analyses to individual rules, excluding consideration of rules it has recently adopted as part of the Petroleum Refinery Emissions Reduction Strategy (Rules 6-5, 8-18, 11-10, 12-15 and 9-14) and the future rules that it is currently developing pursuant to this same strategy. In fact, the District's October 14, 2016 Notice of Preparation does not even mention that Rule 12-16 has been part of the suite of regulations that make up the Refinery Project since the initial inception of that Project. Without a comprehensive analysis of the whole project, it is impossible to quantify and understand the magnitude of the impact the adopted and proposed rules will have on the regulated industry.

The District cannot piecemeal the analysis of environmental impacts from the Petroleum Refinery Emissions Reduction Project that are clearly derived to work toward the common goal of a 20% reduction target. Furthermore, the District must ensure that its analysis and findings are based upon creditable substantive evidence, that a reasonable range of alternatives are considered, that the project decisions meet the purpose and need, significant impacts are avoided or mitigated and that the whole of the actions is identified and analyzed.

APPENDIX B

EMISSION CALCULATONS

This page intentionally left blank.

ICE Replacement - Emission Factors

Off- Road Equipment Type	Numaber	Daily Hours of Use	ROG lbs/hr	CO lbs/hr	NOx lbs/hr	SOx lbs/hr	PM lbs/hr	CO2 eq MT/hr
Forklift	1	2	0.02	0.22	0.19	0	0.01	0.01
Generator	1	4	0.05	0.28	0.41	0	0.22	0.02
Welder	1	4	0.04	0.19	0.21	0	0.02	0.01

ICE Replacement lbs/day = number *hrs/day*emission factor

Off- Road Equipment Type	ROG lbs/day	CO lbs/day	NOx lbs/day	SOx lbs/day	PM10 lbs/day	PM2.5 lbs/day	CO2 eq MT/d
Forklift	0.04	0.44	0.38	0	0.02	0.02	0.02
Generator	0.2	1.12	1.64	0	0.88	0.88	0.08
Welder	0.16	0.76	0.84	0	0.08	0.08	0.04
Sub-total off-road lbs/day	0.4	2.32	2.86	0	0.98	0.98	0.14

On-Road Equipment Type	ROG lbs/day	CO lbs/day	NOx lbs/day	SOx lbs/day	PM10 lbs/day	PM2.5 lbs/day	CO2 eq MM t/d
Construction Worker Light-duty Auto #/day	0.18	0.27	0.02	0.00	0.01	0.00	0.03
Heavy-heavy-duty Truck #/day	0.30	2.15	1.88	0.00	0.03	0.02	0.20
Sub-totalotal #/day	0.48	2.41	1.91	0.00	0.04	0.02	0.23

LD Autos	Avg. Trip Length
# Vehicle Trips	One way
10	11
HHD Truck	HHD Truck Trips/day
2	50

	ROG lbs/day	CO lbs/day	NOx lbs/day	SOx lbs/day	PM10 lbs/day	PM2.5 lbs/day	CO2 eq MM t/d
Sub-total Off-road Construction Equip	0.4	2.32	2.86	0	0.98	0.98	0.14
Sub-total On-road (Worker + HHD Truck)	0.48	2.41	1.91	0.00	0.04	0.02	0.23
Total 1 unit Off-road and On-road #/day	0.88	4.73	4.77	0.00	1.02	1.00	0.37
5 units per day	4.38	23.67	23.85	0.02	5.11	5.01	1.86
10 units per day	8.76	47.33	47.69	0.05	10.23	10.02	3.72

ICE Retrofit - Emission Factors

DPFs - DOCs

Off- Road Equipment Type	Number	Daily Hours of Use	ROG lbs/hr	CO lbs/hr	NOx lbs/hr	SOx lbs/hr	PM lbs/hr	CO2 eq MT/hr
Forklift	1	4	0.02	0.22	0.19	0	0.01	0.01

ICE Retrofit lbs/day = number *hrs/day*emission factor

Off- Road Equipment Type	ROG lbs/day	CO lbs/day	NOx lbs/day	SOx lbs/day	PM10 lbs/day	PM2.5 lbs/day	CO2 eq MM t/d
Subtotal Forklift #/day	0.08	0.88	0.76	0	0.04	0.04	1.81406E-05

On-Road Equipment Type	ROG lbs/day	CO lbs/day	NOx lbs/day	SOx lbs/day	PM10 lbs/day	PM2.5 lbs/day	CO2 eq MM t/d
Construction Worker Light-duty Auto #/day	0.14	0.21	0.02	0.00	0.01	0.00	0.027323082
Heavy-heavy-duty Truck	0.05	0.22	1.58	0.00	0.03	0.02	0.197464895
Sub-totalotal On-road	0.19	0.44	1.60	0.00	0.04	0.02	0.22

LD Autos	Avg. Trip Length
# Vehicle Trips	One way
8	11
HH duty truck trips/day	Avg. Trip Length
2	50

Total 1 unit Off-road and On-road #/day	0.27	1.32	2.36	0.00	0.08	0.06	0.22
5 units per day	1.37	6.59	11.81	0.01	0.40	0.29	1.12
10 units per day	2.74	13.17	23.61	0.01	0.80	0.58	2.25

Total 1 unit Off-road and On-road tons/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5 units per day	0.00	0.00	0.01	0.00	0.00	0.00	0.00
10 units per day	0.001	0.007	0.012	0.000	0.000	0.000	0.001

FCCU with WGS GHG Parameters

Off- Road Equipment Type	Amount	Daily Hours of Use	CO2 eq MT/hr	CO2 eq MT/day	Construction/ period MT	Days/ Period	
Demolition						20.00	
Crane (140 ton, composite hp)	1	10	0.04	0.4	8		
Front End Loader	1	10	0.02	0.2	4		
Forklift	2	10	0.01	0.2	4		
Demolition Hammer	1	10	0.001	0.01	0.20		
Construction						320	2 construction periods
Air Compressor	1	10	0.02	0.2	96		
Crane (140 ton, composite hp)	2	10	0.04	0.8	384		
Aerial Lift (Man Lift)	3	10	0.01	0.3	144		
Generator	1	10	0.02	0.2	96		
Welder	3	10	0.01	0.3	144		
Total			0.171	2.61			
			Total 1 cons. + demo		880.20		
			Total 3 cons. + demo		2640.6		

Refinery WGS lbs/day and Tons/period

	CO2eq MT
Subtotal Construction Worker Vehicle Emissions Trips #/day	0.60
Subtotal Const. worker Vehicle Trips tons/period	286.89
Heavy-heavy-duty Truck #/day	0.20
Heavy-heavy-duty Truck tons/period	94.78
Auto +HHD Truck lb/day	0.80
Auto +HHD Truck tons/period	381.68
Subtotal Off-road tons/period	880.20
Total #/ period	1261.88
Total 1Unit Tons per Construction period	1261.88
Total 3 Units Tons per Construction period	3785.63

Control equipment	# Auto Trips	One-way Trip
WGS	175	11
HDD Trip Length	HHD Truck trips/day	
50	2	

# of days =	320	total days 130

Avg. Trip Length

Ton/construction period = Total pounds/day*(Total days/construction period * 0.5) + (Total pounds/day * 0.5) * (Total days/construction period * 0.5)

Non-Refinery WGS/Baghouse/ESP - Parameters

Off- Road Equipment Type	Amount	Daily Hours of Use	ROG lbs/hr	CO lbs/hr	NOx lbs/hr	SOx lbs/hr	PM lbs/hr	CO2 eq MT/hr
Aerial Lift (Man Lift)	1	2	0.00	0.17	0.1	0.00	0.00	0.01
Air Compressor	1	4	0.06	0.32	0.43	0.00	0.03	0.02
Backhoe	1	4	0.03	0.36	0.31	0.00	0.02	0.02
Concrete Pump	1	2	0.07	0.4	0.43	0.00	0.03	0.003
Concrete Saw	1	2	0.06	0.41	0.80	0.00	0.04	0.02
Crane (140 ton, composite hp)	0	0	0.06	0.41	0.80	0.00	0.04	0.04
Crane - Rough Terrane (28 ton, 120 hp)	1	8	0.07	0.4	0.42	0.00	0.02	0.02
Forklift	1	3	0.02	0.22	0.19	0.00	0.01	0.01
Generator	1	8	0.05	0.28	0.41	0.00	0.22	0.02
Plate Compactor	1	4	0.01	0.03	0.03	0.00	0.00	0.001
Welder	2	8	0.04	0.19	0.21	0.00	0.02	0.01

Non-Refinery WGS/Baghouses/ESP lbs/day = number *hrs/day*emission factor

Off- Road Equipment Type	ROG lbs/day	CO lbs/day	NOx lbs/day	SOx lbs/day	PM10 lbs/day	PM2.5 lbs/day	CO2 eq MT/d
Aerial Lift (Man Lift)	0.00	0.34	0.20	0.00	0.00	0.00	0.02
Air Compressor	0.24	1.28	1.72	0.00	0.12	0.1104	0.08
Backhoe	0.12	1.44	1.24	0.00	0.08	0.0736	0.08
Concrete Pump	0.02	0.8	0.86	0.00	0.06	0.0552	0.006
Concrete Saw	0.12	0.82	1.6	0.00	0.08	0.0736	0.04
Crane (140 ton, composite hp)	0.56	3.2	3.36	0.00	0.16	0.1472	0
Forklift	0.06	0.66	0.57	0.00	0.03	0.0276	0.03
Generator	0.4	2.24	3.28	0.00	1.76	1.6192	0.16
Plate Compactor	0.04	0.12	0.12	0.00	0.00	0.00	0.004
Welder	0.64	3.04	3.36	0	0.32	0.2944	0.16
Subtotal lbs/day off-road	2.20	13.94	16.31	0.00	2.61	2.40	0.58

Non-Refinery WGS/Baghouses/ESPs lbs/day and Tons/period

	ROG	CO	Nox	SOx	PM10	PM2.5 lbs/day	CO2eq MT
Subtotal Construction Worker Vehicle Emissions Trips #/day	0.71	1.07	0.10	0.10	0.05	0.02	0.14
Subtotal Const. worker Vehicle Trips tons/period	0.03	0.05	0.00	0.005	0.00	0.00	13.32
Heavy-heavy-duty Truck #/day	0.05	0.22	1.58	0.004	0.03	0.02	0.20
Heavy-heavy-duty Truck tons/period	0.00	0.01	0.08	0.000	0.00	0.00	19.25
Auto +HHD Truck lb/day	0.76	1.29	1.68	0.10	0.08	0.04	0.33
Subtotal Off-road #/day	2.20	13.94	16.31	0.00	2.61	2.40	0.58
Total #/day	2.96	15.23	17.99	0.10	2.69	2.44	0.91
Auto +HHD Truck tons/period	0.04	0.06	0.08	0.00	0.00	0.00	32.57
Subtotal Off-road tons/period	0.11	0.68	0.80	0.00	0.13	0.12	56.55
Total #/ period	288.35	1484.86	1754.00	9.99	261.93	240.22	89.12
Total 1Unit Tons per Construction period	0.14	0.74	0.88	0.00	0.13	0.12	89.12
Total 5 Units Tons per Construction period	0.72	3.71	4.38	0.02	0.65	0.60	267.37
Total 10 Units Tons per Construction period	1.44	7.42	8.77	0.05	1.31	1.20	891.23

Ton/construction period = Total pounds/day*(Total days/construction period * 0.5) + (Total pounds/day * 0.5) * (Total days/construction period * 0.5)

		Avg. Trip Length
Control equipment	# Auto Trips	One-way Trip
SCR FCCU	40	11
HHD trip length	HHD Truck trips/day	
50	2	

# of days =	65	total days 130

Carbon Adsorber/Thermal Oxidizer/Catalytic Oxidizer Parameters

Off- Road Equipment Type	Number	Daily Hours of Use	ROG lbs/hr	CO lbs/hr	NOx lbs/hr	SOx lbs/hr	PM lbs/hr	CO2 eq MT/hr
Backhoe	1	4	0.07	0.4	0.42	0	0.02	0.02
Crane - Rough Terrane (28 ton, 120 hp)	1	8	0.04	0.19	0.21	0	0.02	0.02
Welder	2	8	0.06	0.06	0.32	0.43	0	0.01
Air Compressor	1	4	0.03	0.36	0.31	0	0.02	0.02
Plate Compactor	1	4	0.01	0.03	0.03	0	0	0.001
Forklift	1	3	0.02	0.22	0.19	0	0.01	0.01
Concrete Pump	1	2	0.01	0.04	0.05	0	0	0.003
Concrete Saw	1	2	0.07	0.4	0.43	0	0.03	0.02
Generator	1	8	0.05	0.28	0.41	0	0.22	0.02
Aerial Man Lift	1	2	0	0.17	0.1	0	0	0.01

Carbon Adsorber/Thermal Oxidizer/Catalytic Oxidizer lbs/day = number *hrs/day*emission factor

Off- Road Equipment Type	ROG lbs/day	CO lbs/day	NOx lbs/day	SOx lbs/day	PM10 lbs/day	PM2.5 lbs/day	CO2 eq MT/d
Backhoe	0.28	1.6	1.68	0	0.08	0.074	0.08
Crane - Rough Terrane (28 ton, 120 hp)	0.32	1.52	1.68	0	0.16	0.15	0.16
Welder	0.96	0.96	5.12	0	0	0.00	0.16
Air Compressor	0.12	1.44	1.24	0	0.08	0.07	0.08
Plate Compactor	0.04	0.12	0.12	0	0	0.00	0.004
Forklift	0.06	0.66	0.57	0	0.00	0.00	0.03
Concrete Pump	0.02	0.08	0.1	0	0.00	0.00	0.006
Concrete Saw	0.14	0.8	0.86	0	0.06	0.06	0.04
Generator	0.4	2.24	3.28	0	1.76	1.62	0.16
Aerial Man Lift	0	0.34	0.2	0	0	0.00	0.02
Subtotal lbs/day off-road	2.34	9.76	14.85	0	2.14	1.97	0.74

	ROG lbs/day	CO lbs/day	NOx lbs/day	SOx lbs/day	PM10 lbs/day	PM2.5 lbs/day	CO2 eq MT
Construction worker vehicle emissions #/day	0.71	1.07	0.10	0.00	0.05	0.02	0.137
Heavy-heavy-duty Truck #/day	0.22	0.02	1.58	0.00	0.03	0.02	0.644
Subtotal Auto + HHD Truck #/day	0.93	1.08	1.68	0.01	0.08	0.04	0.781
Subtotal off-road #/day	2.34	9.76	14.85	0.00	2.14	1.97	0.74
Total #/day	3.27	10.84	16.53	0.01	2.22	2.01	1.52
Auto & HHD Truck tons/period	0.05	0.05	0.08	0.000	0.004	0.002	76.148
Off-road tons/period	0.11	0.48	0.72	0.00	0.10	0.10	72.150
Total 1 Unit tons/ period	0.16	0.53	0.81	0.00	0.11	0.10	148.3
Total 5 Units tons/period	0.80	2.64	4.03	0.00	0.54	0.49	741.5

	# Vehicle Trips/day	Avg. Trip Length One-way Trip
Worker trips	40	11
HHD truck trips/day	2	50

1/2 # of days = 65 Total 130

On-road Mobile Source Emission Factors

Light-duty Auto	CO	ROG	Nox	SOx	PM10	PM2.5	CO2	
Break-wear g/mile = (a)					0.036750011	0.015750005		
Tire wear g/mile = (b)					0.008000002	0.002000001		
Running Evaporation g/mile = (c)		0.32685						
Running Exhaust g/mile = (d)	0.88207051	0.0206274	0.08658368	0.00305211	0.00173145	0.001593313	304.2975854	exhaust
Start-up g/trip = (e)	2.386995467	4.215288	0.16371717	0.00072322	0.002529158	0.002328798	68.11176527	startup

Equation: (No. of One-way Vehicles Trips*One-way Trip Length*[(a) PM10/PM2.5 only]*[(b) PM10/PM2.5 only]*[(c) ROG only])/(lb/454gm))+((Number of One-way Vehicle trips*(e))/(lb/454gm)

Star-up includes startu-up exhaust + hotsoak+running loss+((restng loss+diurnal)/2)

Heavy-Heavy-Duty Truck Mobile Source Emission Factors

Heavy-Heavy-Duty Truck (diesel)	CO	ROG	Nox	SOx	PM10	PM2.5	CO2
Break-wear g/mile = (g)					0.061	0.026	
Tire wear g/mile = (h)					0.035	0.009	
Running Exhaust g/mile (i)	0.839	0.192	5.802	0.016	0.043	0.041	1739.427878
Idling Exhaust g/vehicle/day = (j)	8.907	2.327	68.888	0.110	0.140	0.134	11761.05342

Equation: (No. of One-way Vehicles Trips*One-way Trip Length*[(g) PM10/PM2.5 only]*[(h) PM10/PM2.5 only])/(lb/454gm))+((Number of One-way Vehicle trips*(j))/(lb/454gm)

Reference: CARB, EMFAC 2014 for the Bay Area

Appendix A
Bay Area Air Quality Management District
Regulation 2, Rule 5
Air Quality Analysis
Enclosure Construction Equipment Emissions

Phase	Equipment	Horsepower	Amount	Days	Hours/Day	Total Hours	Emission Factors (lb/hr)[1]						Emissions (lb)						
							VOC	CO	NOx	SOx	PM10	CO_2e[2]	VOC	CO	NOx	SOx	PM10	PM2.5	CO_2e[2]
Paving	Cement and Mortar Mixers	50	1	10	8	80	0.04	0.08	0.19	0.00	0.02	0.01	2.86	6.10	15.09	0.03	1.33	1.32	0.75
Paving	Pavers	Comp	1	10	8	80	0.04	0.51	0.52	0.00	0.03	0.03	3.28	40.59	41.87	0.09	2.29	2.27	2.29
Paving	Rollers	Comp	2	10	8	160	0.03	0.39	0.31	0.00	0.02	0.02	5.08	62.61	49.33	0.11	3.19	3.16	2.62
Paving	Tractors/Loaders/Backhoe	Comp	1	10	8	80	0.03	0.37	0.36	0.00	0.02	0.02	2.44	29.33	28.67	0.06	1.89	1.87	1.54
Paving	Paving Equipment	Comp	1	10	8	80	0.03	0.42	0.44	0.00	0.02	0.02	2.73	33.32	35.49	0.08	1.88	1.86	1.99
Architectural Coating	Air Compressors	50	1	10	6	60	0.04	0.22	0.19	0.00	0.02	0.01	2.15	13.25	11.32	0.02	1.00	0.99	0.56
Building Construction	Generator Sets	50	1	220	8	1760	0.04	0.23	0.19	0.00	0.02	0.01	62.99	409.42	332.07	0.69	29.24	28.95	16.51
Building Construction	Cranes	Comp	1	220	8	1760	0.07	0.42	0.91	0.00	0.04	0.04	115.04	730.84	1600.24	2.58	75.52	74.76	62.22
Building Construction	Forklifts	Comp	2	220	7	3080	0.02	0.22	0.23	0.00	0.02	0.01	68.38	671.77	693.88	1.23	52.38	51.86	29.54
Building Construction	Tractor/Loader/Backhoe	Comp	1	220	7	1540	0.03	0.37	0.36	0.00	0.02	0.02	46.91	564.61	551.81	1.23	36.44	36.07	29.56
Building Construction	Welders	0	3	220	8	5280	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Graders	Comp	1	3	8	24	0.07	0.58	1.01	0.00	0.04	0.04	1.74	14.03	24.29	0.04	1.08	1.07	0.98
Site Preparation	Tractors/Loaders/Backhoes	Comp	1	3	7	21	0.03	0.37	0.36	0.00	0.02	0.02	0.64	7.70	7.52	0.02	0.50	0.49	0.40
Site Preparation	Scrapers	Comp	1	3	8	24	0.14	0.87	2.08	0.00	0.09	0.09	3.33	20.91	49.91	0.09	2.06	2.04	2.26
Grading	Rubber Tired Dozers	Comp	1	6	6	36	0.13	0.93	1.62	0.00	0.08	0.05	4.60	33.48	58.26	0.08	2.95	2.92	1.89
Grading	Tractors/Loaders/Backhoes	Comp	2	6	7	84	0.03	0.37	0.36	0.00	0.02	0.02	2.56	30.80	30.10	0.07	1.99	1.97	1.61
Grading	Graders	Comp	1	6	8	48	0.07	0.58	1.01	0.00	0.04	0.04	3.49	28.05	48.59	0.08	2.16	2.14	1.97
Total													**328.22**	**2696.81**	**3578.44**	**6.50**	**215.89**	**213.73**	**156.69**

(1) Off-Road 2011. CO emissions from SCAQMD, 2006 : http://www.aqmd.gov/ceqa/handbook/offroad/offroadEF07_25.xls

(2) Carbon Dioxide Equivalents (CO_{EQ}) are based on fuel use and default emission factors for diesel. Metric tons.

Appendix A
Bay Area Air Quality Management District
Regulation 2, Rule 5
Air Quality Analysis
Enclosure On-Road Construction Emissions[1]

Phase	Trip Type	Trip Length	Trips	VMT	VOC (lb/hr)	CO(lb/hr)	NOx (lb/hr)	SOx(lb/hr)	PM (lb/hr)	Fugitive PM[2]	CO2e (lb/mile)[3]	VOC (lbs)	CO(lbs)	NOx (lbs)	SOx(lbs)	PM10 (lbs)	PM2.5 (lbs)	CO2e (tonnes)
Paving	Commuters	24.8	150	3720	0.000	0.002	0.001	0.000	0.000	0.000	0.825	0.191	8.044	2.165	0.030	1.226	0.543	1.393
Paving	Delivery	14.6	0	0	0.001	0.003	0.008	0.000	0.001	0.000	2.697	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Paving	HHDT	40	0	0	0.000	0.003	0.007	0.000	0.000	0.002	2.975	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Architectural Coating	Commuters	24.8	80	1984	0.000	0.002	0.001	0.000	0.000	0.000	0.825	0.102	4.290	1.155	0.016	0.654	0.290	0.743
Architectural Coating	Delivery	14.6	0	0	0.001	0.003	0.008	0.000	0.001	0.000	2.697	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Architectural Coating	HHDT	40	0	0	0.000	0.003	0.007	0.000	0.000	0.002	2.975	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Site Preparation	Commuters	24.8	24	595.2	0.000	0.002	0.001	0.000	0.000	0.000	0.825	0.031	1.287	0.346	0.005	0.196	0.087	0.223
Site Preparation	Delivery	14.6	0	0	0.001	0.003	0.008	0.000	0.001	0.000	2.697	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Site Preparation	HHDT	40	0	0	0.000	0.003	0.007	0.000	0.000	0.002	2.975	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Building Construction	Commuters	24.8	9240	2E+05	0.000	0.002	0.001	0.000	0.000	0.000	0.825	11.761	495.541	133.373	1.855	75.513	33.477	85.804
Building Construction	Delivery	14.6	3520	51392	0.001	0.003	0.008	0.000	0.001	0.000	2.697	29.564	135.359	434.195	1.329	52.440	32.509	62.877
Building Construction	HHDT	40	0	0	0.000	0.003	0.007	0.000	0.000	0.002	2.975	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Grading	Commuters	24.8	60	1488	0.000	0.002	0.001	0.000	0.000	0.000	0.825	0.076	3.218	0.866	0.012	0.490	0.217	0.557
Grading	Delivery	14.6	0	0	0.001	0.003	0.008	0.000	0.001	0.000	2.697	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Grading	HHDT	40	200	8000	0.000	0.003	0.007	0.000	0.000	0.002	2.975	3.478	20.099	57.456	0.231	21.468	6.101	10.795
Total												**45.204**	**667.838**	**629.556**	**3.478**	**151.987**	**73.225**	**162.392**

Assumes 5000 cu.yd of overburden moved in 25 trucks.

(1) Emfac2014 emission factors for the San Francisco Bay Area District.

(2) Emission Calculations for travel on paved roads from EPA AP-42 Section 13.2.1, January 2011

$E = k(sL)^{0.91} \times (W)^{1.02}$

Where: k = 0.0022 lb/VMT for PM10, sL = road silt loading (gms/m2)

(0.03 for major/collector roads), W = weight of vehicles (2.5 tons for light; 5 for medium trucks,

and 24 for heavy trucks)

(3) Carbon Dioxide Equivalence (CO_E) = $CO_2 + CH_4 * 21 + N2O*310$

where CO2 emissions factors are from Emfac2011. CH4 and N2O emissions factors are from Direct Emissions from Mobile Combustion Sources, EPA 2008.

where light vehicle are gasoline light duty trucks.

where medium/heavy duty vehicle are diesel heavy duty trucks.

	2017		
Chemical	Light	Medium	Heavy
CO2 (lb/mi)	0.8141	2.6938	2.9713
CH4 (g/mi)	0.0148	0.0051	0.0051
N2O (g/mi)	0.0157	0.0048	0.0048
CO2e (lb/mi)	0.825	2.697	2.975

Appendix A
Bay Area Air Quality Management District
Regulation 11, Rule 18
Air Quality Analysis
Enclosure Construction Summary

Equipment	VOC	CO	NOx	SOx	PM10	PM2.5	CO2e[2]
Construction Equipment[1]	328.22	2696.81	3578.44	6.50	215.89	213.73	156.69
On-Road Equpment[1]	45.20	667.84	629.56	3.48	151.99	73.22	162.39
Total (lbs/project period)	**373.42**	**3364.65**	**4208.00**	**9.98**	**367.87**	**286.95**	**319.08**
Total (lbs/day)[3]	**1.56**	**14.08**	**17.61**	**0.04**	**1.54**	**1.20**	**1.34**
Total for 3 Enclosures (lbs/day)	**4.69**	**42.23**	**52.82**	**0.13**	**4.62**	**3.60**	**4.01**
Total for 3 Enclosures (tons/yr)	**0.56**	**5.05**	**6.31**	**0.01**	**0.55**	**0.43**	**0.73**
BAAQMD Threshold	10.00	NE	10.00	NE	15.00	10.00	10000.00

(1) Reported in pounds per project.

(2) Reported in tonnes per year.

(3) Assumes 239 days per project

NaOH HRA

	Daily Usage Tons/Day	Annual Usage Tons/year	Usage Rate gal/hr	Density #/gal	#/hr
NaOH (50% solution)	3.37	1228.30	22.00	12.747	280.43

NaOH Demand Filling Loss (lb/day)	Q = Fill Rate = NaOH Demand (MMgal/day)	S = Saturation Factor	P = Vapor Pressure of material Loaded (psia)	M = NaOH vapor molecular weight (lb/lbmole)	T= temperature of liquid loaded (oR)	Daily PM10 Filling Loss (lb/day)	Eworking = Hourly PM10 Working Loss (lb/hr)	Total Hourly PM10 Loss (lb/hr)	Total Hourly PM10 Loss (lb/hr) at 25m
3.37	0.53	1.45	0.042	24.8	544.67	1.82E-02	7.60E-04	2.28E-03	2.28E-05

NaOH @ 50% solution density = 12.747 lb/gal
Mv for NaOH solution = 24.8 lb/lbmol
Vapor Pressure for NaOH = 2.18 mmHg at 29.4oC or 85oF = 0.042 psia
Loading Temperature = 85°F to 100°F (544.67°R to 559.67°R)
Breathing Loss = 3 * Filling Loss

Filling Loss

$E_{loading}$ lb/day = (12.46) ((S)(P)(M)(Q))/T where:

S = saturation factor (dimensionless; obtained from Table 5.2-1 in AP-42)
= 1.45 (Splash loading: dedicated normal service)
P = vapor pressure of the material loaded at temperature T (psia)
M = vapor molecular weight (lb/lb-mole)
Q = volume of material loaded (1,000 gal/day)
T = temperature of liquid loaded (°R).

Caustic/NaOH Delivery Truck Trips

Caustic/NaOH	VOC lbs/day	CO lbs/day	NOx lbs/day	SOx lbs/day	PM10 lbs/day	PM2.5 lbs/day	CO2 MT/day
Subtotal 1 HHD/day #/day	0.06	0.26	1.84	0.02	0.04	0.02	0.23
Total 13 HHD Truck/day #/day	0.79	3.39	23.88	0.25	0.49	0.27	3.02
Subtotal 1 Facility Tons/year	0.003	0.01	0.10	0.00	0.002	0.001	24.15
Total 13 Facilities Tons/year	0.04	0.18	1.24	0.013	0.025	0.014	314.007

	# One- Trips/day HHD Truck	Avg. Trip Length One way HHD Truck	Trips per Year
Caustic	13	60	104
1 Caustic	2		

Heavy-Heavy-Duty Truck Mobile Source Emission Factors

Heavy-Heavy-Duty Truck (diesel)	CO	ROG	Nox	SOx	PM10	PM2.5	CO2
Break-wear g/mile = (g)					0.061	0.026	
Tire wear g/mile = (h)					0.035	0.009	
Running Exhaust g/mile (i)	0.839	0.192	5.802	0.016	0.043	0.041	1739.427878
Idling Exhaust g/vehicle/day = (j)	8.907	2.327	68.888	0.110	0.140	0.134	11761.05342

Equation: (No. of One-way Vehicles Trips*One-way Trip Length*[(g) PM10/PM2.5 only]*[(h) PM10/PM2.5 only])/(lb/454gm))+((Number of One-way Vehicle trips*(j))/(lb/454gm)
Reference: CARB, EMFAC 2014 for the Bay Area

Operational GHG Emissions from Regenerating Spent Carbon

Fuel type	Natural Gas Usage scfmm/regen	CH4 lb/mmscf	N2O lb/mmscf	CO2 lb/mmscf	Regeneration per year
Natural Gas	0.0022	2.3	0.64	120000	12

Natural Gas Usage mmscf/yr	22.63	CH4 MT/yr	NO2 MT/yr	CO2 MT/year	CO2e MT/year
1 Unit		0.00	0.00	1.44	1.44
5 Units		0.00	0.00	7.18	7.20

	GWP factors
CO2 =	1
CH4 =	34
N2O =	298

The amount of natural gas required per year is estimated to be 0.0264 million cubic feet (MMcf) [(400 lbs C) x (5.5 scf/lb C per regen) x (12 regen/yr) = 26,400 cf/yr].

NAOH3R.RPT

08/14/17
16:43:31

```
 ***  SCREEN3 MODEL RUN  ***
 *** VERSION DATED 95250 ***

NaOH Release from Tank Vent - Urban Conditions - 1-inch vent re

SIMPLE TERRAIN INPUTS:
   SOURCE TYPE            =        POINT
   EMISSION RATE (G/S)    =      .280000E-03
   STACK HEIGHT (M)       =       3.0000
   STK INSIDE DIAM (M)    =        .0254
   STK EXIT VELOCITY (M/S)=        .1100
   STK GAS EXIT TEMP (K)  =     293.0000
   AMBIENT AIR TEMP (K)   =     293.0000
   RECEPTOR HEIGHT (M)    =        .0000
   URBAN/RURAL OPTION     =        URBAN
   BUILDING HEIGHT (M)    =        .0000
   MIN HORIZ BLDG DIM (M) =        .0000
   MAX HORIZ BLDG DIM (M) =        .0000


     **************************************
     *** SUMMARY OF SCREEN MODEL RESULTS ***
     **************************************

 CALCULATION        MAX CONC       MAX CONC     DIST TO   TERRAIN
  PROCEDURE        (UG/M**3)        (PPM)       MAX (M)    HT (M)
--------------    -----------    -----------    -------   -------
SIMPLE TERRAIN    6.901            0.004227     10.       0.

**************************************************
** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
**************************************************


BUOY. FLUX =     .000 M**4/S**3;  MOM. FLUX =     .000 M**4/S**2.

*** FULL METEOROLOGY ***

**********************************
*** SCREEN AUTOMATED DISTANCES ***
**********************************

*** TERRAIN HEIGHT OF    0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

  DIST     CONC             U10M   USTK  MIX HT   PLUME   SIGMA   SIGMA
```

NAOH3R.RPT

(M)	(UG/M**3)	STAB	(M/S)	(M/S)	(M)	HT (M)	Y (M)	Z (M)	DWASH
5.	2.350	1	1.0	1.0	320.0	2.94	1.60	1.20	NO
100.	1.025	5	1.0	1.0	10000.0	2.94	10.79	7.46	NO
200.	.2935	5	1.0	1.0	10000.0	2.94	21.17	14.03	NO
300.	.1419	5	1.0	1.0	10000.0	2.94	31.18	19.93	NO
400.	.8566E-01	5	1.0	1.0	10000.0	2.94	40.85	25.30	NO
500.	.5843E-01	5	1.0	1.0	10000.0	2.94	50.21	30.24	NO
600.	.4303E-01	5	1.0	1.0	10000.0	2.94	59.27	34.82	NO
700.	.3339E-01	5	1.0	1.0	10000.0	2.94	68.06	39.11	NO
800.	.2691E-01	5	1.0	1.0	10000.0	2.94	76.59	43.15	NO
900.	.2231E-01	5	1.0	1.0	10000.0	2.94	84.89	46.97	NO
1000.	.1892E-01	5	1.0	1.0	10000.0	2.94	92.97	50.60	NO
1100.	.1633E-01	5	1.0	1.0	10000.0	2.94	100.83	54.06	NO
1200.	.1430E-01	5	1.0	1.0	10000.0	2.94	108.50	57.37	NO
1300.	.1268E-01	5	1.0	1.0	10000.0	2.94	115.99	60.55	NO
1400.	.1135E-01	5	1.0	1.0	10000.0	2.94	123.30	63.61	NO
1500.	.1025E-01	5	1.0	1.0	10000.0	2.94	130.44	66.56	NO
1600.	.9334E-02	5	1.0	1.0	10000.0	2.94	137.43	69.42	NO
1700.	.8551E-02	5	1.0	1.0	10000.0	2.94	144.27	72.18	NO
1800.	.7880E-02	5	1.0	1.0	10000.0	2.94	150.97	74.86	NO
1900.	.7298E-02	5	1.0	1.0	10000.0	2.94	157.54	77.47	NO
2000.	.6790E-02	5	1.0	1.0	10000.0	2.94	163.98	80.00	NO
2100.	.6342E-02	5	1.0	1.0	10000.0	2.94	170.30	82.47	NO
2200.	.5946E-02	5	1.0	1.0	10000.0	2.94	176.50	84.87	NO
2300.	.5593E-02	5	1.0	1.0	10000.0	2.94	182.59	87.22	NO
2400.	.5277E-02	5	1.0	1.0	10000.0	2.94	188.57	89.52	NO
2500.	.4992E-02	5	1.0	1.0	10000.0	2.94	194.45	91.77	NO
2600.	.4735E-02	5	1.0	1.0	10000.0	2.94	200.24	93.96	NO
2700.	.4501E-02	5	1.0	1.0	10000.0	2.94	205.93	96.12	NO
2800.	.4287E-02	5	1.0	1.0	10000.0	2.94	211.54	98.23	NO
2900.	.4092E-02	5	1.0	1.0	10000.0	2.94	217.05	100.30	NO
3000.	.3913E-02	5	1.0	1.0	10000.0	2.94	222.49	102.34	NO
3500.	.3201E-02	5	1.0	1.0	10000.0	2.94	248.52	112.00	NO
4000.	.2700E-02	5	1.0	1.0	10000.0	2.94	272.88	120.95	NO
4500.	.2329E-02	5	1.0	1.0	10000.0	2.94	295.82	129.32	NO
5000.	.2045E-02	5	1.0	1.0	10000.0	2.94	317.54	137.20	NO
5500.	.1821E-02	5	1.0	1.0	10000.0	2.94	338.21	144.67	NO
6000.	.1640E-02	5	1.0	1.0	10000.0	2.94	357.94	151.79	NO
6500.	.1491E-02	5	1.0	1.0	10000.0	2.94	376.84	158.60	NO
7000.	.1366E-02	5	1.0	1.0	10000.0	2.94	395.00	165.13	NO
7500.	.1260E-02	5	1.0	1.0	10000.0	2.94	412.50	171.43	NO
8000.	.1169E-02	5	1.0	1.0	10000.0	2.94	429.40	177.50	NO
8500.	.1090E-02	5	1.0	1.0	10000.0	2.94	445.74	183.38	NO
9000.	.1021E-02	5	1.0	1.0	10000.0	2.94	461.59	189.08	NO
9500.	.9600E-03	5	1.0	1.0	10000.0	2.94	476.98	194.62	NO
10000.	.9058E-03	5	1.0	1.0	10000.0	2.94	491.93	200.00	NO
15000.	.5773E-03	5	1.0	1.0	10000.0	2.94	623.64	247.54	NO

NAOH3R.RPT

20000.	.4229E-03	5	1.0	1.0	10000.0	2.94	733.33	287.37	NO
25000.	.3335E-03	5	1.0	1.0	10000.0	2.94	829.16	322.33	NO
30000.	.2752E-03	5	1.0	1.0	10000.0	2.94	915.26	353.86	NO
40000.	.2249E-03	4	1.0	1.0	320.0	2.94	1552.23	1553.16	NO
50000.	.2000E-03	4	1.0	1.0	320.0	2.94	1745.74	1750.00	NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 5. M:

10.	6.901	3	1.0	1.0	320.0	2.94	2.41	2.20	NO

DIST = DISTANCE FROM THE SOURCE
CONC = MAXIMUM GROUND LEVEL CONCENTRATION
STAB = ATMOSPHERIC STABILITY CLASS (1=A, 2=B, 3=C, 4=D, 5=E, 6=F)
U10M = WIND SPEED AT THE 10-M LEVEL
USTK = WIND SPEED AT STACK HEIGHT
MIX HT = MIXING HEIGHT
PLUME HT= PLUME CENTERLINE HEIGHT
SIGMA Y = LATERAL DISPERSION PARAMETER
SIGMA Z = VERTICAL DISPERSION PARAMETER
DWASH = BUILDING DOWNWASH:
DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

****
*** SCREEN DISCRETE DISTANCES ***
****

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
5.	2.350	1	1.0	1.0	320.0	2.94	1.60	1.20	NO
10.	6.901	3	1.0	1.0	320.0	2.94	2.20	2.00	NO
15.	6.652	4	1.0	1.0	320.0	2.94	2.39	2.10	NO
20.	5.758	4	1.0	1.0	320.0	2.94	3.19	2.79	NO
25.	5.416	5	1.0	1.0	10000.0	2.94	2.74	1.96	NO
30.	5.290	5	1.0	1.0	10000.0	2.94	3.28	2.35	NO
35.	4.786	5	1.0	1.0	10000.0	2.94	3.82	2.73	NO
40.	4.203	5	1.0	1.0	10000.0	2.94	4.37	3.11	NO
45.	3.654	5	1.0	1.0	10000.0	2.94	4.91	3.48	NO
50.	3.174	5	1.0	1.0	10000.0	2.94	5.45	3.86	NO

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED

NAOH3R.RPT

DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

****
*** USER SPECIFIED AVERAGING TIMES ***
****

ESTIMATED MAXIMUM CONCENTRATION FOR 30 MIN AVERAGING TIME:
6.901 UG/M**3 0.004227 PPM

****
*** END OF SCREEN MODEL OUTPUT ***
****

NAOH2R.RPT

08/14/17
16:49:32

```
 ***  SCREEN3 MODEL RUN  ***
 *** VERSION DATED 95250 ***

NaOH Release from Tank Vent - Urban Conditions - 1-inch - vap r

SIMPLE TERRAIN INPUTS:
   SOURCE TYPE            =        POINT
   EMISSION RATE (G/S)    =      .280000E-03
   STACK HEIGHT (M)       =       4.5700
   STK INSIDE DIAM (M)    =         .0254
   STK EXIT VELOCITY (M/S)=         .1100
   STK GAS EXIT TEMP (K)  =     293.0000
   AMBIENT AIR TEMP (K)   =     293.0000
   RECEPTOR HEIGHT (M)    =         .0000
   URBAN/RURAL OPTION     =        URBAN
   BUILDING HEIGHT (M)    =         .0000
   MIN HORIZ BLDG DIM (M) =         .0000
   MAX HORIZ BLDG DIM (M) =         .0000


     **************************************
     *** SUMMARY OF SCREEN MODEL RESULTS ***
     **************************************

 CALCULATION        MAX CONC       MAX CONC     DIST TO   TERRAIN
  PROCEDURE        (UG/M**3)        (PPM)       MAX (M)    HT (M)
-------------    -----------    -----------    -------   -------
SIMPLE TERRAIN    2.943            0.001803     16.       0.

**************************************************
** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
**************************************************


BUOY. FLUX =      .000 M**4/S**3;  MOM. FLUX =      .000 M**4/S**2.

*** FULL METEOROLOGY ***

**********************************
*** SCREEN AUTOMATED DISTANCES ***
**********************************

*** TERRAIN HEIGHT OF    0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

  DIST     CONC             U10M   USTK  MIX HT   PLUME   SIGMA   SIGMA
```

NAOH2R.RPT

(M)	(UG/M**3)	STAB	(M/S)	(M/S)	(M)	HT (M)	Y (M)	Z (M)	DWASH
5.	.4141E-01	1	1.0	1.0	320.0	4.51	1.60	1.20	NO
100.	.9228	5	1.0	1.0	10000.0	4.51	10.79	7.46	NO
200.	.2849	5	1.0	1.0	10000.0	4.51	21.17	14.03	NO
300.	.1398	5	1.0	1.0	10000.0	4.51	31.18	19.93	NO
400.	.8488E-01	5	1.0	1.0	10000.0	4.51	40.85	25.30	NO
500.	.5806E-01	5	1.0	1.0	10000.0	4.51	50.21	30.24	NO
600.	.4282E-01	5	1.0	1.0	10000.0	4.51	59.27	34.82	NO
700.	.3326E-01	5	1.0	1.0	10000.0	4.51	68.06	39.11	NO
800.	.2682E-01	5	1.0	1.0	10000.0	4.51	76.59	43.15	NO
900.	.2225E-01	5	1.0	1.0	10000.0	4.51	84.89	46.97	NO
1000.	.1887E-01	5	1.0	1.0	10000.0	4.51	92.97	50.60	NO
1100.	.1629E-01	5	1.0	1.0	10000.0	4.51	100.83	54.06	NO
1200.	.1427E-01	5	1.0	1.0	10000.0	4.51	108.50	57.37	NO
1300.	.1266E-01	5	1.0	1.0	10000.0	4.51	115.99	60.55	NO
1400.	.1134E-01	5	1.0	1.0	10000.0	4.51	123.30	63.61	NO
1500.	.1024E-01	5	1.0	1.0	10000.0	4.51	130.44	66.56	NO
1600.	.9322E-02	5	1.0	1.0	10000.0	4.51	137.43	69.42	NO
1700.	.8542E-02	5	1.0	1.0	10000.0	4.51	144.27	72.18	NO
1800.	.7872E-02	5	1.0	1.0	10000.0	4.51	150.97	74.86	NO
1900.	.7291E-02	5	1.0	1.0	10000.0	4.51	157.54	77.47	NO
2000.	.6783E-02	5	1.0	1.0	10000.0	4.51	163.98	80.00	NO
2100.	.6337E-02	5	1.0	1.0	10000.0	4.51	170.30	82.47	NO
2200.	.5941E-02	5	1.0	1.0	10000.0	4.51	176.50	84.87	NO
2300.	.5589E-02	5	1.0	1.0	10000.0	4.51	182.59	87.22	NO
2400.	.5273E-02	5	1.0	1.0	10000.0	4.51	188.57	89.52	NO
2500.	.4989E-02	5	1.0	1.0	10000.0	4.51	194.45	91.77	NO
2600.	.4731E-02	5	1.0	1.0	10000.0	4.51	200.24	93.96	NO
2700.	.4498E-02	5	1.0	1.0	10000.0	4.51	205.93	96.12	NO
2800.	.4285E-02	5	1.0	1.0	10000.0	4.51	211.54	98.23	NO
2900.	.4090E-02	5	1.0	1.0	10000.0	4.51	217.05	100.30	NO
3000.	.3911E-02	5	1.0	1.0	10000.0	4.51	222.49	102.34	NO
3500.	.3200E-02	5	1.0	1.0	10000.0	4.51	248.52	112.00	NO
4000.	.2699E-02	5	1.0	1.0	10000.0	4.51	272.88	120.95	NO
4500.	.2328E-02	5	1.0	1.0	10000.0	4.51	295.82	129.32	NO
5000.	.2045E-02	5	1.0	1.0	10000.0	4.51	317.54	137.20	NO
5500.	.1821E-02	5	1.0	1.0	10000.0	4.51	338.21	144.67	NO
6000.	.1640E-02	5	1.0	1.0	10000.0	4.51	357.94	151.79	NO
6500.	.1491E-02	5	1.0	1.0	10000.0	4.51	376.84	158.60	NO
7000.	.1366E-02	5	1.0	1.0	10000.0	4.51	395.00	165.13	NO
7500.	.1260E-02	5	1.0	1.0	10000.0	4.51	412.50	171.43	NO
8000.	.1169E-02	5	1.0	1.0	10000.0	4.51	429.40	177.50	NO
8500.	.1090E-02	5	1.0	1.0	10000.0	4.51	445.74	183.38	NO
9000.	.1021E-02	5	1.0	1.0	10000.0	4.51	461.59	189.08	NO
9500.	.9599E-03	5	1.0	1.0	10000.0	4.51	476.98	194.62	NO
10000.	.9056E-03	5	1.0	1.0	10000.0	4.51	491.93	200.00	NO
15000.	.5772E-03	5	1.0	1.0	10000.0	4.51	623.64	247.54	NO

20000.	.4229E-03	5	1.0	1.0	10000.0	4.51	733.33	287.37	NO
25000.	.3334E-03	5	1.0	1.0	10000.0	4.51	829.16	322.33	NO
30000.	.2752E-03	5	1.0	1.0	10000.0	4.51	915.26	353.86	NO
40000.	.2249E-03	4	1.0	1.0	320.0	4.51	1552.23	1553.16	NO
50000.	.2000E-03	4	1.0	1.0	320.0	4.51	1745.74	1750.00	NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 5. M:

16.	2.943	3	1.0	1.0	320.0	4.51	3.73	3.40	NO

DIST = DISTANCE FROM THE SOURCE
CONC = MAXIMUM GROUND LEVEL CONCENTRATION
STAB = ATMOSPHERIC STABILITY CLASS (1=A, 2=B, 3=C, 4=D, 5=E, 6=F)
U10M = WIND SPEED AT THE 10-M LEVEL
USTK = WIND SPEED AT STACK HEIGHT
MIX HT = MIXING HEIGHT
PLUME HT= PLUME CENTERLINE HEIGHT
SIGMA Y = LATERAL DISPERSION PARAMETER
SIGMA Z = VERTICAL DISPERSION PARAMETER
DWASH = BUILDING DOWNWASH:
DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

****
*** SCREEN DISCRETE DISTANCES ***
****

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
5.	.4141E-01	1	1.0	1.0	320.0	4.51	1.60	1.20	NO
10.	2.018	1	1.0	1.0	320.0	4.51	3.19	2.41	NO
15.	2.920	3	1.0	1.0	320.0	4.51	3.29	3.00	NO
20.	2.720	4	1.0	1.0	320.0	4.51	3.19	2.79	NO
25.	2.785	4	1.0	1.0	320.0	4.51	3.98	3.49	NO
30.	2.498	4	1.0	1.0	320.0	4.51	4.77	4.18	NO
35.	2.184	5	1.0	1.0	10000.0	4.51	3.82	2.73	NO
40.	2.295	5	1.0	1.0	10000.0	4.51	4.37	3.11	NO
45.	2.258	5	1.0	1.0	10000.0	4.51	4.91	3.48	NO
50.	2.144	5	1.0	1.0	10000.0	4.51	5.45	3.86	NO

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED

NAOH2R.RPT

DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

****
*** USER SPECIFIED AVERAGING TIMES ***
****

ESTIMATED MAXIMUM CONCENTRATION FOR 30 MIN AVERAGING TIME:
2.943 UG/M**3 0.001803 PPM

****
*** END OF SCREEN MODEL OUTPUT ***
****

APPENDIX C

PUBLIC COMMENTS ON THE DRAFT REIR AND RESPONSES TO COMMENTS

Comments and Responses on the Recirculated Draft EIR

1. CALTRANS

EIR Comment: Page 3.2-1, section 3.2.1.1, Ambient Air Quality Standards: In the second to the last sentence, insert the words "reducing particles" after the word "visibility" to be consistent with the air pollutant naming convention in the California Air Resource Board's (CARB) table of the Ambient Air Quality Standards (AAQS) table.

Caltrans

Response: The Final EIR has been revised as suggested.

EIR Comment: Page 3.2-2, section 3.2.1.1, Table 3.2-1: Revise the following to be consistent with CARB's Ambient Air Quality Standards (AAQS) table:

a) Rename the column headings “State Standard” and “Federal Primary Standard” to “California Standard” and National Primary Standard”, respectively.
b) When comparing the AAQS table to the table provided, the carbon monoxide section is missing the eight-hour Lake Tahoe measurement.
c) Footnote 14 for Visibility-Reducing Particle is not consistent with the Visibility-Reducing Particle state standard section.

Caltrans

Response: The Final EIR has been revised as suggested and the 8-hour Lake Tahoe measurement was added.

EIR Comment: Page 3.2-3, section 3.2.1.1, Table 3.2-2: Please provide a map of the monitoring stations locations in the Bay Area.

Caltrans

Response: The locations for the air quality monitoring stations used in Table 3.2-2 can be found in the BAAQMD 2015 Air Monitoring Network Plan, which can be accessed at http://www.baaqmd.gov/~/media/files/technical-services/2015_network_plan-pdf.pdf?la=en. Maps of monitoring station locations are included within the 2015 Air Monitoring Network Plan, separated by air pollutant.

EIR Comment: Page 3.2-4, section 3.2.1.1:

a) Delete the word, “unclassifiable” in two locations in the first paragraph. Replace the word with the actual term used and that is “unclassified.”
b) Non-attainment or maintenance status of air pollutants in the first paragraph should be mentioned.

Caltrans

Response: The Final EIR has been revised as suggested.

EIR Comment: Page 3.2-4, section 3.2.1.1, Table 3.2-3: Insert the unabbreviated meaning of “Nat” and “Cal” into a footnote.

Caltrans

Response: The Final EIR has been revised as suggested.

2. CHEVRON

EIR Comment: Chevron incorporates by reference WSPA's claim of improper "piecemealing" and all other comments submitted by WSPA in its correspondence dated October 16, 2017.

Chevron

Response: See responses to WSPA comments.

EIR Comment: The RDEIR understates adverse air quality impacts that the Air District acknowledged as significant in its March 2017 draft EIR because it (1) "inexplicably" revises March 2017 Draft EIR emission assumptions and calculations for NOx emissions so that impacts are portrayed as less-than-significant, (2) omits emission increases from use of thermal oxidizers and carbon adsorption equipment caused by adoption of Rule 11-18, and (3) does not evaluate emissions that could result from requirements for the implementation of TBARCT.

Chevron

Response:

NOx Calculation Revisions

As described in the DEIR, carbon adsorption is a control technology designed to remove reactive organic gas (ROG) emissions from low concentration waste streams. The March 2017 DEIR assumes that carbon adsorption will be used primarily for emissions from wastewater treatment facilities, which typically have low concentrations of ROG emissions. Air streams with high concentrations of ROG emissions, such as those found in some refinery streams, are typically captured in vapor recovery systems so they can be used as a fuel to run other types of refinery equipment, e.g., heaters and boilers.

NOx is emitted during "regeneration," when “spent” carbon is heated to burn off ROG so that it can capture more ROG molecules. How frequently this occurs, and therefore the quantity of NOx generated, depends on the amount of ROG emissions found in the waste stream being controlled.

The carbon adsorption units in the March 2017 DEIR were described as being regenerated 4 times per day, which would allow one system to remove approximately 220 pounds of ROGs per day or 40 tons per year. This assumption overstated the quantity of ROGs available in the low concentration waste streams expected to be controlled under Rule 11-18. As a result, the carbon adsorption systems described in the March 2017 DEIR were oversized and inconsistent with DEIR's assumption that

carbon adsorption would be used to control wastewater streams. Based on this reassessment, the number of regenerations required for carbon adsorption systems that may be required under Rule 11-18 has been revised, and NOx emissions are expected to be much less than those estimated in the March 2017 DEIR. A more properly sized carbon adsorption system was used to estimate emissions in the current RDEIR, which estimates emissions from a system capable of capturing 55 pounds per day or 10 tons per year. That system is capable of controlling emissions from low concentration waste streams, while reducing the incidence of regeneration as compared to the March 2017 DEIR.

The Air District has carefully reviewed its NOx calculations for the RDEIR and has discovered an error. A system capturing 55 lbs per day of ROG would require regeneration once per day, not once per month as assumed in the RDEIR. Revisions have been made to the calculations in the final EIR. The resulting calculation yields emissions of 1.4 lbs/day. When combined with other expected NOx emissions, total operational NOx emissions are below the Air District's significance threshold so that the revised calculation does not alter the RDEIR conclusion that operational NOx emissions are less than significant.

In addition to the error in the RDEIR, there was a calculation error in the March 2017 DEIR. NOx emissions from regeneration were shown as 40.3 lbs/day. The correct number was 5.7 lbs/day, but, since Rule 11-18 was dropped from the final EIR, regeneration emissions were not included, and no correction was made to the calculation.

Emissions from Thermal Oxidizers and Carbon Adsorption at Refineries

Chevron suggests that because it uses a thermal oxidizer and carbon adsorption to control a pump station within the South Coast AQMD and because a South Coast AQMD document lists these two technologies as suitable for use in refineries, Table 2.5-3 of the RDEIR, which describes the most likely types of control technologies expected to be used to comply with the risk reduction requirements of proposed Rule 11-18 is somehow inadequate.

Chevron's argument seems to be that, because these two technologies were not included in Table 2.5-3 for refineries, the use of these technologies at refineries should be added to the RDEIR Table 2.5-4 estimates of the number of thermal oxidizers and carbon adsorption systems that will be installed under the rule. But the Air District evaluated the potential impacts associated with Rule 11-18 based on existing information and data regarding stationary sources within its jurisdiction.

Staff reviewed preliminary screening data and, based on those efforts and extensive knowledge about the Bay Area facilities, estimated how many installations of each type of equipment are likely. These estimates were not constrained by the technologies listed in Table 2.5-3. This information and data may change when new HRAs are completed for affected facilities using the latest OEHHA assumptions for estimating human health risks. But Table 2.5-4 provides reasonable estimate of air pollution equipment that is likely to be implemented under Rule 11-18. To clarify that carbon adsorption could be

used at refineries, that technology has been added to Table 2.5-3 as potential control equipment for refinery wastewater treatment.

Emissions from Implementation of TBARCT

Chevron notes that a Rule 11-18 draft from over a year ago would have permitted a facility to comply either by meeting the rule's risk action levels or by installing TBARCT, while the current rule proposal allows compliance by installing TBARCT only if meeting the risk action level is infeasible. It then argues that the Air District is required to analyze the impact of the difference between the two proposals. Its argument is based on an elaborate scenario that reflects a fundamental misunderstanding of health risk assessment and rule requirements.

Under CEQA, the Air District is required to analyze the impact of the proposal before the Board, not previously-considered and discarded drafts. But even were an analysis of the difference in impacts required, it would be impossible to do with the scenario set forth in the comment. The scenario imagines a facility with 105 sources, with each of five sources having a risk of 5, which is above the significant risk threshold of 1 for cancer, and each of the remaining 100 sources having a risk of 0.20, well below the cancer threshold. Imagining that risk is purely additive, the comment assumes the facility risk would be 45 (25 plus 100 X 0.2). With the original proposal, the comment supposes that the facility would have two options: reducing emissions from all 105 sources by 80%, or installing TBARCT on the five sources. It then further assumes that under the current proposal, the TBARCT option would not be available, and controls would have to be installed on all sources. Its argument is then that the RDEIR fails to analyze the emissions from controls on all of these sources.

The problems with Chevron's scenario is that it is an exercise in pure speculation. CEQA requires an analysis of impacts in the real world. Risk is not simply additive. It depends on the location of a source, the location of those who would be exposed, the prevailing winds, stack heights, and a host of other variables. In most cases, risk to neighbors is driven by only some of the sources at a facility. Under the current proposal, it is likely that controls would be required only for those sources. But there is no point in analyzing a scenario that cannot exist in the real world, and CEQA does not require such an analysis.

EIR Comment: The RDEIR does not contain an adequate project description that is sufficiently stable to allow accurate analysis of impacts, in particular, because staff descriptions of how risk from mobile sources would be treated have varied during the development of the rule.

Chevron

Response: The project description has been stable since the final rule proposal was made available in September. While it is true that, prior to that time, some consideration was given to including mobile source risk in determining applicability of the rule, which could have had some impact on environmental analysis, that approach was rejected

with the current proposal. Only the health risk from stationary sources would be reflected in the facility risk that would be compared against the risk action levels of the proposed rule. This is consistent with the project description in the EIR. To ensure full transparency for the public, the health risk assessments, which will be conducted by the Air District, will present information on the risk from both mobile and stationary sources. But no action will be required for risks related to mobile sources, and this information has no consequences that would require environmental analysis.

EIR Comment: The RDEIR does not contain an adequate evaluation of alternatives. The analysis of Alternative 2 (higher risk thresholds) shows water demand impacts that differ only slightly from those for the proposed rule, despite an analysis of the same alternative in the March 2017 DEIR that showed a significant difference and despite a significant difference in the number of facilities affected. In addition, the RDEIR does not evaluate a range of alternatives such as a hybrid alternative that would impose a lower risk threshold on smaller facilities and a higher threshold on larger facilities.

Chevron

Response: Water demand impacts are driven by whether refinery wet gas scrubbers will be required to meet rule requirements. Until HRAs are completed for the refineries, how many wet gas scrubbers, if any, will be required for a particular risk action level is a matter of speculation. Risk assessment is complex, and whether a wet gas scrubber would be required for a given stack would depend on the location of the stack, the inputs to the stack, the proximity of neighbors, and, as noted before, a host of other variables. In order to present what may be a worst-case analysis for water demand impacts from the proposed rule, the RDEIR assumed water demand based on the use of three wet gas scrubbers to comply with the rule. In presenting alternatives, the intent was to also avoid understating potential impacts as might result from assuming a simple linear relationship between risk action level and number of wet gas scrubbers. There is no basis for such an assumption. CEQA requires that the RDEIR look at what the impacts may be, and given the uncertainty, it is more environmentally protective to assume that water demand impacts may be about the same for Alternative 2.

Please note that the discussion on Alternative 1.2 in the March 2017 Draft EIR for Rule 12-16 was eliminated from the Final EIR because Rule 11-18 was eliminated as an alternative and there were some incorrect conclusions in Chapter 4 of the March 2017 Draft EIR. The Final EIR for Rule 12-16 contains the correct language, and the language cited in this comment (water demand impacts “would be greatly diminished”) was eliminated.

EIR Comment: The RDEIR cumulative impacts analysis is inadequate because it does not refer to related projects and does not consider how operational NOx emissions and water demand impacts would contribute to air quality and water demand impacts from those projects.

Chevron

Response: As noted in the comment, a review of cumulative impacts can include either a list of related projects or a summary of projections contained in an adopted planning document, or, pursuant the CEQA Guidelines §15130(b)(1), in an adopted or certified prior environmental document for such a plan. The current EIR uses the certified 2017 Spare the Air – Cool the Climate: A Blueprint for Clean Air and Climate Protection (2017 Clean Air Plan) in the Bay Area Final EIR (State Clearinghouse No. 2016062046) to address cumulative impacts, including air quality and water demand impacts. The 2017 Clean Air Plan Final EIR included the evaluation of the environmental impacts of a total of 85 control measures in nine categories, essentially the Air District's entire regulatory program. The 2017 Clean Air Plan Final EIR evaluated the impacts of all of these control measures (including Rule 11-18), to the extent that information is available, on all applicable environmental resources. The cumulative air quality impacts as evaluated in the 2017 Clean Air Plan EIR, which included Rule 11-18, concluded that "Emission reductions from the 2017 Plan are expected to far outweigh any potential secondary emission increases associated with implementation of the control measures in the 2017 Plan (including Rule 11-18), providing a beneficial impact on air quality and public health." (see page 3.2-48 of the Rule 11-18 EIR). Large emission reductions from the 2017 Clean Air Plan include reductions in ROG emissions of 1,596 tons/year; NOx emissions of 2,929 tons/year; SOx emissions of 2,590 tons/year, and PM2.5 emission reductions of 503 tons/year.

Regarding the NOx emissions in the March 2017 Draft EIR, please see the Air District's response to Chevron's comment on this issue. NOx emissions do not exceed the significance threshold and are not considered to be cumulatively considerable.

Cumulative hydrology impacts were addressed in the Draft EIR (see page 3.5-26) and concluded to be cumulatively considerable. In addition, the following paragraph will be added for further clarification.

> The 2017 Clean Air Plan contains a total of 85 control measures that the District intends to impose to improve overall air quality in the District. Control measures in the 2017 Clean Air Plan included Rule 11-18 as well as a number of other control measures to control emissions from refineries as well as other stationary sources and transportation control measures. The 2017 Clean Air Plan is expected to result in overall reductions in VOC, NOx, SOx, and PM emissions, providing an air quality benefit (BAAQMD, 2017). The Final EIR for the 2017 Air Plan evaluated the potential hydrology and water quality impacts associated with implementation of the 85 control measures (including Control Measure SS20 Air Toxics Risk Cap and Reduction from Existing Facilities, which is proposed Rule 11-18) and concluded that the 2017 Plan could result in the installation of control equipment that would utilize water in excess of the water demand significance thresholds. Accordingly, stationary source control measures in the 2017 Plan may result in a cumulative considerable contribution to water demand. The impacts on wastewater treatment and water quality associated with the 2017 Plan do not include any specifically identified actions that would result in any

cumulatively considerable contributions to water treatment and water quality impacts.

The conclusion in the Final EIR remains the same as the conclusion in the Draft EIR: Rule 11-18 is expected to result in water demand impacts that would be cumulatively considerable.

3. WSPA

EIR Comment: By failing to review Rule 11-18 in conjunction with all rules that have been considered for implementing the Air District's Petroleum Refinery Emissions Reduction Strategy, the Air District has engaged in "piecemealing" of the project in violation of CEQA.

WSPA

Response: As a preliminary matter, Rule 11-18 has not been considered to be part of the Refinery Strategy. (See the response below to WSPA's comment on the origins of Rule 11-18.) Even if it is considered part of that strategy, the Air District disagrees that a failure to review all rules that have been considered for implementation of the Refinery Strategy constitutes segmentation or “piecemealing” for CEQA purposes.

The Air District believes the manner in which it has considered and adopted rules implementing the Board of Directors’ October 2014 Refinery Strategy Resolution does not constitute piecemealing for two primary reasons. First, because the Refinery Strategy Resolution was not itself a CEQA project, it follows that rules implementing it are not susceptible to being piecemealed as part of a larger CEQA project. Second, under established judicial precedent, because each rule implementing the Refinery Strategy Resolution has independent utility, analyzing these rules separately is appropriate, and does not constitute piecemealing.

Comments advancing the piecemealing argument characterize the Refinery Strategy as qualitatively different from the Air District’s historic approach to regulating refinery emissions. The Air District’s approach to rulemaking and the methodologies used are no different than in the past, and the rules themselves have the same independent utility as rules pre-dating the Refinery Strategy. The difference in rulemaking activity undertaken pursuant to the Refinery Strategy is at most quantitative over a given period of time, but there is no qualitative difference that would the larger policy effort referred to as the “Refinery Strategy” is itself a CEQA project.

For almost 50 years, virtually since its inception as an agency, the Air District has been adopting rules applicable to Bay Area refineries. Prior to 2015, at least 22 rules developed, adopted, and from time to time amended by the Air District were applicable to refineries. Notwithstanding this extensive historical effort, regulation of refinery emissions was neither complete nor static prior to the Board of Director’s 2014 adoption of the Refinery Strategy. This is evident, for instance, in the 2010 Clean Air Plan. The Clean Air Plan is a scoping document for rulemaking efforts the Air District anticipates

over the next few years. The 2010 Clean Air Plan Stationary Source Measure 8 – addressing reduction of SO_2 from petroleum coke calcining – was later identified as a component of the Refinery Strategy and was ultimately adopted as Rule 9-14. Stationary Source Measure 18 -- "Revisions to the Hot Spots Air Toxics Program" -- was described in the 2010 Clean Air Plan as an enhancement of the Air District's hot spots program similar to Rule 11-18. Rule 12-15 -- adopted in 2016 and requiring enhanced emissions information from refineries -- was not identified in the 2010 Plan, but was included as "Action Item 4" in the Air District's 2012 Work Plan (a list, required pursuant to Health & Safety Code Section 40923 of regulations planned for adoption in the coming year).

The overlap between the 2010 Clean Air Plan, the 2012 Work Plan, and the Air District's efforts to implement the Refinery Strategy effort demonstrates the continuity of the Air District's efforts to reduce refinery emissions before and after the Board of Director's 2014 adoption of the Refinery Strategy. It could not reasonably be argued that the cumulative historic effort to regulate refinery emissions is a unified CEQA project such that evaluating each rule separately constitutes piecemealing. Such an argument would advocate for the impossible, namely, that the Air District should have at some point in the past foreseen and analyzed under CEQA the future of refinery regulation. The piecemealing argument posits a qualitative break in this historical continuity marked by the October 2014 Board Resolution. This begs the question: what distinguishes activity implementing the Refinery Strategy from the decades of continual regulatory development that preceded it?

The Air District's legal analysis starts with the proposition that if the Board Resolution was not itself a CEQA project, then it has no implication for what constitutes the "whole of the action" under CEQA. Put another way, if the 2014 Board Resolution has no significance under CEQA, then it did not have potential to change the CEQA significance of anything else, including the rules identified as making progress towards the policy goal announced in the resolution.

The 2014 Board Resolution was a statement by the Air District Board of Directors setting an aspirational goal to achieve a certain degree of emissions reductions from refineries within a certain period of time. A resolution is the expression by the members of the Air District governing board of a position or sense. It has no regulatory effect, and is neither a necessary nor sufficient basis for any subsequent action that might have regulatory effect.

A "project," for CEQA purposes, is "an activity which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment." The Refinery Strategy Board Resolution fails to meet this definition because it is not an "activity" at all. Unlike a general plan for land development or an agreement to allocate funds, the Refinery Strategy Board resolution is not a legal or functional prerequisite to further rulemaking.

The commenters may be arguing that, although the 2014 Refinery Strategy Board Resolution is not itself a project, it was reasonably foreseeable that rules implementing it would be adopted, and that this foreseeability is enough to create a larger CEQA project corresponding to the Refinery Strategy effort. However, as explained above, it was foreseeable that additional rules regulating refinery emissions would be developed by the Air District even without the Board Resolution. Such rules were in development prior to the Board Resolution, and some of these rules later became identified as part of the Refinery Strategy. Put another way, there is nothing in the record to suggest that, with State air quality goals still unattained, the refineries (as among the largest stationary sources of air pollution in the Air District) would not have been subject to future regulation but for the Refinery Strategy.

Separate CEQA analysis of the rules implementing the Refinery Strategy is proper because each rule has independent utility. See, e.g., *Del Mar Terrace Conservancy, Inc. v. City Council of the City of San Diego*, 10 Cal.App. 4th 712 (1992). Air District rules generally have independent utility because each operates independently of the others to reduce emissions from a specific operation, and because the emissions reduction from each rule advances the goal of reducing emissions regardless of whether another rule is adopted. This is generally true of the rules implementing the Refinery Strategy.

The Air District has at times sought to combine various Refinery Strategy rules together into common CEQA documents. In each of these combined CEQA analyses it was noted that rules were being combined for administrative convenience only, and that no inference was created that the rules were functionally interdependent. If there is no larger CEQA project encompassing these various rules, then the significance of combining them in one CEQA document is a purely administrative. Nor is it otherwise legally improper to combine distinct CEQA projects into one CEQA document. See, *Neighbors of Cavitt Ranch v. County of Placer*, 106 Cal. App. 4th 1092 (2003).

The practical difficulties in analyzing all Refinery Strategy rules in one CEQA analysis would be insurmountable. If, for instance, CEQA analysis should have been completed prior to the Board announcing the 20% reduction policy goal, such an analysis would have been pure speculation. Analysis of an emissions reduction figure is an empty exercise unless the details of how those reductions will be achieved are known. The Refinery Strategy Board Resolution was a directive to staff to attempt to develop such details. It is implausible that CEQA requires the governing board of a public agency to conduct a CEQA study prior to issuing such a directive to its staff.

As a practical matter, analyzing all Refinery Strategy rules together under CEQA to the level of detail found in the Recirculated Draft EIR for Rule 11-18 could only occur if all the rules were proposed simultaneously. Resource constraints alone make such a scenario highly unlikely. Resources aside, technically complex rules such as those applicable at different refinery operations will develop at a different pace and on different schedules. The development of rules comprising the Refinery Strategy illustrates this. The Refinery Strategy effort has been in continual flux as new

information and analysis (much of it coming from the public and the refineries themselves) has emerged. The iterative process of proposing ideas, soliciting feedback, and revising proposals is appropriate and normal for development of a single rule. This iterative nature is multiplied as additional rules are developed during the same time frame. With several rules simultaneously under consideration, an attempt to conduct CEQA analysis on the totality of such an effort would result in an endless loop of revision and recirculation of CEQA documents, effectively foreclosing the adoption of any rules under consideration. The Air District believes CEQA intends no such result.

EIR Comment: The Air District has changed its rationale for proposing Rule 11-18, describing it as having origins in both the Work Plan for Action Items Related to Accidental Releases from Industrial Facilities and as Stationary Source Control Measure SS20 in 2017 Clean Air Plan.

WSPA

Response: Rule 11-18 has its roots in "Stationary Source Measure 18 -- Revisions to the Hot Spots Air Toxics Program" from the 2010 Clean Air Plan. SSM 18 was described as an enhancement of the Air District's hot spots program that would impose more stringent risk reduction requirements on existing facilities. The proposed rule was later incorporated into the Air District's 2017 Clean Air Plan as Stationary Source Control Measure SS20. No rule similar to Rule 11-18 was proposed in the "Work Plan for Action Items Related to Accidental Releases from Industrial Facilities."

EIR Comment: The Air District should define "overburdened" as it is used in Section 1.3.1 of the DEIR, since the term is not used in Rule 11-18.

WSPA

Response: The project description in the RDEIR adequately describes the project for CEQA purposes. In the proposed rule, the regulatory term "priority community" is defined as "[a] geographic area where levels of toxic air contaminants are higher than other areas and where people may be particularly vulnerable and may bear disproportionately higher adverse health effects." The RDEIR uses the term "overburdened community" as synonymous with "priority community."

EIR Comment: In the RDEIR, the District does not explain or justify what constitutes an "unacceptable health risk" nor has it addressed the cumulative impacts of the risk threshold of 10/M relative to background risk, i.e., whether risk will be significantly reduced below background risk.

WSPA

Response: This comment is not relevant to the CEQA analysis but has been addressed in the response to comments on the proposed rule. The cumulative impact analysis is intended to address any negative environmental impacts of the rule, not cumulative environmental improvements due to the rule.

EIR Comment: The RDEIR fails to recognize all potential applications of thermal oxidizers and carbon adsorption because Table 2.5-3 fails to identify thermal oxidizers and carbon adsorption as potential control technologies for refinery fugitive emissions, and therefore fails to address the additional construction and operational impacts of applying these technologies to refineries.

WSPA

Response: As noted above in the response above to same comment from Chevron, Table 2.5-3 did not constrain estimates of numbers and types control equipment expected to be installed under the rule. See the response to Chevron for a more complete response.

EIR Comment: The DEIR fails to provide the basis for significantly decreasing the frequency of regenerations for applications of carbon adsorption.

WSPA

Response: The basis for the decrease as well as corrections made to calculations are explained above in the response above to the same comment from Chevron. See the response to Chevron for a more complete response.

WSPA

EIR Comment: The DEIR's impact analysis of alternatives is inadequate and fails to provide the basis for the environmental impacts of Alternative 2, as it gives no explanation for why the number of refinery wet gas scrubbers remains unchanged under Alternative 2 despite a significantly higher risk action level.

WSPA

Response: As noted above in the response to the same comment from Chevron, the uncertainty associated with health risk assessment means that there is no basis for assuming a simple linear relationship between risk action level and number of wet gas scrubbers. See the response to Chevron for a more complete response.

4. BACWA

EIR Comment: BACWA suggests editorial changes to the text regarding sewage treatment facilities to accurately depict and reference facilities and operations.

BACWA

Response: This text has been edited based on the BACWA's comments. Revisions have been made to the description of equalization basins and regarding anaerobic digesters.

EIR Comment: The second sentence and its footnote in Section 3.2.4.1.3 need to be deleted, as it is outdated information and no longer represents the full scope of wastewater treatment facilities in the Bay Area:

~~A survey of wastewater treatment facilities in the Bay Area indicated that there are at least 20 facilities ranging in size from a discharge rate of 0.1 to greater 30 million gallons per day (Pacific Institute, 2009).~~

BACWA

Response: The information on the number and size of wastewater treatment facilities was updated using more recent information.

EIR Comment: BACWA proposes the following addition to Section 3.2.4.1.3, page 3.2-30:

If it is determined that affected facilities, primarily sewage treatment facilities, exceed the health risk requirements in Rule 11-18 and a decision is made to install a carbon adsorption unit or thermal oxidizer, then it would likely take months, possibly years, to provide engineering specifications, acquire financing, purchase and deliver the necessary equipment, complete Air District permit evaluations, and undergo any necessary environmental analyses, as well as obtain local Board and rate payer approvals.

It is critical to acknowledge that the planning process for implementation of reduction measures to include communication with a wastewater treatment facility's Board and rate payers.

BACWA

Response: The air quality impact section is not the appropriate location for information regarding engineering and timing for new equipment. Similar language was added to the Project Description portion of the Final EIR (see page 2-21).

EIR Comment: Under Section 3.5.2.2.5 (Wastewater Treatment Regulations), delete the following text, as the Regional Water Quality Control Board is the entity that issues discharge permits to municipal wastewater treatment facilities:

~~*In addition to federal and state restrictions on wastewater discharges, most incorporated cities in California have adopted local ordinances for wastewater treatment facilities. Local ordinances generally require treatment system designs to be reviewed and approved by the local agency prior to construction."*~~

BACWA

Response: The language in this section was not changed as it is not specific to municipal wastewater treatment facilities but also includes wastewater treatment equipment at individual stationary sources, e.g., refineries, manufacturing facilities, etc.

EIR Comment: Biosolids are regulated under the Clean Water Act via Title 40 of the Code of Federal Regulations [CFR], Part 503. A description of Rule 503 should be added to Section 3.5.2.1.1.

BACWA

Response: A description of 40 CFR Part 503 was added to the Final EIR as requested.

EIR Comment: Wastewater treatment facilities are regulated by multiple governmental agencies whose goals can result in contradictory impacts to the municipal wastewater sector, and regulations should be viewed holistically to address cross-media impacts and operational and financial effects.

BACWA

Response: The Air District will continue to work with BACWA and its members to address this concern.

EIR Comment: BACWA appreciates the reference in Section 3.5.4.3 (Conclusion, page 3.5-22) considering the impacts to water quality from the installation of air pollution control equipment:

> *"Based upon the above considerations, water quality impacts from installing most types of air pollution control equipment that use water as part of the control process would not exceed applicable water quality significance thresholds and, therefore, are concluded to be less than significant."*
>
> *BACWA*

List of Commenters

Abbreviation	Commenter / Reference
BACWA	David R. Williams, Executive Director, Bay Area Clean Water Association, Letter, October 26, 2017
BCDC	Cody Aichele-Rothman, Coastal Planning Analyst, San Francisco Bay Conservation and Development Commission, Letter, October 16, 2017
Caltrans	Patricia Maurice, District Branch Chief, District 4, California Department of Transportation, Letter, October 16, 2017
Chevron	Marc R. Bruner, PerkinsCoie, Letter, October 16, 2017
WSPA	Bob Brown, Director, Bay Area Region, Western States Petroleum Association, Letter, October 16, 2017
WSPA 2	Bob Brown, Director, Bay Area Region, Western States Petroleum Association, Letter, May 8, 2017

Bay Area Air District

APPENDIX F

Mitigation Monitoring and Reporting Program for Rule 11-18

This page has been intentionally left blank.

BAY AREA AIR DISTRICT

Mitigation Monitoring and Reporting Program for the Final Addendum to the Environmental Impact Report for Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities

May 2026

State Clearinghouse No. 2016102043
[November 2017 Recirculated Final EIR]

Bay Area Air District
375 Beale Street, Suite 600
San Francisco, California 94105

Contact: Katie Gong, Senior Air Quality Engineer,
Regulatory Development Division
(415) 749-4790

Prepared by:
Environmental Audit, Inc.

[This page intentionally left blank]

TABLE OF CONTENTS

MITIGATION MONITORING AND REPORTING PROGRAM FOR THE FINAL ADDENDUM TO THE EIR FOR RULE 11-18

Page No.

1.0 MITIGATION MONITORING AND REPORTING PROGRAM....1
2.0 MITIGATION MEASURES....1
2.1 AIR QUALITY IMPACTS AND MITIGATION MEASURES....2
2.2 GREENHOUSE GAS IMPACTS AND MITIGATION MEASURES....3
2.3 HAZARDS AND HAZARDOUS MATERIALS IMPACTS AND MITIGATION MEASURES....4
2.4 HYDROLOGY AND WATER QUALITY IMPACTS AND MITIGATION MEASURES....6

TABLES

Table 1: Mitigation Monitoring and Reporting Program for Air District Rule 11-18....7

[This page intentionally left blank]

BAY AREA AIR DISTRICT

Rule 11-18: Reduction of Risk from Air Toxic Emissions at Existing Facilities

1.0 MITIGATION MONITORING AND REPORTING PROGRAM

The Mitigation Monitoring and Reporting Program (MMRP) is a required component of the California Environmental Quality Act (CEQA) process, when mitigations are imposed on projects for which Environmental Impact Reports (EIRs) or Mitigated Negative Declarations have been prepared.

When a public agency conducts an environmental review of a proposed project in conjunction with approving it, the lead agency shall adopt a program for monitoring or reporting on the measures it has imposed to mitigate or avoid significant adverse environmental effects pursuant to the requirements of CEQA Guidelines §15097 and PRC §21081.6. PRC §21081.6 states in part that when making the findings required by §21081(a):

"... the public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead or responsible agency, prepare and submit a proposed reporting or monitoring program."

Enforcement of the mitigation, monitoring, and reporting requirements described in this program is primarily the responsibility of the Bay Area Air District (Air District) as the lead agency under CEQA. The mitigation measures discussed herein are primarily the responsibility of the project applicants to implement. To certify compliance, documentation that mitigation measures have been implemented will be maintained by the project applicants to ensure potential environmental impacts are mitigated in accordance with the performance standards in the FEIR.

2.0 MITIGATION MEASURES

During the preparation of the Final EIR for Rule 11-18, potentially significant impacts were identified for air quality, greenhouse gases (GHG), hazards and hazardous materials, and hydrology and water quality (water demand) impacts. The following mitigation measures were imposed.

2.1 AIR QUALITY IMPACTS AND MITIGATION MEASURES

Based on the evaluation of those air pollution control technologies that would most likely be used to reduce toxic air contaminant (TAC) emissions from affected facilities (if applicable) pursuant to proposed Rule 11-18, air quality impacts from construction activities associated with the proposed project could generate emissions that exceed the Air District's construction emission thresholds. Therefore, construction air quality impacts were concluded to be significant for ROG, NOx, PM10 and PM2.5 emissions. Air quality emissions were determined to be less than significant during the operational phases associated with implementation of Rule 11-18.

The following mitigation measures were imposed.

A-1 Develop a Construction Emission Management Plan for each affected facility to minimize emissions from vehicles including, but not limited to: consolidating truck deliveries; scheduling deliveries to avoid peak hour traffic conditions; describing truck routing; describing deliveries including logging delivery times; describing entry/exit points; identifying locations of parking; identifying construction schedule; and prohibiting truck idling in excess of five consecutive minutes or another timeframe as allowed by the California Code of Regulations, Title 13 §2485 - CARB's Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. The Construction Emission Management Plan shall be submitted to Air District staff for approval prior to the start of construction. At a minimum, the Construction Emission Management Plan would include the following types of mitigation measures.

On-Road Mobile Sources:

A-2 The Construction Emission Management Plan shall include measures to minimize emissions from vehicles including, but not limited to, consolidating truck deliveries, prohibiting truck idling in excess of five minutes as contract conditions with carriers and by posting signs onsite, specifying truck routing to minimize congestion emissions, specifying hours of delivery to avoid peak rush-hour traffic, allowing ingress/egress only at specified entry/exit points to avoid heavily congested traffic intersections and streets, and specifying allowable locations of onsite parking.

Off-Road Mobile Sources:

A-3 Prohibit construction equipment from idling longer than five minutes at the facility under consideration as contract conditions with construction companies and by posting signs onsite.

A-4 Maintain construction equipment tuned up and with two- to four-degree retard diesel engine timing or tuned to manufacturer's recommended specifications that optimize emissions without nullifying engine warranties.

A-5 The facility operator shall survey and document the locations of construction areas and identify all construction areas that are served by electricity. This documentation shall be provided as part of the Construction Emissions Management Plan. Electric welders shall be used in all construction areas that are demonstrated to be served by electricity.

A-6 The facility operator shall survey and document the locations of construction areas and identify all construction areas that are served by electricity. This documentation shall be provided as part of the Construction Emissions Management Plan. Onsite electricity rather than temporary power generators shall be used in all construction areas that are demonstrated to be served by electricity.

A-7 If cranes are required for construction, cranes rated 200 hp or greater equipped with Tier 4 or equivalent engines shall be used. Engines equivalent to Tier 4 may consist of Tier 3 engines retrofitted with diesel particulate filters and oxidation catalysts, selective catalytic reduction, or other equivalent NOx control equipment. Retrofitting cranes rated 200 hp or greater with PM and NOx control devices must occur before the start of construction. If cranes rated 200 hp or greater equipped with Tier 4 engines are not available or cannot be retrofitted with PM and NOx control devices, the facility operator shall use cranes rated 200 hp or greater equipped with Tier 3 or equivalent engines. The facility operator shall provide documentation in the Construction Emissions Management Plan or associated subsequent status reports as information becomes available that cranes rated 200 hp or greater equipped with Tier 4 or equivalent engines are not available.

A-8 For off-road construction equipment rated 50 to 200 hp that will be operating for eight hours or more, the facility operator shall use equipment rated 50 to 200 hp equipped with Tier 4 or equivalent engines. Engines equivalent to Tier 4 may consist of Tier 3 engines retrofitted with diesel particulate filters and oxidation catalysts, selective catalytic reduction, or other equivalent NOx control equipment. Retrofitting equipment rated 50 to 200 hp with PM and NOx control devices must occur before the start of construction. If equipment rated 50 to 200 hp equipped with Tier 4 engines is not available or cannot be retrofitted with PM and NOx control devices, the facility operator shall use equipment rated 50 to 200 hp equipped with Tier 3 or equivalent engines. The facility operator shall provide documentation in the Construction Emissions Management Plan or associated subsequent status reports as information becomes available that equipment rated 50 to 200 hp equipped with Tier 4 or equivalent engines are not available.

2.2 GREENHOUSE GAS IMPACTS AND MITIGATION MEASURES

Based on the evaluation of those air pollution control technologies that would most likely be used to reduce TAC emissions from affected facilities (if applicable) pursuant to proposed Rule 11-18, GHG emission impacts could exceed the Air District's operational GHG emissions significance threshold of 10,000 $MTCO_2e$/yr. Therefore, because the analysis of GHG emission impacts is by

definition a cumulative impact analysis, cumulative operational GHG emission impacts for Rule 11-18 are concluded to be significant.

While potentially significant GHG emission impacts were identified, no feasible mitigation measures were identified. However, some GHG emissions may be offset under the California Cap-and-Trade Program (renamed to be called the Cap-and-Invest Program).

Under the Cap-and-Invest program, industrial sectors receive allowances. An allowance is a tradable permit to emit one metric ton of a carbon dioxide equivalent GHG emissions. Allowances are distributed among facilities based on their complexity and energy efficiency. The more energy efficient a facility is, the greater the allocation it receives. Further, the AB32 Cap and Trade Program requires that the facilities subject to the program offset any GHG emissions in excess of the total allowance obtained through the program. As the emissions cap is gradually reduced over time, and as additional sources are brought under the cap to include the vast majority of GHG emissions in the State, the program will ensure that California remains on track to continually reduce GHG emissions. Operational GHG emission increases would be offset if they occurred at facilities that are included in the Cap-and-Invest Program. However, since there is no specific information as to where the air pollution control equipment would occur it would be speculative to assume that GHG emissions would be offset under the AB 32 Cap-and-Invest Program at this time. Nonetheless, some or all of the GHG emissions that may be generated to comply with Rule 11-18 may be offset under the Cap-and-Invest Program.

2.3 HAZARDS AND HAZARDOUS MATERIALS IMPACTS AND MITIGATION MEASURES

Based on the evaluation of those air pollution control technologies that would most likely be used to reduce TAC emissions from affected facilities if required pursuant to proposed Rule 11-18, hazards and hazardous materials impacts from the use of baghouses and dry electrostatic precipitators to comply with Rule 11-18 are potentially significant.

The following mitigation measures were imposed.

Baghouses

HHM-1 Maintain a comprehensive dust control program, with hazard dust inspections, testing, housekeeping, and control initiatives.

HHM-2 Ground the filter elements using grounding wires, rods, etc., to prevent sparks that could be generated during cleaning.

HHM-3 Install additional explosion rupture panels and vent outdoors.

HHM-4 If the collector filters are to be replaced, the first procedure is to remove as much flammable or explosive dusts from the filters as possible. Reverse the exhaust fan's

direction to maintain a low flow and prevent dust from returning to the hood. Clean the collector one section at a time allowing time for the dust to settle into the collection hopper. After several complete cleaning cycles a large portion of the dust will be ejected, which is expected to lower the exposure of the worker in handling the filter elements.

HHM-5 Perform all hot work (welding, acetylene cutting, grinding, etc.) away from the collector, if possible.

HHM-6 Ensure that power tools and impact hand tools (such as hammers, chippers, etc.) used by maintenance personnel that could present a sparking hazard are not used in high dust concentrations. When such work is being performed on the structure itself, make certain the dust concentrations within the enclosure are well below combustible levels.

HHM-7 Ensure adherence to National Fire Protection Agency (NFPA) standards including, but not limited to, NFPA 499, Recommended Practice for the Classification of Combustible Dusts and of Hazardous (classified) Locations for Electrical Installations in Chemical Process Areas.

Dry Electrostatic Precipitators

HHM-8 Fire and explosion risks can be reduced by equipping dry ESPs with CO sensors that send a signal to a safety system to stop the process when CO concentrations exceed the critical limit. This solution reduces the risk dramatically.

HHM-9 Modern digital electronic controls shall be used to automate this process to assure the dry ESP operates at peak performance levels at all times.

HHM-10 The bottom and top of each wire should be covered with shrouds to help minimize sparking and metal erosion at these points.

HHM-11 To further reduce fire and explosion hazards, affected operators shall establish the inspection frequency of all dry ESP components through a formal inhouse maintenance procedure. Vendors' recommendations for an inspection schedule shall be followed and shall include at a minimum, the following procedures.

Daily: On a daily basis operation of hoppers and ash removal system should be checked; the control room ventilation system should be examined; any abnormal arcing in the ESP enclosure and ducts (typically caused by broken wires, which may swing freely causing shorting between discharge and collector electrodes) should be investigated; and electrodes should be checked.

Weekly: Air filters should be checked and cleaned on a weekly or more frequently.

Semianually: On a semiannual basis the operator should check the exterior for visual signs of deterioration, and abnormal vibration, noise, or leaks.

2.4 HYDROLOGY AND WATER QUALITY IMPACTS AND MITIGATION MEASURES

Based on the evaluation of those air pollution control technologies that would most likely be used to reduce TAC emissions from affected facilities (if applicable) pursuant to Rule 11-18, large wet gas scrubber(s) installed to comply with Rule 11-18 requirements could result in significant water demand impacts due to operation of new scrubbers.

The following mitigation measures were imposed.

HWQ-1 When air pollution control equipment is installed and water is required for its operation, the facility is required to use recycled water, if available, to satisfy the water demand for the air pollution control equipment.

HWQ-2 In the event that recycled water cannot be delivered to the affected facility, the facility is required to submit a written declaration with the application for a Permit to Construct for the air pollution control equipment, to be signed by an official of the water purveyor indicating the reason(s) why recycled water cannot be supplied to the project.

Table 1 below provides the information required in the MMRP for mitigation measures imposed by the Final EIR for Rule 11-18. The Rule was adopted to reduce health risks from all facilities whose emissions of toxic air contaminants may result in a significant risk to nearby residents and workers. Rule 11-18 applies to numerous facilities, including data centers, petroleum refineries, a cement kiln, chemical plants, to name a few. As discussed above, mitigation measures were identified for construction air quality impacts, hazard impacts, and water demand (hydrology and water quality).

TABLE 1-1

Mitigation Monitoring and Reporting Program for Air District Rule 11-18

Mitigation Measure Summary	Monitoring Action	Responsible Party/Agency	1. Enforcement Agency 2. Monitoring Entities 3. Monitoring Phase
Air Quality			
A-1: Develop a Construction Emission Management Plan for each affected facility to minimize emissions from vehicles.	Applicants are responsible for preparation of the Construction Emission Management Plan and maintaining records documenting implementation. Air District is responsible for reviewing and approving the Plan. Records shall be maintained for two years following the completion of construction activities.	Applicant to develop plan Air District to review/approve plan	1. Air District 2. Air District 3. Prior to start of construction and during construction
A-2: The Construction Emission Management Plan shall include measures to minimize emissions from vehicles including, but not limited to, consolidating truck deliveries.	Applicants are responsible for preparation of the Construction Emission Management Plan and maintaining records documenting implementation. Air District is responsible for reviewing and approving the Plan. Records shall be maintained for two years following the completion of construction activities.	Applicant to develop plan Air District to review/approve plan	1. Air District 2. Air District 3. Prior to start of construction and during construction
A-3: Prohibit construction equipment from idling longer than five minutes at the facility under consideration as contract conditions with construction companies and by posting signs onsite.	Prepare notification letter explaining idling limitation during construction, include in contract, remind contractors during shift meetings, and provide copy of letter to all contractors. Post signs on-site. Records shall be maintained for two years following the completion of construction activities.	Applicant to implement	1. Air District 2. Air District/Applicant 3. Prior to start of construction and daily during construction.
A-4: Maintain construction equipment tuned up and with two- to four-degree retard diesel engine timing or tuned to manufacturer's recommended specifications that optimize emissions without nullifying engine warranties.	Applicants to maintain records of vehicle maintenance activities. Records shall be maintained for two years following the completion of construction activities.	Applicant to implement	1. Air District 2. Air District/Applicant 3. During construction

TABLE 1-1

Mitigation Monitoring and Reporting Program for Air District Rule 11-18

Mitigation Measure Summary	Monitoring Action	Responsible Party/Agency	1. Enforcement Agency 2. Monitoring Entities 3. Monitoring Phase
Air Quality (cont.)			
A-5: The facility operator shall survey and document the locations of construction areas and identify all construction areas that are served by electricity. Electric welders shall be used in all construction areas that are demonstrated to be served by electricity.	Prepare site plan that identifies construction areas where electricity is not available and non-electric (gasoline or diesel) welders are permissible. If applicable, identify areas where safety prohibits the use of electric power tools. Maintain records of use of non-electric welders including location, date, duration of use, and fuel type. Records shall be maintained for two years following the completion of construction activities.	Applicant to implement	1. Air District 2. Air District/Applicant 3. Prior to start of construction and daily during construction.
A-6: The facility operator shall survey and document the locations of construction areas and identify all construction areas that are served by electricity. Onsite electricity rather than temporary power generators shall be used in all construction areas that are demonstrated to be served by electricity.	Prepare site plan that identifies construction areas where electricity is not available and non-electric (gasoline or diesel) temporary power generators are permissible. If applicable, identify areas where safety prohibits the use of electric power generators. Maintain records of use of non-electric generators including location, date, duration of use, and fuel type. Records shall be maintained for two years following the completion of construction activities.	Applicant to implement	1. Air District 2. Air District/Applicant 3. Prior to start of construction and during construction.
A-7: If cranes are required for construction, cranes rated 200 hp or greater equipped with Tier 4 or equivalent engines shall be used.	Maintain records of all crane with engines rated at more than 200 hp including 1) equipment description; 2) equipment ID; 3) dates operated on-site; 4) engine hp rating; 5) engine tier certification; 6) description of control technologies and CARB certification; and, 7) justification for use of equipment with less than Tier 4 engines, if Tier 4 engines are not available. Records shall be maintained for two years following the completion of construction activities.	Applicant to implement	1. Air District 2. Air District/Applicant 3. Prior to start of construction and during construction.

TABLE 1-1

Mitigation Monitoring and Reporting Program for Air District Rule 11-18

Mitigation Measure Summary	Monitoring Action	Responsible Party/Agency	1.Enforcement Agency 2.Monitoring Entities 3.Monitoring Phase
Air Quality (cont.)			
A-8: For off-road construction equipment rated 50 to 200 hp that will be operating for eight hours or more, the facility operator shall use equipment rated 50 to 200 hp equipped with Tier 4 or equivalent engines.	Maintain records of all diesel-fueled construction equipment with engines rated at more than 50 hp including 1) equipment description; 2) equipment ID; 3) dates operated on-site; 4) engine hp rating; 5) engine tier certification; 6) description of control technologies and CARB certification; and, 7) justification for use of equipment with less than Tier 4 engines, if Tier 4 engines are not available. Records shall be maintained for two years following the completion of construction activities.	Applicant to implement	1. Air District 2. Air District/Applicant 3. During construction
Hazards and Hazardous Materials			
HHM-1: Maintain a comprehensive dust control program, with hazard dust inspections, testing, housekeeping, and control initiatives.	Applicant to develop and implement dust control program for installation of new baghouses. Maintain records documenting inspections, testing, housekeeping and control initiatives. Compliance records shall be maintained for two years.	Applicant to implement	1. Air District 2. Air District/Applicant 3. Prior to and during operation
HHM-2: Ground the filter elements using grounding wires, rods, etc., to prevent sparks that could be generated during cleaning.	Applicant to maintain records of grounding. Compliance records shall be maintained for two years.	Applicant to implement	1. Air District 2. Air District/Applicant 3. Prior to and during operation
HHM-3: Install additional explosion rupture panels and vent outdoors.	Applicant to maintain records of installation of rupture panels and venting. Compliance records shall be maintained for two years.	Applicant to implement	1. Air District 2. Air District/Applicant 3. Prior to and during operation

TABLE 1-1

Mitigation Monitoring and Reporting Program for Air District Rule 11-18

Mitigation Measure Summary	Monitoring Action	Responsible Party/Agency	1.Enforcement Agency 2.Monitoring Entities 3.Monitoring Phase
Hazards and Hazardous Materials (cont.)			
HHM-4: If the collector filters are to be replaced, remove as much flammable or explosive dusts from the filters as possible. Reverse the exhaust fan's direction to maintain a low flow and prevent dust from returning to the hood. Clean the collector one section at a time allowing time for the dust to settle into the collection hopper.	Applicant to maintain records of installation of cleaning activities. Compliance records shall be maintained for two years.	Applicant to implement	1. Air District 2. Air District/Applicant 3. Prior to and during operation
HHM-5: Perform all hot work (welding, acetylene cutting, grinding, etc.) away from the collector, if possible.	Applicant to maintain records of installation of rupture panels and venting. Compliance records shall be maintained for two years.	Applicant to implement	1. Air District 2. Air District/Applicant 3. Prior to and during operation
HHM-6: Ensure that power tools and impact hand tools (such as hammers, chippers, etc.) used by maintenance personnel that could present a sparking hazard are not used in high dust concentrations. Make certain the dust concentrations within the enclosure are well below combustible levels.	Applicant to monitor and maintain records of dust concentrations prior to maintenance activities. Compliance records shall be maintained for two years.	Applicant to implement	1. Air District 2. Air District/Applicant 3. During operation
HHM-7: Ensure adherence to National Fire Protection Agency (NFPA) standards.	Applicant to monitor and maintain records associated with compliance with NFPA standards relating to hazards and hazardous materials. Compliance records shall be maintained for two years.	Applicant to implement	1. Air District 2. Air District/Applicant 3. During operation

TABLE 1-1

Mitigation Monitoring and Reporting Program for Air District Rule 11-18

Mitigation Measure Summary	Monitoring Action	Responsible Party/Agency	1.Enforcement Agency 2.Monitoring Entities 3.Monitoring Phase
Hazards and Hazardous Materials (cont.)			
HHM-8: Equip dry ESPs with CO sensors.	Applicant to maintain records of installation of CO sensors on new dry ESPs. Compliance records shall be maintained for two years.	Applicant to implement	1. Air District 2. Air District/Applicant 3. Prior to and during operation
HHM-9: Modern digital electronic controls shall be used to automate this process to assure the dry ESP operates at peak performance levels at all times.	Applicant to maintain records of installation of electronic controls on dry ESPs. Compliance records shall be maintained for two years.	Applicant to implement	1. Air District 2. Air District/Applicant 3. Prior to and during operation
HHM-10: The bottom and top of each wire should be covered with shrouds to help minimize sparking and metal erosion at these points.	Applicant to maintain records of installation of covered shrouds on wires. Compliance records shall be maintained for two years.	Applicant to implement	1. Air District 2. Air District/Applicant 3. Prior to and during operation
HHM-11: To further reduce fire and explosion hazards, applicant shall establish the inspection frequency of all dry ESP components through a formal inhouse maintenance procedure. Vendors' recommendations for an inspection schedule shall be followed and shall include: **Daily:** Check operation of hoppers and ash removal system; examine the control room ventilation system; investigate any abnormal arcing in the ESP enclosure and ducts (typically caused by broken wires); and check electrodes. (cont.)	Applicant to maintain records of all inspection activities. Compliance records shall be maintained for two years.	Applicant to implement	1. Air District 2. Air District/Applicant 3. During operation

TABLE 1-1

Mitigation Monitoring and Reporting Program for Air District Rule 11-18

Mitigation Measure Summary	Monitoring Action	Responsible Party/Agency	1.Enforcement Agency 2.Monitoring Entities 3.Monitoring Phase
Hazards and Hazardous Materials (cont.)			
Weekly: Check and clean air filters. **Semianually:** Check the exterior for visual signs of deterioration, and abnormal vibration, noise, or leaks.			
Hydrology and Water Quality			
HWQ-1: When air pollution control equipment is installed and water is required for its operation, the facility is required to use recycled water, if available, to satisfy the water demand for the air pollution control equipment.	Applicant to maintain water purchase records. Compliance records shall be maintained for two years.	Applicant	1. Air District 2. Air District/Applicant 3. Prior to and during operation
HWQ-2: In the event that recycled water cannot be delivered to the affected facility, the facility is required to submit a written declaration with the application for a Permit to Construct for the air pollution control equipment, to be signed by an official of the water purveyor indicating the reason(s) why recycled water cannot be supplied to the project.	If applicable, applicant to obtain and provide declaration from water purveyor and include as part of the application for air permits to the Air District.	Applicant	1. Air District 2. Air District/Applicant 3. Prior to and during operation

Bay Area Air District

APPENDIX G

Response to Comments: Proposed Amendments to Rule 11-18

This page has been intentionally left blank.

Summary of Comments and Responses on the Regulatory Package for Proposed Amendments to Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities

Table of Contents

LIST OF COMMENTERS **3**

GENERAL COMMENTS **4**

SUPPORT FOR PROPOSED AMENDMENTS 4
TACS IDENTIFIED IN THE STAFF REPORT ARE NOT REFLECTIVE OF COMMUNITY CONCERNS 4
THE PROPOSED AMENDMENTS VIOLATE THE TERMS OF THE 2019 RULE 11-18 SETTLEMENT AGREEMENT BETWEEN WSPA AND THE AIR DISTRICT 4
PROPOSED RESPONSE TIMES ARE TOO BRIEF TO ALLOW PUBLIC AGENCIES, SPECIFICALLY PUBLICLY OWNED TREATMENT WORKS FACILITIES, TO COMPLY 5
THE RULE SHOULD INCLUDE TIMELINES FOR THE AIR DISTRICT TO RESPOND TO SUBMITTALS 6
OPPOSITION TO THE FACILITY PREPARED HRA DUE TO CONFLICT OF INTEREST 6
THE RULE SHOULD ESTABLISH PRIORITY COMMUNITIES FOR EXPEDITED RRP IMPLEMENTATION 7
THE IMPLEMENTATION PROCEDURES DO NOT IMPROVE PUBLIC UNDERSTANDING OF LOCAL HEALTH IMPACTS 7
RECENT INCREASES IN STRINGENCY FOR CANCER RISK STANDARDS DO NOT MEANINGFULLY IMPACT HEALTH 7
THE STAFF REPORT MAKES INCORRECT OR MISLEADING STATEMENTS ABOUT CANCER RISK 8

HEALTH RISK ASSESSMENTS **8**

THE NEW VERSUS LEGACY HRA PROCEDURES IN THE PROPOSED AMENDMENTS CREATE ARBITRARY COMPETITIVE ADVANTAGES 8
EMISSIONS INVENTORIES AND SITE-SPECIFIC MODELING PROTOCOLS SHOULD BE APPROVED BEFORE FACILITIES PREPARE DRAFT PRELIMINARY HRAS 9
THERE SHOULD BE A FACILITY REVIEW PERIOD BEFORE THE PRELIMINARY HRA PUBLIC COMMENT PERIOD 10
THERE SHOULD BE AN ADDITIONAL PUBLIC COMMENT PERIOD PRIOR TO PUBLISHING FINAL HRAS 10
TIMELINES FOR FACILITIES TO PREPARE AND ALTER DOCUMENTS SHOULD BE EXTENDED 11
TIMELINES FOR FACILITIES TO SUBMIT AND ALTER DOCUMENTS SHOULD BE SHORTENED 12
REQUESTED EXTENSIONS SHOULD BE APPROVED AUTOMATICALLY 13
HRAS AT PUBLICLY OWNED TREATMENT WORKS SHOULD BE DEFERRED UNTIL THE COMPLETION OF AN ONGOING STATEWIDE POOLED EMISSIONS STUDY 13
ALL REFINERY EMISSIONS SHOULD BE INCLUDED IN TOXIC EMISSIONS INVENTORIES AT REFINERIES 13
FACILITIES SHOULD HAVE THE OPTION TO CHOOSE BETWEEN SECTION 11-18-401 AND SECTION 11-18-402 14
OWNERS/OPERATORS SHOULD NOT BE REQUIRED TO PREPARE MULTIPLE HRAS AT THE SAME TIME 14
HRA APPLICABILITY SHOULD ONLY BE BASED ON A FACILITY'S PRIORITIZATION SCORE 15
THE LIST OF PHASE I FACILITIES SHOULD BE UPDATED AND PUBLISHED ANNUALLY 15
AIR TOXICS INVENTORIES SHOULD BE PROVIDED ANNUALLY 15
THE AIR DISTRICT SHOULD BE REQUIRED TO PROVIDE ALL SUPPORTING CALCULATIONS AND ASSUMPTIONS FOR APPROVED EMISSIONS INVENTORIES 16
THE AIR DISTRICT SHOULD PUBLISH THE EMISSIONS INVENTORY USED FOR THE CHEVRON RICHMOND REFINERY'S HRA, AND EMISSIONS INVENTORY PROCEDURES SHOULD INCLUDE SPECIFIC LANGUAGE REGARDING RULE 12-15 EMISSIONS INVENTORIES 16

RISK REDUCTION PLANS **17**

TIMELINES SHOULD BE EXTENDED WHEN RISK REDUCTION MEASURES REQUIRE PERMIT APPLICATIONS WITH THE AIR DISTRICT 17

Support for timeline of up to ten years for RRP implementation to allow continuous operation of public services and to accommodate construction approval requirements at publicly owned facilities. 18
The Air District should consider operational constraints when allowing RRP submission extensions 18
Extensions for submission and implementation should be limited 19
Oppose replacing "source" with "facility" because facilities are often complex sites with numerous and diverse sources. 19
TBARCT procedures should be included in the Rule 19

UPDATES TO THE IMPLEMENTATION PROCEDURES 20

Oppose limiting the Dispute Resolution Panel requests and number of issues 20
Expand public access to Dispute Resolution Panel 22
Concern that WSPA has undue influence over the Implementation Procedures via the 2019 settlement agreement 22
Dispute Resolution Panel provisions should be codified in the rule language 23
Expand access to the DRP to all facility owners/operators 23
Extend the time period for facility owners/operators to notify the Air District they would like to convene the DRP 24
Rename the Implementation Procedures to Implementation Guidelines 24
Request for emissions inventory consistency with CARB "Hot Spots" Program 24

SOCIOECONOMIC IMPACT ANALYSIS 25

Costs to implement Risk Reduction Plans should also be considered in the analysis 25
Costs are too high; Suggest Air District grow its own staffing instead 25
"Unreasonable Economic Burden" definition does not capture total costs 26
The socioeconomic analysis report contains unclear citations 26
Future stringency updates will require additional socioeconomic impact analysis 26

ADDENDUM TO ENVIRONMENTAL IMPACT REPORT FOR CEQA 27

Future Amendments will require new CEQA review 27
A new EIR should be prepared 27
Presently foreseeable rulemaking may constitute unlawful "piecemealing" under CEQA 27

List of Commenters

The following table lists the individuals and organizations from whom Air District staff received written comments prior to the April 19, 2026 comment deadline.

Abbreviation	Commenter / Reference
B. Monnette	Barbara Monnette Resident Email, March 18, 2026
J. Kilbreth	Jeffrey Kilbreth Richmond-North Richmond-San Pablo CERP Steering Committee Email, April 16, 2026
Chevron	Kris Battleson HSE Manager Chevron Products Company Email, April 16, 2026
Phillips 66	Brent Eastep Sr. Manager, Environmental Phillips 66 Rodeo Renewable Energy Complex Email, April 17, 2026
BACWA	Lorien Fono Executive Director Bay Area Clean Water Agencies Email, April 17, 2026
CBE et al.	Kaitlin Alcontin Legal Fellow Communities for a Better Environment Heidi Taylor Healthy Martinez Shoshana Wechsler Sunflower Alliance Emma Ishii Asian Pacific Environmental Network Marilyn Bardet Benicia Community Air Monitoring Program; Good Neighbor Steering Committee Email, April 18, 2026

The following table lists the organizations from whom Air District staff received written comments after the April 19, 2026 comment deadline.

Abbreviation	Commenter / Reference
CCEEB	Peter Okurowski Policy Director California Council for Environmental and Economic Balance Email, April 20, 2026
WSPA	Kevin Buchan Senior Manager – Bay Area Regulatory Affairs Western States Petroleum Association Email, April 23, 2026

General Comments

Support for proposed amendments

Comment: Commenters expressed support for the proposed amendments. One commenter noted the proposed amendments would expedite implementation of the Rule.

B. Monnette, J. Kilbreth

Response: The Air District notes the comments in support of the proposed amendments.

TACs identified in the Staff Report are not reflective of community concerns

Comment: One commenter pointed to the background section of the Staff Report, where five specific toxic air contaminants were identified as the primary toxicity-weighted toxic air contaminant emissions from all sources in the Bay Area. The commenter expressed that these specific pollutants are not the primary pollutants of concern in the Richmond-North Richmond-San Pablo AB617 community.

J. Kilbreth

Response: This excerpt from the Staff Report cited the main contributors across the entire Bay Area and was not intended to represent the prioritization of Rule 11-18 TACs at specific facilities. The Air District appreciates the note that individual communities have their own unique profiles of specific air toxics, and a note to this effect has been added to the Final Staff Report.

The proposed amendments violate the terms of the 2019 Rule 11-18 settlement agreement between WSPA and the Air District

Comment: One commenter stated that the proposed amendments violate a 2019 lawsuit settlement between the Western States Petroleum Association (WSPA) and the Air District. The commenter incorporated by reference any comments to this effect submitted by WSPA.

Chevron

Response: The Air District intends to comply with its legal obligations arising from the 2019 settlement agreement with WSPA. Chevron has been noted as a supporter of WSPA comments mentioning the settlement agreement, which includes comments regarding emissions inventories, the Dispute Resolution Panel, and BARCT.

Proposed response times are too brief to allow public agencies, specifically publicly owned treatment works facilities, to comply

Comment: One commenter stated that publicly owned facilities have expanded project timeline needs. The commenter stated that, at some publicly owned facilities, contracts could require 120 days or more to retain a consultant and conduct the work. The commenter stated it may take a period of 180 days to one year to prepare draft site-specific modeling protocols, depending on facility complexity. Additionally, the commenter stated additional time may also be necessary for development of the HRA and the RRP, depending on the availability of consultants. The commenter further noted that agencies may choose to run several scenarios in the HRA model to ensure that risk reduction measures are both compliant and cost-effective for ratepayers. The commenter stated that many publicly owned treatment works facilities may be trying to meet Rule 11-18 requirements simultaneously using the same subset of specialized industry consultants.

BACWA

Response: The Air District considered comments submitted on the Rule 11-18 draft rule amendments materials, which suggested a minimum of 180 days and up to one year to prepare the draft site-specific modeling protocol instead of the 45-day time period in the Air District's draft amendments. The Air District agreed that 45 days would not be an appropriate amount of time for a facility to plan for Rule 11-18 implementation and prepare the draft site-specific modeling protocol. Therefore, the proposed amendments to Rule 11-18 and proposed updates to the Rule 11-18 Implementation Procedures include a timeline that could potentially provide facilities with over 180 days to prepare the draft site-specific modeling protocol, consisting of at least 60 days to plan to prepare for Rule 11-18 implementation during the Air District review of the facility's emission inventory, 60 days to prepare the site-specific modeling protocol, and an extension of up to 60 days if requested by the facility and approved by the Air District.

Regarding additional time that may be necessary for the development of the HRA, facilities may begin the development of the draft preliminary HRA report simultaneously during the development, review, and approval of the site-specific modeling protocol. Additionally, there would be an opportunity for facilities to request an additional 30 days for the development of the draft preliminary HRA reports.

Regarding additional time that may be necessary for the development of the RRP, facilities may begin early development of the draft RRP after the health risk drivers are known, as early as during the development of the draft preliminary HRA report. There would also be an opportunity for facilities to request an extension of the development of the draft RRP to ensure its compatibility with safety regulations.

The Rule should include timelines for the Air District to respond to submittals

Comment: One commenter requested that the Rule establish a timeline for Air District staff to review and respond to submittals so facilities and consultants can forecast workload and staffing requirements.

BACWA

Response: The absence of fixed timelines for Air District responses is intentional and necessary given the technical complexity of Rule 11-18 implementation and the need to ensure thorough reviews by the Air District. Reviews conducted under Rule 11-18 often involve data with varying degrees of complexity and scope across different facilities. Therefore, establishing fixed response timelines could inadvertently limit the Air District's ability to request additional information when appropriate and to fully evaluate submittals from regulated facilities. For example, depending on the review required with considerations or evaluation of TBARCT and feasibility for large facilities, more time may be needed to review RRPs. This first phase of Rule 11-18 amendments focuses on establishing clear timelines for facilities while preserving the Air District's flexibility to conduct thorough and sound reviews.

Opposition to the facility prepared HRA due to conflict of interest

Comment: One commenter expressed opposition to the proposed amendments. The commenter stated that facility-prepared HRAs create conflicts of interest not present in the current Rule and undermine the Rule's purpose. The commenter asserted that the Air District would not be able to ensure that facility-prepared HRAs accurately assess health risks. The commenter requested that the Air District either perform HRAs in-house or provide direct oversight for neutral third-party vendors to conduct the work.

CBE et al.

Response: Although the Air District understands the commenters' concern, the Air District believes that the proposed amendments would strike a good balance between speeding up implementation of the Rule and ensuring robust and rigorous Air District oversight of HRAs. The Air District would complete reviews of the HRAs and supporting documents that must be submitted by the facilities. After these reviews, the Air District would provide a list of required alterations that must be implemented by the facility. In addition, Section 11-18-402 of the proposed amendments would grant the Air District sole discretion to approve site-specific modeling protocols, preliminary HRAs, and final HRAs. Further, at each of these steps, the Air District would retain authority to finalize the site-specific modeling protocols, preliminary HRAs, and final HRAs if facilities fail to incorporate required alterations.

It is worth noting that the Air District is not aware of a similar rule that includes a requirement for an Air District to conduct facility-wide HRAs for existing facilities. Both the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) and the South Coast Air Quality Management District's Rule 1402 require facilities to prepare facility-wide HRAs for existing facilities.

The Rule should establish priority communities for expedited RRP implementation

Comment: One commenter requested deadlines of less than five years to implement RRPs in AB 617 communities and in "overburdened communities" and that these communities be designated as "priority" communities.

CBE et al.

Response: The Air District is prioritizing facilities in AB 617 communities by considering earlier initiation of Rule 11-18 implementation, even if the facilities are not on the Phase I Facilities list.

RRP implementation timelines would allow facilities to plan and implement risk reduction measures as feasible. Implementing all risk reduction measures in the RRP in less than five years may not be feasible for all facilities in these communities. The Air District anticipates considering additional measures to further reduce health risks from Rule 11-18 facilities in future rulemakings.

The Implementation Procedures do not improve public understanding of local health impacts

Comment: One commenter stated that, while the Implementation Procedures state that the Air District "recognizes the public's desire to understand local health impacts due to air pollution in their communities," it does nothing to further that understanding.

WSPA

Response: The statement in question is further expanded in the paragraph that follows in the 2024 Implementation Procedures and the proposed updates to the Implementation Procedures. The Air District's approach to providing information on local health impacts from air pollution in communities is implemented through three main components:

1) Rule 11-18 requires facilities with potentially elevated health risk to undergo HRAs using Air District-approved methods so that cancer and non-cancer risks from toxic air contaminants can be quantified as local health risk estimates;
2) The Implementation Procedures also support making HRA results and related information available to the public through the Rule 11-18 implementation process; and
3) Opportunities for public engagement are included throughout the Rule 11-18 implementation process to ensure transparency.

Recent increases in stringency for cancer risk standards do not meaningfully impact health

Comment: One commenter reflected that, in 2015, the Air District strengthened the maximum allowable project cancer risk from 100-in-a-million to 10-in-a-million. The commenter posited that the strengthened standard will have either no measurable impact on health or no impact at all. In support of this position, the commenter supplied that the Air District has previously estimated potential lifetime cancer risks across ambient Bay Area air at several hundred in a million and that the American Cancer Society has previously estimated actual lifetime cancer risk from all causes at approximately 400,000-in-a-million.

WSPA

Response: The Air District believes that Rule 11-18 is an important regulation that is designed to ensure that facilities emitting toxic air contaminants do not pose unacceptable health risks to nearby residents, workers, or students.

The Staff Report makes incorrect or misleading statements about cancer risk

Comment: One commenter expressed concern that the Staff Report for the proposed amendments conflates potential risks with actual risks. The commenter stated that, at one point, the Staff Report provided a definition for cancer risk that contradicts the definition of cancer risk used by the California Office of Environmental Health Hazard Assessment (OEHHA). The commenter also stated that the difference between "best estimates" and health-protective "potential" values can be large, with uncertainty factors of 1000 or more for some TACs.

WSPA

Response: The Air District has revised the statement in the Final Staff Report to better align it with OEHHA guidance.

Health Risk Assessments

The new versus legacy HRA Procedures in the proposed amendments create arbitrary competitive advantages

Comment: Two commenters stated that different standards for "legacy facilities" (those subject to amended Section 11-18-401) and "non-legacy facilities" (those subject to amended Section 11-18-402) would create competitive advantages or disadvantages on a facility-by-facility basis.

One commenter stated that, while non-legacy facilities would have the opportunity to validate emissions inventory calculations with the consultants they hire to perform their HRAs, legacy facilities would not be allowed such opportunities to validate inventories with the Air District. This commenter expressed concern that an unvalidated emissions inventory has the potential to result in the exceedance of a risk threshold that could inappropriately require a Risk Reduction Plan or increase the scope of a facility's Risk Reduction Plan, resulting in increased costs for risk reduction measure that may not be feasible.

One commenter stated that they believe the cost for the Air District to perform the HRA for their facility is "four to five times" higher than what a consultant would typically charge. The commenter stated that the amendments are "arbitrary and capricious and a misuse of authority."

Chevron, WSPA

Response: The Air District disagrees with the characterization of the proposed amendments as "arbitrary and capricious"; rather, they pragmatically reflect the reality that different facilities would be at different stages of a rule's implementation when proposed amendments are considered for adoption by the Air District Board of Directors. The Air District strives to improve and expedite Rule implementation for all facilities subject to the Rule: legacy facilities

would not redo all the work that has been completed to date, and non-legacy facilities would prepare their HRAs in-house.

Under both the legacy and non-legacy procedures, the Air District would provide facilities the opportunity to review emissions inventories (EI) and identify potential corrections to ensure completeness and accuracy. In each case, the Air District would develop an initial EI and share it with the facility for review. The facility would be given the opportunity to review the information and suggest corrections as needed.

As an example, in the case of Chevron, which is subject to the legacy procedure, the Air District shared draft EI with the facility and allowed the facility to review and provide comments. The Air District reviewed these comments and incorporated revisions where appropriate before finalizing the EI. For each comment from Chevron, the Air District has responded by providing the emissions inventory calculation basis and methodologies for the sources in question, and the Air District intends to continue this practice.

Regarding costs of HRAs by the facility, the Air District has estimated as part of proposed rule amendment materials that it would cost more to the facility to conduct the HRA instead of the Air District. The commenter has not provided any information supporting their claim that the Air District costs are four to five times the typical rate for a consultant. The Air District's experience has shown that consultant rates for completing this work would be higher than those charged by the Air District; this is reflected in the estimated compliance costs used in the socioeconomic analysis for non-legacy facilities affected by the proposed amendments. In addition, the Air District anticipates that the non-legacy facilities would incur costs associated with the consultant preparation of an HRA as well fees for Air District reviews.

Emissions inventories and site-specific modeling protocols should be approved before facilities prepare draft preliminary HRAs

Comment: Two commenters requested that the emissions inventory and site-specific modeling protocol be approved prior to draft HRA preparation. Both commenters noted inefficiencies with performing multiple iterations of the HRA and with changing the emissions inventory after an HRA has been performed.

One commenter expressed concern that multiple HRA iterations could confuse the public regarding the true health impacts.

One commenter expressed concern that Air District staff are not transparent about calculations and methodologies to support modeling parameters, and facilities have disagreed with inputs into emissions inventories in the past. This commenter noted that incorrect parameters could produce exaggerated health risks, which could necessitate mitigation measures that would be infeasible.

Phillips 66, CCEEB

Response: The Air District agrees that it is ideal to finalize the emissions inventory before the development of an HRA. However, in practice, the Air District has found that addressing all concerns, without prioritizing the concerns, has been one of the primary reasons that Rule 11-18

implementation has been delayed. Emissions inventories for complex facilities like refineries can have thousands of lines of sources and their emissions. The review of the emissions inventory with a preliminary HRA available would allow for a focused review with visibility of the most impactful line items, rather than having detailed discussions about each item before the impacts are understood. Representative emissions inventories are important, but the Air District disagrees that every molecule of emissions would need to be agreed on for a facility to effectively implement Rule 11-18.

Under both the legacy and non-legacy procedures, the Air District would provide facilities the opportunity to review emission inventories (EI) and identify potential corrections to ensure completeness and accuracy. In each case, the Air District would develop an initial EI and share it with the facility for review. The facility would be given the opportunity to review the information and suggest corrections as needed. The Air District has actively engaged with facilities to incorporate changes when deemed appropriate. The Air District would continue to work with the facility on resolving disagreements in emissions by sharing calculations for associated sources and/or pollutants upon request.

The Air District recognizes that multiple iterations of HRA results could be possible due to changes in the emissions inventories. Before HRA results are published, the Air District would prioritize review and resolution of emissions inventory disagreements, which the Air District anticipates would affect the HRA results. Finalization of an RRP, however, would occur after the emissions inventory is finalized and the final HRA report is published, so the Air District does not anticipate unnecessary risk reduction measures due to changes in emissions inventories.

There should be a facility review period before the preliminary HRA public comment period

Comment: One commenter requested a review period be added prior to the public comment period described in Section 11-18-402.4 of the proposed amendments. The commenter stated this would allow facilities to ensure the preliminary HRA has no errors and would minimize the potential for multiple HRAs and public confusion.

Phillips 66

Response: The Air District does not believe that an additional facility-only comment period prior to the public comment period is warranted or necessary. Facilities would have extensive opportunity to provide input to the Air District before and during the public comment period. The Air District believes an additional facility comment period would unnecessarily delay Rule 11-18 implementation.

There should be an additional public comment period prior to publishing final HRAs

Comment: One commenter requested that the Air District "accept public comment on the Draft Final HRA prior to the Air District's decision on approval, not only the Draft Preliminary HRA."

CBE et al.

Response: The proposed amendments would ensure a public comment period upon release of the preliminary HRA report. With this primary public comment period, there would be multiple

development, review, alteration, and approval steps before the Air District would determine it is appropriate to release the preliminary HRA report to the public. The Air District anticipates that conducting additional public comment periods would have diminishing returns: it would require repeating these steps, further extending the total timeline, with limited additional value.

The Air District would consider all public comments on the preliminary HRA report before publishing the final HRA report and would plan to publish a document responding to comments on the preliminary HRA report.

Timelines for facilities to prepare and alter documents should be extended

Comment: Three commenters requested timeline extensions for preparation or alteration of draft preliminary HRAs. One commenter expressed concern that the number of qualified consultant firms could be insufficient to comply with the timelines in the proposed amendments. This commenter stated that the Air District "identified only six (6) firms as authorized HRA vendors" in the August 2020 Rule 11-18 Implementation Procedures and that the Air District has stated that it intends to process Rule 11-18 HRAs in batches of "up to more than 50 facilities at a time." This commenter stated that building facility-specific air dispersion models in AERMOD is necessary before running an HRA model, and that this step could take 2-3 months.

Two commenters requested that the 30-day deadlines in Sections 11-18-402.3.3 and 11-18-402.5.2 of the proposed amendments be extended to 60 days. One commenter stated that Section 1402(e)(2)(C) of South Coast Air Quality Management District Rule 1402 includes a 60-day deadline for HRA corrections.

BACWA, CCEEB, WSPA

Response: The Air District agrees that the language regarding the review batches in the proposed updates to the Implementation Procedures was misleading. The Air District anticipates that the small, manageable batches to be reviewed at a time would be approximately up to a dozen. The language in the final updates to the Implementation Procedures has been updated to clarify that the Air District does not intend to do all Phase I facilities simultaneously as a small, manageable batch.

While in the August 2020 version of the Implementation Procedures there were six firms that were authorized HRA vendors, that list has since expired, as stated in the April 2024 Implementation Procedures. In these proposed updates to the Implementation Procedures, there would not be a list of authorized vendors, and each facility would be able to choose their own vendor outside of the six originally identified in 2020.

The Air District understands the commenters' concern about having enough time to develop a model and confirm necessary site parameters needed for modeling.

- Preparation of site-specific modeling protocol and Preliminary HRA timeline: The proposed amended rule amendments would allot 60 days for a draft site-specific modeling protocol to be developed, with the possibility of a 30-day revision period if changes are required by the Air District after submittal. This site-specific modeling protocol should already include the parameters to be used for the AERMOD model. The

allotted timeline for the preliminary HRA report development would be 90 days, and the facility could request an extension of up to 30 days. In total, the facility could thus be provided up to five to six months to develop the model.

- Alterations to the HRA timeline: The Air District considered the public comments that were submitted on the draft version of the amendments, which stated that draft timeline of 14 days for alterations to HRAs was not appropriate, and requested that the Air District increase the time period to a potential of up to 60 days for the alterations. The proposed amendments now would provide a time period of 30 days for a facility to implement alterations in the preliminary HRA steps and an opportunity for a facility to request additional time of up to 30 days to implement the alterations if the facility can establish that additional time is necessary to the Air District. The proposed timeline would provide a reasonable deadline for responses while still supporting the Air District goals of improving implementation efficiency through these proposed rule amendments.

Timelines for facilities to submit and alter documents should be shortened

Comment: One commenter recommended the Air District prepare all site-specific modeling protocols. The commenter stated that, should the Air District not incorporate this recommendation, then deadlines for facility submissions and alterations of modeling protocols should be shortened. The commenter noted that deadlines in the proposed amendments are longer than those that were in the draft amendments to the Rule. Specifically, the commenter stated that, between the draft amendments and the proposed amendments, (i) the deadline for initial submission timelines for draft modeling protocols increased from 45 days to 60 days, with an option to request an additional 60 days and (ii) the deadline for alterations to draft modeling protocols increased from 14 days to 30 days. The commenter stated that the timelines in the draft amendments would be sufficient and that increasing the timelines is inconsistent with the purpose of the proposed amendments package – "to expedite the HRA." The commenter stated that "the Air District should outline more specific criteria under which an APCO may grant an extension."

CBE et al.

Response: The draft site-specific modeling protocol timeline was extended with an option to request for extension in the proposed amendments from the draft amendments to provide an adequate amount of time for facilities to prepare for Rule 11-18 implementation work planning, such as coordinating with a contractor. The timeline to implement required alterations in the draft site-specific modeling protocol was extended to align with similar timelines in the South Coast Air Quality Management District Rule 1402. Although overall it seems that the Rule 11-18 HRA timeline would be extended, the intent of the timeline change is to allow for more time for facilities to prepare for the Rule 11-18 process to begin, which would lead to more efficient implementation throughout the Rule 11-18 process.

Since there could be a variety of reasons for a request for extension, the Air District did not include specific criteria for when an extension would be granted, and, instead, included an established maximum amount of time that could be requested for an extension to limit the extension.

In the proposed amendments, the Air District would maintain strict oversight of the site-specific modeling protocol preparation, as the Air District would review, require alterations, if necessary, and approve the site-specific modeling protocol. The Air District could also take over the preparation of the site-specific modeling protocol.

Requested extensions should be approved automatically

Comment: One commenter identified provisions of Sections 11-18-401 and 11-18-402 of the proposed amendments to the Rule that allow the Air District to grant deadline extensions to facilities that demonstrate that extensions are necessary. The commenter requested that these extensions be granted automatically.

CCEEB

Response: The Air District reviewed and considered comments submitted on the draft rule amendments related to timelines and made corresponding changes to the proposed rule package, specifically to Sections 11-18-402.1, 402.3.3, and 402.5.2 of the proposed amendments and Step 1 of the proposed updates to the Implementation Procedures Section 4.2.3 (Procedures for Implementing Health Risk Assessments: Current Procedures).

The Air District believes these timelines should be sufficient. If a facility chooses to request additional time to complete a step in the HRA procedures, the facility would need to provide an adequate amount of information and reasoning to the Air District that an extension is warranted.

HRAs at publicly owned treatment works should be deferred until the completion of an ongoing statewide Pooled Emissions Study

Comment: One commenter stated that Sections 11-18-404, 11-18-405, and 11-18-406 of the proposed rule amendments allow the Air District to defer Rule implementation at publicly owned treatment works (POTWs). The commenter requested that HRAs not be required at these facilities until after emissions data are available from an ongoing "statewide Pooled Emissions Study." The commenter stated that this study is expected to be completed by 2028.

BACWA

Response: POTWs would remain designated as Phase II Facilities. For most POTWs in Phase II, the updated pooled source tests and updated POTW emission factors are expected to be available before the Air District would initiate the Rule 11-18 review for these POTWs. One POTW is on a more accelerated Rule 11-18 schedule because the facility is impacting an AB 617 community. If the Pooled Emissions Study is not completed once Rule 11-18 review has been initiated for this facility, the Air District would work with the facility to ensure that best available data is used. This would include site-specific source testing that has been conducted by the facility and approved by the Air District pursuant proposed amended Section 11-18-405.

All refinery emissions should be included in Toxic Emissions Inventories at refineries

Comment: One commenter requested that the Air District "[I]ncorporate all refinery emissions into the Toxic Emissions Inventory."

CBE et al.

Response: While the Air District recognizes the potential benefit of incorporating emission updates made during Rule 11-18 implementation, the annual toxic emissions inventories available on the Air District Toxic Air Contaminants page are intended to serve as point-in-time datasets that reflect the best available emissions data reported to California ARB at the time of publication. Rule 11-18 relies on these historical inventories as a starting point but may apply updated emissions factors and methodologies to refine emissions estimates. The resulting updated emissions are then used as the basis for assessing health impacts associated with facility emissions for a representative year. These updates are incorporated into the modeling inputs used for health risk assessment and any decision made by the Air District.

Facilities should have the option to choose between Section 11-18-401 and Section 11-18-402

Comment: One commenter requested that facilities that would be subject to Section 11-18-401 (Health Risk Assessment Procedures – Legacy) be given the option to comply with either Section 11-18-401 or Section 11-18-402 (Health Risk Assessment Procedures) of the proposed amendments to the Rule. The commenter stated an understanding that "very few facilities" will be subject to the legacy procedures of Section 11-18-401 and that "several" facilities do not know whether they have received notification by the APCO that would indicate they will be subject to the legacy procedures. The commenter stated that some "Legacy" facilities, particularly those who have already paid HRA fees to the Air District, may prefer the legacy procedures of Section 11-18-401; the commenter stated that other "Legacy" facilities may prefer the procedures of Section 11-18-402, particularly the ability to prepare their own HRA reports. The commenter stated belief that allowing "Legacy" facilities to make this choice is unlikely to cause delays since facilities could prepare HRAs faster than the Air District.

CCEEB

Response: Currently, two facilities would fall under the Legacy Procedures in proposed amended Section 11-18-401 (Chevron Richmond Refinery and Chemtrade). The legacy procedures could be applied to one to two more facilities depending on how soon the Air District can complete the site-specific protocol for these facilities. The Air District intends to complete the HRA reports for continuity in the development of these Rule 11-18 HRAs and to avoid further delays in Rule implementation.

Owners/operators should not be required to prepare multiple HRAs at the same time

Comment: One commenter stated that some entities operate multiple facilities that could potentially be required to prepare HRAs at the same time, and that this could make it difficult for those entities to comply. The commenter requested that the Air District state in the proposed Implementation Procedures that it will not require facility owners/operators to prepare multiple HRAs at the same time.

CCEEB

Response: The Air District understands the concern around the potential need for facility owners/operators managing multiple facilities to prepare multiple HRAs simultaneously. As included in Section 4.2.3 Procedures for Implementing Health Risk Assessments: Current Procedures Step 1 of the proposed updates to the Implementation Procedures, the Air District intends to notify facilities subject to the new procedures when the District has started reviewing the facility's emissions inventory. Then, no fewer than 60 days after that notification, the Air District would issue a formal notice requiring the facility to prepare an HRA pursuant to Section 11-18-402.1.

The Air District would encourage such owners/operators to inform the Air District if this situation applies after receiving notice that a facility's emissions inventory review has commenced. The Air District would take this information into consideration and, to the extent feasible, would work with affected owners/operators to reasonably stagger HRA submittal requirements and timelines.

Additionally, the owner/operators could request an additional 60 days for draft site-specific modeling protocol submittal. However, such requests would need to be approved by the APCO.

HRA applicability should only be based on a facility's prioritization score

Comment: One commenter requested that Section 11-18-402.1 of the proposed amendments be changed to strike the phrase "…and other relevant factors" from the clause "…an HRA is warranted based on the facility's prioritization scores and other relevant factors." The commenter stated that "HRAs should only be warranted based on a facility's prioritization score."

CCEEB

Response: The clause "other relevant factors" would provide the Air District with the flexibility to require an HRA if the Air District has good cause to believe that the facility may pose a potential threat to public health.

The list of Phase I facilities should be updated and published annually

Comment: One commenter requested that the Air District publish a current list of Phase I facilities each January. The commenter noted that the Air District posted a list of Phase I facilities in 2024 on the Air District website, along with additional notes qualifying how high of a priority each facility on the list was at that time.

CCEEB

Response: The proposed updates to the Implementation Procedures include that the Air District will post updated facility lists for each phase annually.

Air toxics inventories should be provided annually

Comment: One commenter requested all facilities should be provided copies of their air toxics inventory annually. The commenter stated an understanding that facilities would not receive the inventories until they are notified to prepare an HRA and that a "60-day window is inadequate for meaningful review."

CCEEB

Response: Currently through its permit renewal process, the Air District includes facility toxics inventories along with their associated prioritization scores in each facility's Permit of Operate. This is to ensure that facilities have access to their toxic emissions data and prioritization scores prior to the Air District's annual inventory reporting to the California ARB.

In addition, each year the Air District publishes the annual toxic air contaminant emissions for all permitted facilities in the Bay Area on its Toxic Air Contaminants webpage (https://www.baaqmd.gov/about-air-quality/emission-inventory/toxic-air-contaminants).

The Air District also updates its Facility Toxic Emissions and Prioritization Tool, available on the same webpage, which provides the public with a way to easily view the most recent year's toxic air contaminant emissions and prioritization scores for all permitted facilities within the Bay Area.

The Air District should be required to provide all supporting calculations and assumptions for approved emissions inventories

Comment: One commenter requested that Section 11-18-402.1 of the proposed amendments to the Rule be changed to require the Air District to provide "all supporting calculations, data, methodology, and assumptions used to support [emissions] inventories." The commenter expressed appreciation that emissions inventories (EI) would be provided in advance but stated that facilities should be provided with all supporting materials used to develop the EI. The commenter encouraged transparency and expressed the importance of the EI in determining risk levels.

CCEEB

Response: Under both the legacy and non-legacy procedures, the Air District would provide facilities the opportunity to review emission inventories (EI) and identify potential corrections to ensure completeness and accuracy. In each case, the Air District would develop an initial EI and share it with the facility for review. The facility would be given the opportunity to review the information and suggest corrections as needed. The recommendation to provide supporting calculations in addition to what is already provided will be taken into consideration and may be provided as needed to resolve ongoing disputes concerning specific sources and/or pollutants.

The Air District should publish the emissions inventory used for the Chevron Richmond Refinery's HRA, and emissions inventory procedures should include specific language regarding Rule 12-15 emissions inventories

Comment: One commenter requested that the Air District publish the emissions inventory (EI) for "the first Regulation 11-18 refinery," along with all supporting documentation. The

commenter further requested that the Air District supply all supporting documentation used to produce the EI for review and comment. Finally, the commenter requested that the Air District convene the DRP should any disputes arise.

The commenter stated that, for refineries, preliminary HRAs that do not use Rule 12-15 inventories "may be very skewed." The commenter stated that a settlement agreement between the Air District and WSPA requires the use of Rule 12-15 inventories in Rule 11-18 HRAs. The commenter stated that the Air District has used TAC speciation profiles that are unlike other published profiles, that differ from Rule 12-15 inventory profiles, and that "have not been subject to any formal review and comment."

The commenter requested Section 4.1.1 of the proposed Implementation Procedures (which describes emissions inventories) specifically reflect the language of the 2019 WSPA Agreement regarding using Rule 12-15 emissions inventory data, which states that:

> *"[t]he District shall utilize, for purposes of comparing health risk to the Rule 11-18 [Risk Action Levels], only emissions identified in the relevant refinery's Rule 12-15 emissions inventory with the exception of accidental, non-routine flaring and emergency-related emissions" [Article 1, §1.3.e.]*
>
> WSPA

Response: Rule 11-18 relies on a historical inventory from a representative year, as reported to California ARB, as a starting point. However, the Air District may apply updated emissions factors and methodologies to refine emissions estimates to ensure accuracy and use of the best available data.

For example, Chevron recently voluntarily conducted on-site sampling of certain process units in order to provide improved data for some TACs. With the availability of this new information, the Air District incorporated these findings into the toxics inventory developed under Rule 11-18. As this example shows, it is the Air District's practice to use the most current available data, rather than limiting the toxics inventory to information previously reported to California ARB.

With regard to the comment about Regulation 12-15, for the Chevron HRA, which is expected to be the first-released refinery Rule 11-18 HRA, the Air District intends to use the emissions inventory developed under Rule 12-15 as the basis for the HRA conducted under Rule 11-18. Any emissions updates made for purposes of Rule 11-18 will also be reflected in the final inventory for this facility under Rule 12-15. The Air District intends to finalize the Rule 12-15 emissions inventory simultaneously with the toxics inventory under Rule 11-18 for Chevron.

Risk Reduction Plans

Timelines should be extended when risk reduction measures require permit applications with the Air District

Comment: The commenter expressed concern that facilities cannot begin construction on RRP measures until the Air District issues an Authority to Construct, and requested that the 5-year timeline start once the Authority to Construct is issued, rather than when the RRP is approved.

Phillips 66

Response: The Air District understands the concern raised and notes that the five-year period specified in Section 11-18-403.2.6.2 already incorporates a buffer to account for permitting. In addition, the Air District currently gives high priority to permitting emission control equipment, especially when controls are necessary to comply with rules and regulations.

Support for timeline of up to ten years for RRP implementation to allow continuous operation of public services and to accommodate construction approval requirements at publicly owned facilities.

Comment: Another commenter also had RRP timeline concerns, noting that capital improvement projects at publicly owned treatment works (POTWs) have two additional constraints:

(1) Potential RRP capital construction projects must be carefully planned to allow for continuous operation of the POTWs to protect public health and the environment, and suggested exceptions for these sorts of operational constraints be considered in the RRP implementation and extension timeline, and
(2) These publicly-owned facilities require a minimum of 6 years for construction projects due to public process requirements, multiple Board/Council approvals, and the full project development process, from initial planning through construction.

The commenter expressed they appreciate the ability to extend the timeline to ten years to allow for compliance in these cases.

BACWA

Response: The Air District notes the support of the ability to extend the RRP implementation timeline to ten years. Requests for extensions would be reviewed for approval on a case-by-case basis. In addition, the Air District currently gives high priority to permitting emission control equipment, especially when controls are necessary to meet rules and regulations.

The Air District should consider operational constraints when allowing RRP submission extensions

Comment: One commenter requested that Section 11-18-403.1 of the proposed amendments be changed to include "operational constraints, or applicable technology options." The commenter stated that this would allow the Air District to extend RRP submission deadlines to ensure uninterrupted operation of publicly owned treatment works.

BACWA

Response: The Air District believes that the concept of "applicable technology options" is already reflected in "technologically feasible" and in frameworks such as TBARCT. Therefore, the Air District does not believe that adding this phrase is necessary or would provide additional value. With respect to "operational constraints", the Air District is unable to support including

this language, as it could potentially introduce ambiguity or unintentionally weaken enforceability, given the broad nature of the term (e.g., staffing, scheduling preferences, production goals).

Extensions for submission and implementation should be limited

Comment: One commenter requested that a maximum amount of additional time for an RRP to be submitted be set, and that facilities requesting extensions in submission and implementation demonstrate that such extensions are necessary for safety purposes.

CBE et al.

Response: Since the deadline is based on safety considerations and the Air District anticipates that the extension would be granted only in limited circumstances, the Air District believes that setting a maximum amount of additional time is not necessary. In these circumstances, the Air District would require demonstration that additional time is necessary.

Oppose replacing "source" with "facility" because facilities are often complex sites with numerous and diverse sources.

Comment: The current Rule states that RRPs must be certified to meet all requirements, with one of the options being an 'individual responsible for operations at the source.' However, the word 'source' has been changed to 'facility' in the proposed Rule language. One commenter expressed concern that an individual with experience with one source at a facility does not guarantee sufficient knowledge to certify that the risk reduction measures for different sources in different parts of the facility.

The commenter also noted that the change from source to facility is described in the Staff Report to be in alignment with other certifications, but does not clarify which certifications and why alignment is appropriate.

CBE et al.

Response: The Air District believes that this change is actually a correction of an unintended error in the original rule, and that the Air District always intended for each RRP to be accompanied by a single facility-wide certification. It would be confusing and logistically complex, particularly at large facilities, to require source-specific certifications by many different individuals. The Air District is not aware of any other context where this is done. By contrast, designating a single responsible individual for certification is a typical practice that aligns with similar environmental compliance reports done at the federal, state, and local levels.

TBARCT procedures should be included in the Rule

Comment: One commenter stated that both AB 617 and the 2019 settlement agreement between the Air District and WSPA require cost-effectiveness analysis of Best Available Retrofit Control Technology (BARCT). The commenter stated that the proposed rule language, proposed updates to the Implementation Procedures, and Staff Report do not mention this settlement agreement or

the TBARCT Workbook, conveying that the District has no intention of honoring Section 1.6.c. of the settlement agreement.

> *1.6.c. Cost Effectiveness. When assessing whether TBARCT is cost effective under Section 11-18-404.6 of Rule 11-18, the District will follow the procedure outlined in section 3 .2.2 of its Draft BAAQMD TBARCT Workbook, dated October 2017 and published with the Rule 11-18 Rule Development package before the District's Board of Directors, attached hereto as Exhibit 3.*

The commenter requested the Air District clarify its intent in the Rule language or the documentation referenced in the Rule.

WSPA

Response: The Air District intends to comply with its legal obligations arising from the 2019 settlement agreement with WSPA. Although the Air District has withdrawn the Draft TBARCT Workbook due to, among other things, a lack of bandwidth to finalize it, that does not suggest that the Air District will not follow aspects of it to the extent that doing so is appropriate to the circumstances or is legally required.

Updates to the Implementation Procedures

Oppose limiting the Dispute Resolution Panel requests and number of issues

Comment: Three commenters opposed limiting the number of issues that can be brought to the Dispute Resolution Panel (DRP) or the number of times the DRP can be convened. The commenters requested that the limitations be removed entirely given the complexity and severity of incorrect assumptions. The commenters also opposed the language in the proposed updates to the Implementation Procedures stating that the DRP will not have to address "multiple issues", or issues that staff determines are "overly burdensome" or "previously resolved." Commenters suggested that whether an issue should be rejected should be the function of the DRP, not staff.

Phillips 66, CCEEB, and WSPA

Response: The primary goal of these amendments to Rule 11-18 is to increase the pace at which the Rule is implemented, given the extensive delays that have occurred thus far in implementation. In keeping with this goal, the Air District is proposing common-sense limitations on the DRP to avoid it becoming a source of delay. Specific limitations that commenters have noted are below.

1. Number of Issues:

Limiting the DRP to six issues per facility (three issues each for the HRA and RRP) would be reasonable given that the DRP must become familiar with each issue and would provide its advice in the form of a written recommendation to the Air District. The more issues that are allowed to come before the DRP, the longer the process would likely take. Further, because facilities could benefit financially from delays in the Rule 11-18 process, allowing an unlimited DRP would create a perverse incentive to refer as many issues as possible to the DRP.

Notably, facilities would still have every opportunity to argue their perspectives to Air District staff on as many issues as they would like. In the Air District's opinion, allowing facilities to raise six issues with the DRP is reasonable because it would give facilities the opportunity to pursue the most salient issues on which they and the Air District disagree.

The 2019 settlement agreement between the Air District and WSPA does not speak to this question of how many issues a facility must be able to raise before the DRP, so the Air District disagrees that there is any conflict between the proposed limitations and the 2019 settlement agreement.

2. The Air District's authority to reject issues submitted for DRP review if they are overly burdensome, outside of the DRP's scope, previously resolved by the DRP, or if they present multiple issues in the guise of a single issue

As discussed above, the Air District is concerned about extensive use of the DRP delaying the requirement to implement an RRP. The purpose of the proposed provision that allows the Air District to reject overly burdensome requests is to protect against this concern. The Air District does not anticipate using this provision unless, in the Air District's opinion, a facility is using the DRP in such a way that it would not reasonably be possible for the DRP to complete its review in the time allotted, and where the harm from any delay would plainly, in the Air District's view, outweigh any benefits from receiving the DRP's opinion.

The reasoning behind barring issues that have previously been resolved by the DRP is similar—because such issues have already been resolved, it would be a poor use of resources to reconsider them.

The capacity to reject out-of-scope requests is important to ensure that the DRP does not constitute a waste of public funds if a facility raises an issue that is not relevant. The scope of the DRP's jurisdiction is clearly defined in the proposed updates to the Implementation Procedures at Section 5, and is consistent with the scope that refineries agreed to in the 2019 settlement agreement with WSPA.

Likewise, facilities would not be permitted to exceed the three-issues-per-request limit by presenting multiple issues as a single issue. Including this limitation is necessary to enforce the three-issues-per-request limitation.

3. Timing of DRP Access

Commenters express concern about only being able to access the DRP once the preliminary HRA is complete, rather than during the emissions inventory process. As noted elsewhere, a primary driver of delay in the Rule 11-18 process thus far has been that working with facilities on emissions inventories has taken far longer than expected. This is the impetus for combining the Air District's emissions inventory review step with review of the preliminary HRA.

Given the Air District's experience to date, it would be extremely deleterious to the implementation of Rule 11-18 to give facilities the type of early access to the DRP that

commenters request. As noted above, facilities would be incentivized to use the DRP at every opportunity because of the benefit of delay, and the Air District expects convening and implementing the DRP to be a labor-intensive and time-consuming process.

The Air District's proposed plan would give facilities access to the DRP to contest the most salient issues that arise at both the HRA and RRP stages before finalization of those documents.

Expand public access to Dispute Resolution Panel

Comment: One commenter requested the public have access to the Dispute Resolution Panel proceedings.

CBE et al.

Response: The public can participate and comment on the Rule 11-18 process using public comment periods during both the HRA and RRP development process. The DRP would be limited to resolving narrow, technical disputes. As noted elsewhere, the Air District is concerned about the DRP becoming a source of delay, and allowing the public to raise issues with the DRP would make it effectively impossible to limit the workload and time associated with the DRP process.

Concern that WSPA has undue influence over the Implementation Procedures via the 2019 settlement agreement

Comment: One commenter expressed concern that WSPA has undue influence over the Proposed Implementation Procedures via a 2019 settlement agreement with the Air District, which unfairly carves out special privileges (the DRP in particular) for refineries to the detriment of fenceline communities. The commenter expressed concern that this will result in rulemaking-by-settlement-agreement, and will not substantially comply with the Administrative Procedure Act ("APA"). The commenter expressed concerned that, while the Proposed Implementation Procedures have been made subject to notice and public comment, WSPA has effectively predetermined the result by spelling out provisions in the 2019 settlement agreement that must be included in the rulemaking.

CBE et al.

Response: As discussed in the Final Staff Report, the Air District believes there are good reasons to convene a DRP for refineries that do not relate to the 2019 settlement agreement with WSPA. Refineries are highly complex, and technical issues associated with refineries are more likely to benefit from the input of an expert third party.

Also, notably, the impetus for the DRP was not the 2019 settlement agreement with WSPA; rather, it was the 2017 Air District Board Resolution associated with adoption of Rule 11-18 in the first place. That Board Resolution said that "the Board of Directors understands that, in implementing the Proposed Rule, staff will convene a panel of technical experts (Dispute Resolution Panel) by the time the first health risk assessments under the Proposed Rule are completed to advise staff regarding resolution of disputes over implementation of the Proposed Rule, and, in particular, disputes by an affected facility regarding the inventory used in a health

risk assessment, the methodology used for a health risk assessment, the technical feasibility or economic burdens involved in a demonstration pursuant to Section 11-18-404.6.2 or 11-18-404.6.3, or a determination of best available retrofit control technology for toxics (TBARCT)." The idea behind the DRP, as reflected in that document, was that it would focus on disputes between facilities and the Air District, not between the Air District and the public. The proposed approach is therefore consistent with the Air District's longstanding, pre-settlement position regarding the DRP.

The Air District therefore disagrees with the commenter's assessment that the 2019 settlement agreement with WSPA is guiding the Air District's rulemaking process.

Lastly, it is worth noting that the Air District is not subject to the California Administrative Procedure Act, which applies to state agencies. The rulemaking procedures that govern the Air District are contained in Chapter 6.5 of Part 3 of Division 26 of the California Health and Safety Code, at section 40725 et seq.

Dispute Resolution Panel provisions should be codified in the rule language

Comment: One commenter expressed support for elements of the Dispute Resolution Panel and recommended they be codified in the regulatory text of Rule 11-18.

CCEEB

Response: The DRP would be a new effort for the Air District, and its implementation would require a significant amount of logistical coordination. The Air District believes that it is better to have flexibility in implementing the DRP, in case things do not go as planned or in case the Air District learns over time that a slight change to implementation would be warranted.

Expand access to the DRP to all facility owners/operators

Comment: One commenter recommended that all facility owners/operators, not just refineries, be able to utilize the Dispute Resolution Panel, finding that limiting the use of the panel to one facility type is inequitable as it deprives other facility types of a valuable resource.

CCEEB

Response: To minimize delays in Rule 11-18 implementation and reduce the staff resources required to convene a DRP, the proposed update to this section would limit the use of DRPs to matters specifically related to HRAs and RRPs for refineries. Refineries are highly complex, and estimates of emissions for these facilities are particularly challenging to determine. Technical issues associated with refineries are likely to be more numerous and more likely to benefit from the input of an expert third party. For this reason, and to balance between refined emissions estimates and Air District resources, these facilities were identified to be in the greatest potential need of the DRP process to provide additional guidance on especially complex technical issues.

Other industries would still have the opportunity to raise issues and resolve disputed matters with staff during other steps in the process (such as the comment period or Air District review and facility resubmittal process).

The Air District anticipates that limiting DRP access to the refineries would result in time and resource savings by restricting the DRP process to only the most complex facilities, where additional expertise and support are most needed.

Extend the time period for facility owners/operators to notify the Air District they would like to convene the DRP

Comment: One commenter stated that 15 days would be insufficient to review information and then determine whether the next best action is to engage with the DRP. The commenter recommended extending the notification time limit to 30 days.

CCEEB

Response: The proposed Phase 1 amendments are intended primarily to improve the efficiency and timeliness of Rule 11-18 implementation. The proposed timeframe for requesting a DRP is included to support timely identification of disputes while avoiding delays to the overall process. The Air District believes the 15-day timeframe would be adequate for facilities to determine if they wish to convene the DRP, given that facilities would be expected at this point in the process to be familiar with the materials relevant to potential disputes since the materials would have been published and made available for public review and comment. Therefore, the Air District does not see a need at this time to extend the proposed timeframe beyond 15 days.

Rename the Implementation Procedures to Implementation Guidelines

Comment: One commenter suggested re-titling the document to "Regulation 11, Rule 18 Implementation Guidelines" so it is clear that both Air District staff and regulated entities have the flexibility to implement the Rule in a manner different from the document if appropriate. The commenter suggested that this would be more appropriate given that the document would not have the force of law and would therefore be nonbinding for the Air District, the regulated entities, or any other person or entity.

CCEEB

Response: The Air District agrees with the commenter that, in a vacuum, "Implementation Guidelines" is likely a more fitting name than "Implementation Procedures." However, the Air District has made the decision to maintain the name of the document given the document's history and the fact that it has existed in multiple previous versions over the past several years with the same name.

Request for emissions inventory consistency with CARB "Hot Spots" Program

Comment: One commenter stated that Section 4.1.1 of the proposed Implementation Procedures (which describes emissions inventories) mentions consistency with the reporting requirements under California ARB's Emission Inventory Criteria and Guidelines (EICG) for the "Hot Spots" Program. The commenter stated that current practices of the Air District Source Test Division and Rule 12-15 emissions inventory staff are not consistent with these California ARB Guidelines. The commenter suggested that the Air District revise its Petroleum Refinery

Emissions Inventory Guideline to allow inventories that comply with CARB's EICG Guidelines to be approvable.

WSPA

Response: For Rule 11-18, the Air District follows the CARB EICG/CTR Guidelines when it comes to certain elements related to health risk estimation, including toxicity values, cancer risk and hazard index equations, and exposure assumptions.

For emissions estimation and Implementation Procedures, the Air District applies its own guidance and procedures. These include methods for calculating toxic air contaminant emissions, source testing protocols, treatment of non-detect values, and other engineering assumptions necessary to support Rule 11-18 implementation.

Socioeconomic Impact Analysis

Costs to implement Risk Reduction Plans should also be considered in the analysis

Comment: Three commenters expressed concern that the socioeconomic assessment of the amendments does not analyze any impacts or costs associated with implementing the Risk Reduction Plans. The commenters noted compliance with the plans may impose significant costs, including control technologies, reduced operations, and shutdowns, and that these costs could be passed downstream to businesses and consumers. One commenter stated that the potentially expedited Implementation Procedures and their impact to the economy should be assessed because this is not clear in the socioeconomic assessment.

Phillips 66, CCEEB, WSPA

Response: Socioeconomic impacts associated with RRP implementation were evaluated in the initial socioeconomic analysis for the adoption of Rule 11-18 in 2017 and can be found in the final socioeconomic analysis report and Final Staff Report for the 2017 Rule 11-18 adoption.

The proposed amendments do not increase stringency of any RRP emission limit or standard. During the development of the current proposed rule amendment materials, the Air District determined that it is highly unlikely that Rule 11-18 implementation under the proposed amendments would be faster than the original anticipated schedule (in which it was projected that Rule 11-18 HRAs for each facility subject to conducting a facility-wide HRA would be completed in five years, see Recirculated Final EIR Table 2.4-1). The Air District therefore determined there would not be changes to emissions impacts associated with the proposed amendments. An analysis of the cost implications of implementing the RRP measures would therefore be repetitive of the original analysis and outside the scope of the proposed amendments.

Costs are too high; Suggest Air District grow its own staffing instead

Comment: A commenter concluded that the costs identified in the socioeconomic analysis are too high for amendments that they feel reduce the trustworthiness of the Health Risk

Assessments. The commenter suggests the Air District instead enhance its own staffing capacity to continue conducting HRAs in-house.

CBE et al.

Response: The IMPLAN model estimates the reduction in output is equivalent to less than 0.001 percent of gross annual regional product. The socioeconomic analysis overall is a conservative projected estimate due to the conservative assumptions and estimates of compliance costs in the IMPLAN model. For these reasons, the Air District believes socioeconomic impacts could be lower than the high-end estimates in the IMPLAN model.

Staff recognizes that with these conservative estimates, the socioeconomic analysis indicated potential significant impacts for some small businesses. In order to avoid these significant impacts, the Air District is committing to complete the HRAs "in-house" for any small business impacted by the rule via the provision in the proposed rule amendments section 11-18-402.6 which states the Air District would be able to perform the HRA for a facility owner/operator that lacks the resources to do the HRA.

"Unreasonable Economic Burden" definition does not capture total costs

Comment: One commenter noted that the Rule's definition of "Unreasonable Economic Burden" is a burden for which *annualized* costs exceed 10% of the *annual* profits of a facility. The commenter stated that, since *annualized* costs are likely to be less than the *total* capital costs, the total capital costs could therefore potentially exceed annual profits of a facility in a given year. The commenter found this hypothetical to be unreasonable.

WSPA

Response: These proposed Rule 11-18 amendments are focused on efficiency of Rule 11-18 implementation. The concept of altering the definition of Unreasonable Economic Burden may be considered under future Rule 11-18 amendments focused on stringency.

The socioeconomic analysis report contains unclear citations

Comment: One commenter found the citations in the socioeconomic report to be too vague to be checked.

WSPA

Response: Additional notes have been added to Socioeconomic Impact Analysis Report, Tables 2, 3, and 4 to clarify citations.

Future stringency updates will require additional socioeconomic impact analysis

Comment: One commenter noted that if Phase 2 of the Rule 11-18 amendments increase stringency of the rule or require new emissions mitigation requirements, a new socioeconomic analysis will need to be conducted.

WSPA

Response: The Air District agrees a new socioeconomic analysis will need to be conducted if Phase 2 of the Rule 11-18 amendments increase stringency of the rule or require new emissions mitigation requirements.

Addendum to Environmental Impact Report for CEQA

Future Amendments will require new CEQA review

Comment: One commenter stated that the Air District will be required to evaluate the future Phase 2 Rule 11-18 amendments under a new CEQA review and that the CEQA addendum prepared for the Phase 1 amendments is not adequate environmental review of the future Phase 2 amendments.

WSPA

Response: The Air District agrees that the CEQA addendum prepared for these proposed amendments does not constitute adequate environmental review of the impacts associated with any future Phase 2 changes. As the commenter noted, the form and content of any Phase 2 amendments is unknown, so the Air District will need to consider the implications of such amendments under CEQA in the future.

A new EIR should be prepared

Comment: One commenter stated that a subsequent or supplemental EIR should be prepared instead of an addendum due to the proposal that facilities conduct the HRAs instead of the Air District. The commenter stated that key assumptions or information could differ based on who is performing the HRA, which could lead to substantially different HRA results.

CBE et al.

Response: The Air District disagrees with the commenter's premise that having facilities perform HRAs would substantively alter the results of the HRAs. Given that the Air District disagrees with that premise, the Air District further disagrees with the conclusion that having facilities perform HRAs could meet any of the criteria in Public Resources Code section 21166 or CEQA Guidelines section 15162 requiring a subsequent or supplemental EIR.

Presently foreseeable rulemaking may constitute unlawful "piecemealing" under CEQA

Comment: One commenter stated that there are reasons to believe that foreseeable future rulemaking could affect the environmental impacts of the proposed amendments and that failing to assess these impacts could constitute unlawful "piecemealing" under CEQA. The commenter listed the following two examples of potentially "presently foreseeable rulemakings:"

1. Future rulemaking to increase stringency of Rule 11-18 could necessitate different control technologies and result in more overlap between installation timelines.

2. Future amendments to Rule 12-15 could impact emissions inventories used for refinery HRAs, which could in turn impact HRA results and RRPs for these facilities.

The commenter also pointed to the U.S. EPA's 2020 revision of the primary annual PM2.5 national ambient air quality standard from 12 micrograms per cubic meter to 9 micrograms per cubic meter. The commenter noted that the CEQA addendum for the proposed amendments acknowledges that this standard was not considered in the original Rule 11-18 EIR from 2017. The commenter stated that, although the Air District discussed this strengthened standard in the CEQA addendum, the Air District will need to assess CEQA impacts for future rulemaking while considering the new standard.

WSPA

Response: The Air District disagrees with WSPA's concern that its reliance on the addendum may constitute unlawful piecemealing.

1. Potential Rule 11-18 Phase 2 Amendments: First, as WSPA noted in their comment letter, the Phase 2 amendments are extremely uncertain in form, content, and timing. The concept of Phase 2 is that it will be an opportunity for the Air District to review the stringency of Rule 11-18. This does not necessarily mean that the Air District will propose any increases in stringency, let alone any specific increase in stringency that could presently be reviewed under CEQA. The Air District's posture with regard to these Phase 2 amendments therefore falls comfortably within a line of caselaw holding that speculative future actions do not need to be included in current environmental documents. (See, e.g., Berkeley Keep Jets Over the Bay Com. v. Board of Port Cmrs. (2001) 91 Cal.App.4th 1344, 1361 [airport EIR could omit future projects that "existed only as concepts in long-range plans that were subject to constant revision"]; National Parks and Conservation Assn. v. County of Riverside (1996) 42 Cal.App.4th 1505, 1518-1519 ["Deferral of environmental assessment does not violate CEQA where an EIR cannot currently provide meaningful information about speculative future projects."].)

2. Potential Rule 12-15 Changes: The commenter also raised the hypothetical future repeal of Rule 12-15 as a potential source of increased environmental impacts because of how Rule 12-15 and Rule 11-18 interact. The potential repeal of Rule 12-15, which is still in the concept phase, is also uncertain at this time, and therefore it is proper to leave it out of an addendum. However, even if the Air District were required to consider the impact of the repeal of Rule 12-15, that repeal would not trigger the need to prepare a subsequent or supplemental EIR pursuant to CEQA section 21166 or CEQA Guidelines section 15162. Because the original EIR included very conservative assumptions about environmental impacts, and because it did not rely on any assumptions about Rule 12-15, there is no reason to believe that repeal of Rule 12-15 would result in new significant impacts or substantially more severe impacts. Indeed, it is not clear if or how repeal of Rule 12-15 would impact implementation of Rule 11-18 at all, let alone sufficiently to trigger the requirement to prepare a subsequent or supplemental EIR. Although WSPA suggested that repeal of Rule 12-15 may impact Rule 11-18 emission inventories, the Air District

does not anticipate any specific change to Rule 11-18 inventories if Rule 12-15 were repealed, so the Air District could not analyze the environmental impacts of any such change.

3. Revised $PM_{2.5}$ Federal Standard: Last, WSPA raised the revised federal $PM_{2.5}$ standard as a source of new information. As WSPA recognizes, the Air District's addendum does address the revised $PM_{2.5}$ standard and explains why this new information does not trigger the requirement for a subsequent or supplemental EIR.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

RESOLUTION NO. 2026-

A Resolution of the Board of Directors of the Bay Area Air Quality Management District Amending Air District Regulation 11, Rule 18 (Reduction of Risk from Air Toxic Emissions at Existing Facilities) and Amending Implementation Procedures to Regulation 11, Rule 18

RECITALS

WHEREAS, the Board of Directors of the Bay Area Air Quality Management District ("Air District") has determined that a need exists to amend Air District rules and regulations by adopting amendments to Regulation 11, Rule 18, Reduction of Risk from Air Toxic Emissions at Existing Facilities ("Rule 11-18") as set forth in Attachment A hereto ("Proposed Rule Amendments") and to adopt amendments to the Implementation Procedures for Rule 11-18 as set forth in Attachment B hereto ("Proposed Implementation Procedures Amendments") (collectively, "Proposed Amendments");

WHEREAS, among other things, the Proposed Amendments provide that regulated facilities, rather than the Air District, would generally conduct Health Risk Assessments under Rule 11-18 in the first instance;

WHEREAS, the need for the Proposed Amendments has arisen because of delayed implementation of Rule 11-18, and for other reasons as addressed in the Final Staff Report for the Proposed Amendments and discussed at the public hearing held to consider the Proposed Amendments;

WHEREAS, the Board of Directors of the Air District obtains its authority to adopt, amend, and repeal rules and regulations from Sections 40000, 40001, 40702, and 40725 through 40728.5 of the California Health & Safety Code;

WHEREAS, on November 14, 2017, the Board of Directors of the Air District adopted Rule 11-18;

WHEREAS, the Air District was lead agency for adoption of Rule 11-18 pursuant to Section 21067 of the California Environmental Quality Act ("CEQA") and Sections 15050 and 15051 of the CEQA Guidelines (Title 14 of the California Code of Regulations);

WHEREAS, also on November 14, 2017, the Air District certified a Recirculated Final Environmental Impact Report ("EIR") (State Clearinghouse number 2016102043) in accordance with the provisions of CEQA and the CEQA Guidelines analyzing the potential environmental impacts of the adoption of Rule 11-18, and adopted findings under CEQA Guidelines Section 15091 and a statement of overriding considerations under CEQA Guidelines Section 15093 in accordance with the provisions of CEQA and the CEQA Guidelines;

DRAFT

WHEREAS, in 2018, the Air District published Implementation Procedures for Rule 11-18 ("Implementation Procedures"), the purpose of which was to detail how the Air District planned to implement Rule 11-18;

WHEREAS, in 2020, the Air District amended the Implementation Procedures for Rule 11-18;

WHEREAS, on December 29, 2023, the Air District published draft amendments to the Implementation Procedures and a Concept Paper for the Proposed Rule Amendments ("Concept Paper") for public comment, and accepted public comments through February 29, 2024;

WHEREAS, on February 15, 2024, Air District staff held a virtual public workshop to discuss the draft amendments to the Implementation Procedures and Concept Paper with interested parties and the public;

WHEREAS, the Air District received 12 written comment letters and seven oral comments during the public comment period on the draft amendments to the Implementation Procedures and the Concept Paper;

WHEREAS, on March 13, 2024, Air District staff presented an update on the amendments to the Implementation Procedures and the amendment concepts to the Stationary Source Committee of the Board of Directors of the Air District;

WHEREAS, on April 29, 2024, Air District staff published the updated Implementation Procedures and summaries of the public comments received and staff's responses;

WHEREAS, on August 28, 2025, the Air District released draft amendments to Rule 11-18 and further amendments to the Implementation Procedures for public comment through October 13, 2025;

WHEREAS, on October 2, 2025, Air District staff held a virtual public workshop to discuss the amendments with interested parties and the public;

WHEREAS, the Air District received eight written comment letters and three oral comments on the draft amendments;

WHEREAS, on November 12, 2025, the Stationary Source Committee considered and discussed with interested members of the public a briefing on the amendments and the public comments received on the documents;

WHEREAS, on December 10, 2025, the Stationary Source Committee considered and discussed with interested members of the public a briefing on additional comments received on the documents;

WHEREAS, on March 18, 2026, the Air District published the Proposed Amendments, accompanied by, among other things, an addendum prepared pursuant to CEQA Guidelines Section 15164 ("Addendum") and a socioeconomic impact analysis, which would meet the

DRAFT

requirements of Health & Safety Code Section 40728.5 if such requirements were applicable, along with a request for public comment, and the Air District accepted public comments on the materials through April 19, 2026;

WHEREAS, on March 18, 2026, Air District staff published a notice in the newspaper and on the Air District's website of a public hearing to be held on June 3, 2026 for the Proposed Amendments;

WHEREAS, the Air District received eight written comment letters from the public on the Proposed Amendments and accompanying materials;

WHEREAS, Air District staff have prepared summaries of the public comments received and staff's responses in the Final Staff Report, which has been considered by the Board of Directors of the Air District and is incorporated herein by reference;

WHEREAS, on June 3, 2026, the Board of Directors of the Air District held a public hearing, which was properly noticed in accordance with the provisions of Health & Safety Code Section 40725 and was conducted in accordance with the provisions of Health and Safety Code Section 40726, to consider the Proposed Amendments in accordance with all provisions of law;

WHEREAS, at the June 3, 2026 public hearing, the subject matter of the Proposed Amendments was discussed with interested persons in accordance with all provisions of law;

WHEREAS, in accordance with Health & Safety Code Section 40727, and based on substantial evidence presented at the hearing and described in the Final Staff Report, the Board of Directors of the Air District has found and determined that the Proposed Rule Amendments are necessary; that the Air District has the authority to adopt the Proposed Rule Amendments; that the Proposed Rule Amendments are clearly written and displayed; that the Proposed Rule Amendments are consistent with other legal requirements; that the Proposed Rule Amendments are not impermissibly duplicative of existing regulatory requirements; and that the Proposed Rule Amendments will implement and make specific certain provisions of law as referenced and identified below;

WHEREAS, the Board of Directors has determined that a need exists to adopt the Proposed Rule Amendments to more expeditiously and efficiently address impacts from emissions of toxic air contaminants from existing stationary sources in the San Francisco Bay Area;

WHEREAS, the Board of Directors of the Air District has determined, based on a review of the text of the Proposed Rule Amendments set forth in Attachment A and the rulemaking materials prepared by Air District staff, including the Final Staff Report, that the Proposed Rule Amendments are written and displayed so that their meaning can be easily understood by the persons directly affected by the Proposed Rule Amendments, and by the public at large;

DRAFT

WHEREAS, the Board of Directors of the Air District has determined that the Proposed Rule Amendments are in harmony with and not in conflict with or contradictory to existing statutes, court decisions, and state and federal regulations;

WHEREAS, the Board of Directors of the Air District has determined that the Proposed Rule Amendments do not impose the same requirements as any existing state or federal regulation, and are necessary and proper to execute the power and duties granted to and imposed upon the Air District;

WHEREAS, the Board of Directors of the Air District has identified and determined that the Proposed Rule Amendments will implement, interpret and/or make specific the provisions of Sections 40000, 40001, and 40702 of the California Health & Safety Code;

WHEREAS, the Board of Directors of the Air District finds and intends that its determinations stated in the preceding paragraphs constitute the findings the Board of Directors of the Air District is required to make before adopting the Proposed Rule Amendments pursuant to Health & Safety Code Section 40727;

WHEREAS, the Air District has prepared a written analysis, which would meet the requirements of Health & Safety Code Section 40727.2 if such requirements were applicable, of federal, state, and District requirements applicable to the relevant source categories and has found that the Proposed Rule Amendments would not be in conflict with any federal, state, or other Air District rules, and the Board of Directors of the Air District has agreed with these findings;

WHEREAS, in accordance with the requirements of Health & Safety Code Section 40728 and other requirements of law, the Air District has maintained a file of the documents and other materials that constitute the record of proceedings on which this rulemaking project is based, which record documents and other materials are located at the Bay Area Air Quality Management District, 375 Beale Street, Suite 600, San Francisco, 94105, and the custodian for which is Marcy Hiratzka, Clerk of the Boards;

WHEREAS, the Board of Directors of the Air District has reviewed the Socioeconomic Impact Analysis for the Proposed Rule Amendments prepared for the Air District by BAE Urban Economics, Inc., which found that the Rule Amendments could financially impact 24 small businesses and could have a significant financial impact on eight small businesses, if the Air District were to require those businesses to conduct Health Risk Assessments under the amended Rule 11-18;

WHEREAS, to eliminate the significant financial impacts of the Proposed Rule Amendments, the Board of Directors of the Air District understands that the Air Pollution Control Officer of the Air District will exercise discretion under Section 11-18-406 of the Proposed Rule Amendments to prepare Health Risk Assessments for facilities that qualify as small businesses pursuant to Regulation 3, Section 209;

DRAFT

WHEREAS, in accordance with the requirements of Health & Safety Code Section 40728.5 to the extent that such requirements are applicable, the Board of Directors of the Air District has actively considered the socioeconomic impacts of the Proposed Rule Amendments and has reviewed and considered the Socioeconomic Impact Analysis for the Proposed Rule Amendments, and has determined that the Air District has made a good faith effort to minimize adverse socioeconomic impacts arising from the Proposed Rule Amendments;

WHEREAS, Air District staff has determined that an incremental cost-effectiveness analysis of the Proposed Rule Amendments pursuant to Health & Safety Code Section 40920.6 is not required because the Proposed Rule Amendments were not adopted to meet the requirement for best available retrofit control technology pursuant to Health and Safety Code Sections 40918, 40919, 40920, and 40920.5 or for a feasible measure pursuant to Health and Safety Code Section 40914;

WHEREAS, pursuant to CEQA Section 21166 and CEQA Guidelines Sections 15162 and 15163, when an EIR has been certified and the project is modified or otherwise changed after certification, then no subsequent or supplemental EIR shall be required or prepared unless (i) substantial changes are proposed in the project that will require major revisions of the EIR, (ii) substantial changes occur with respect to circumstances under which the project is being undertaken that will require major revisions to the EIR, or (iii) new information that was not known (and could not have been known) at the time of the EIR becomes available;

WHEREAS, pursuant to CEQA Guidelines Section 15164(a), an addendum may be prepared by the lead agency that prepared the original EIR if some changes or additions are necessary, but none of the conditions set forth in CEQA Section 21166 and CEQA Guidelines Section 15162 requiring preparation of a subsequent or supplemental EIR have occurred;

WHEREAS, Air District staff have reviewed the Addendum prepared for the Air District by Environmental Audit, Inc., and have determined that, for the reasons set forth in the Addendum and Final Staff Report, no subsequent or supplement EIR is required or allowed because the conditions of CEQA Section 21166 and CEQA Guidelines Section 15162 have not been met;

WHEREAS, pursuant to CEQA Guidelines Section 15097, a Mitigation Monitoring and Reporting Program has been prepared for the Air District by Environmental Audit, Inc., as set forth in Attachment D hereto, to ensure that all mitigation measures are fully implemented;

WHEREAS, this matter has been duly noticed and heard in compliance with applicable requirements of the Health & Safety Code and other applicable provisions of law;

WHEREAS, Air District staff recommends that the Board of Directors adopt the Proposed Amendments and the Proposed Mitigation Monitoring and Reporting Program, and approve the Proposed Addendum; and

WHEREAS, the Board of Directors concurs with the recommendations of Air District staff

regarding the Proposed Amendments and relevant provisions of law.

RESOLUTION

NOW THEREFORE, BE IT RESOLVED that the Board of Directors of the Bay Area Air Quality Management District does hereby adopt the Proposed Rule Amendments as set forth in Attachment A and the Proposed Implementation Procedures Amendments as set forth in Attachment B, as discussed in the Final Staff Report and all other documents in the record, pursuant to the authority granted by law, with instructions to staff to correct any typographical or formatting errors before final publication.

BE IT FURTHER RESOLVED that in support of and as part of its adoption of the Proposed Rule Amendments, the Board of Directors hereby finds, based on all the reasons contained in the Final Staff Report and summarized in the Recitals above, that the Proposed Rule Amendments are necessary; the District has the authority to adopt the Proposed Rule Amendments; the Proposed Rule Amendments are clearly written and displayed; the Proposed Rule Amendments are consistent with other legal requirements; the Proposed Rule Amendments are not impermissibly duplicative of existing regulatory requirements; and the Proposed Rule Amendments will implement specific provisions of law as referenced and identified.

BE IT FURTHER RESOLVED that the Board of Directors of the Bay Area Air Quality Management District does hereby adopt the Addendum prepared pursuant to CEQA for the Proposed Amendments.

BE IT FURTHER RESOLVED that the Addendum, which is attached hereto as Attachment C, was presented to the Board of Directors of the Bay Area Air Quality Management District, and they have reviewed and considered the information contained within the Addendum and the EIR, both of which are incorporated by reference, prior to making a decision to adopt the Proposed Amendments.

BE IT FURTHER RESOLVED that the Board of Directors of the Bay Area Air Quality Management District does hereby adopt the Mitigation Monitoring and Reporting Program, which is attached hereto as Attachment D, to ensure that all mitigation measures are fully implemented.

BE IT FURTHER RESOLVED that the Board of Directors of the Bay Area Air Quality Management District directs the Air Pollution Control Officer of the Air District to exercise discretion under Section 11-18-406 of the amended Rule 11-18 to prepare Health Risk Assessments for facilities that qualify as small businesses pursuant to Regulation 3, Section 209.

BE IT FURTHER RESOLVED that the record documents and other materials supporting this Resolution shall be maintained and made available for public review at the headquarters of the Bay Area Air Quality Management District at 375 Beale Street, Suite 600, San Francisco, CA

DRAFT

94105, and that the custodian for these documents and other materials shall be Marcy Hiratzka, Clerk of the Boards.

The foregoing Resolution was duly and regularly introduced, passed, and adopted at a public meeting of the Board of Directors of the Bay Area Air Quality Management District on the Motion of Director _____, seconded by Director _____, on the _____ _____ day of June, 2026, by the following vote of the Board:

AYES:

NOES:

ABSENT:

_____
Lynda Hopkins
Chairperson of the Board of Directors

ATTEST:

_____
Marcy Hiratzka
Clerk of the Boards

DRAFT

Bay Area Air District

ATTACHMENT A

Proposed Rule Amendments to Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities

This page has been intentionally left blank.

NOTE: Revisions to the November 2017 version of Rule 11-18 are indicated as follows: deletions are indicated as ~~red strikethrough~~ and additions are indicated as blue underline.

REGULATION 11
HAZARDOUS POLLUTANTS
RULE 18
REDUCTION OF RISK FROM AIR TOXIC EMISSIONS AT EXISTING FACILITIES

INDEX

11-18-100 GENERAL

11-18-101 Description
11-18-102 Applicability
11-18-103 Exemption, Emergency Use, Stationary Diesel Engines
11-18-104 Exemption, Retail Gasoline Dispensing Facilities

11-18-200 DEFINITIONS

11-18-201 Acute Hazard Index, or Acute HI
11-18-202 Acute Hazard Quotient, or Acute HQ
11-18-203 Airborne Toxic Control Measure~~, or~~ (ATCM)
11-18-204 Best Available Retrofit Control Technology for Toxics~~, or~~ (TBARCT)
11-18-205 Cancer Risk
11-18-206 Chronic Hazard Index, or Chronic HI
11-18-207 Chronic Hazard Quotient, or Chronic HQ
11-18-208 Exposed Individual (EI)
11-18-209 Facility
11-18-210 Gasoline Dispensing Facility (GDF)
11-18-211 Health Risk
11-18-212 Health Risk Assessment~~, or~~ (HRA)
11-18-213 Maximally Exposed Individual (MEI)
11-18-214 Maximum Achievable Control Technology~~, or~~ (MACT)
11-18-215 Owner/Operator
11-18-216 Prioritization Score
11-18-217 ~~Priority Community~~ Risk Action Level
11-18-218 ~~Risk Action Level~~ Risk Reduction Measures
11-18-219 Risk Reduction Plan~~ or Plan~~ (RRP)
11-18-220 ~~Risk Reduction Measures~~ Significant Risk Threshold
11-18-221 ~~Significant Risk Threshold~~Significant Source
11-18-222 ~~Significant Source~~Site-Specific Modeling Protocol
11-18-223 Source
11-18-224 Stationary Diesel-Fueled, Compression-Ignited Engine
11-18-225 Toxic Air Contaminant~~ or~~ (TAC), or Air Toxic
11-18-226 Toxic Risk Facility
11-18-227 Unreasonable Economic Burden

11-18-300 STANDARDS

11-18-301 Compliance with Risk Reduction Plan

11-18-400 ADMINISTRATIVE REQUIREMENTS

~~11-18-401 Health Risk Assessment Information Requirement~~
~~11-18-402 Early Application of Risk Action Levels~~
~~11-18-403 Notification of HRA Results and Submission of Plan~~
~~11-18-404 Risk Reduction Plan Content Requirements~~
~~11-18-405 Review and Approval of Risk Reduction Plans~~
11-18-401 Health Risk Assessment Procedures – Legacy
11-18-402 Health Risk Assessment Procedures
11-18-403 Risk Reduction Plan Procedures
11-18-404 Reconsideration of Prioritization Scores
11-18-405 Additional Emissions Data
11-18-406 Updated Risk Reduction Plan

11-18-500 MONITORING AND RECORDS

11-18-501 Progress Reports

11-18-600 MANUAL OF PROCEDURES

11-18-601 Prioritization Score Calculation Procedures
11-18-602 Health Risk Assessment Procedures

REGULATION 11
HAZARDOUS POLLUTANTS
RULE 18
REDUCTION OF RISK FROM AIR TOXIC EMISSIONS AT EXISTING FACILITIES

(Adopted November 15, 2017)

11-18-100 GENERAL

11-18-101 Description: The purpose of this rule is to ensure that facilities that emit toxic air contaminants do not pose an unacceptable health risk to nearby residents, workers, or students.

11-18-102 Applicability: This rule applies to any toxic risk facility that is required to report the toxic air contaminant emissions inventory of the facility to the Air District pursuant to the Air Toxics "Hot Spots" Information and Assessment Act of 1987, California Health and Safety Code, Section 44300 *et seq*.

11-18-103 Exemption, Emergency-Use, Stationary Diesel Engines: This rule shall not apply to facilities for which the only source of toxic air contaminant emissions is one or more stationary diesel-fueled, compression-ignited engines operated only for emergency-use, as defined in Regulation 9, Rule 8, Section 9-8-231, and reliability-related activities, and the facility prioritization score is less than 250.

11-18-104 Exemption, Retail Gasoline Dispensing Facilities: This rule shall not apply to retail gasoline dispensing facilities with a prioritization score less than 250.

11-18-200 DEFINITIONS

11-18-201 Acute Hazard Index, or Acute HI: Acute hazard index is the sum of the individual acute hazard quotients for toxic air contaminants identified as affecting the same target organ or organ system.

11-18-202 Acute Hazard Quotient, or Acute HQ: Acute hazard quotient is the ratio of the estimated short-term average concentration of the toxic air contaminant to its acute reference exposure level (estimated for inhalation exposure).

11-18-203 Airborne Toxic Control Measure~~, or~~ (ATCM): A recommended method and, where appropriate, a range of methods, established by the California Air Resources Board (CARB) pursuant to the Tanner Act, California Health and Safety Code Section 39650 *et seq.*, that reduces, avoids, or eliminates the emissions of a toxic air contaminant.

11-18-204 Best Available Retrofit Control Technology for Toxics~~, or~~ (TBARCT): The most stringent of the following retrofit emission controls; considering the cost of achieving health risk reductions, any non-air quality health and environmental impacts, and energy requirements; provided that under no circumstances shall the controls be less stringent than the emission control required by any applicable provision of federal, State or District laws, rules, regulations or requirements:

204.1 The most effective retrofit emission control device or technique that has been successfully utilized for the type of equipment comprising such a source; or

204.2 The most stringent emission limitation achieved by a retrofit emission control device or technique for the type of equipment comprising such a source; or

204.3 Any retrofit control device or technique or any emission limitation that the APCO has determined to be technologically feasible for the type of equipment comprising such a source; or

204.4 The most stringent retrofit emission control for a source type or category specified as MACT by ~~U.S. EPA,~~the United States Environmental Protection Agency (U.S. EPA), or specified in an ATCM by CARB.

11-18-205 Cancer Risk: An estimate of the chance that an individual may develop cancer as a result of exposure to emitted carcinogens at a given exposed individual location, and considering, where

appropriate, Age Sensitivity Factors to account for inherent increased susceptibility to carcinogens during infancy and childhood.

11-18-206 **Chronic Hazard Index, or Chronic HI:** Chronic hazard index is the sum of the individual chronic hazard quotients for toxic air contaminants identified as affecting the same target organ or organ system.

11-18-207 **Chronic Hazard Quotient, or Chronic HQ:** Chronic hazard quotient is the ratio of the estimated annual average exposure of the toxic air contaminant to its chronic reference exposure level (estimated for inhalation and non-inhalation exposures).

11-18-208 **Exposed Individual (EI):** A person who is exposed to TACs emitted from a toxic risk facility who is not an employee or contractor of the facility. Exposed individual includes a resident, student, or worker who is not an employee of or a contractor for the toxic risk facility.

11-18-209 **Facility:** Any property, real or personal, which may incorporate one or more plants all being operated or maintained by a person as part of an identifiable business on contiguous or adjacent property, and shall include, but not be limited to manufacturing plants, refineries, power generating plants, ore processing plants, construction material processing plants, automobile assembly plants, foundries and waste processing sites.

11-18-210 **Gasoline Dispensing Facility (GDF):** Any stationary operation that dispenses gasoline directly into the fuel tanks of motor vehicles. This facility shall be treated as a single source which includes all necessary equipment for the exclusive use of the facility, such as nozzles, dispensers, pumps, vapor return lines, plumbing and storage tanks.

11-18-211 **Health Risk:** The potential for adverse human health effects resulting from exposure to emissions of toxic air contaminants and ranging from relatively mild temporary conditions, such as eye or throat irritation, shortness of breath, or headaches, to permanent and serious conditions, such as birth defects, cancer or damage to lungs, nerves, liver, heart, or other organs. Measures of health risk include cancer risk, chronic hazard index, and acute hazard index.

11-18-212 **Health Risk Assessment~~, or~~ (HRA):** An analysis that estimates the potential for increased likelihood of health risk for individuals in the affected population that may be exposed to emissions of one or more toxic air contaminants, determined in accordance with Section 11-18-602~~Rule 2-5, Section 2-5-603~~. An HRA report is a document that presents the HRA and follows the HRA report template approved by the APCO.

11-18-213 **Maximally Exposed Individual (MEI):** A person that may be located at the exposed individual location where the highest exposure to toxic air contaminants emitted from a given source or project is predicted, as shown by an APCO-approved HRA. MEI locations are typically determined for maximum cancer risk, chronic hazard index and acute hazard index based on exposure to residents, workers, and students.

11-18-214 **Maximum Achievable Control Technology~~, or~~ (MACT):** An emission standard promulgated by U.S. EPA pursuant to Section 112(d) of the Clean Air Act.

11-18-215 **Owner/Operator:** Any person who owns, leases, operates, controls, or supervises a facility~~, building, structure, installation, or source which directly or indirectly results or may result in emissions of any air pollutant~~.

11-18-216 **Prioritization Score:** The relative potential for health impacts from a facility based on the amount of TACs emitted from the facility, the relative toxicity of the TACs emitted, the proximity of the facility to exposed individuals and exposure factors for different types of exposed individuals. The methodology for determining a facility's prioritization scores is located in Appendix A to this rule.

~~**11-18-217** **Priority Community:** A geographic area where levels of toxic air contaminants are higher than other areas and where people may be particularly vulnerable and may bear disproportionately higher adverse health effects.~~

~~**11-18-218** **Risk Action Level**~~

~~218.1 Before January 1, 2020, any of the following health risk levels:~~

~~1.1 A cancer risk of 25 per million (25/M); or~~

~~1.2 A chronic hazard index of 2.5; or~~

~~1.3 An acute hazard index of 2.5.~~

~~218.2 Effective January 1, 2020, except as provided in Section 11-18-402, any of the following health risk levels:~~

~~2.1 A cancer risk of 10 per million (10/M); or~~

~~2.2 A chronic hazard index of 1.0; or~~

~~2.3 An acute hazard index of 1.0.~~

11-18-217 Risk Action Level: Any of the following health risk levels:

217.1 A cancer risk of 10 per million (10/M); or

217.2 A chronic hazard index of 1.0; or

217.3 An acute hazard index of 1.0.

~~**11-18-220**~~**11-18-218 Risk Reduction Measures:** Practices that reduce toxic air contaminant emissions or that reduce health risks at the facility being evaluated, including changes to production processes, feedstocks, product formulations, emission point locations, emissions capture and dispersion mechanisms, and the installation of TBARCT or other control devices.

11-18-219 Risk Reduction Plan ~~or Plan~~ (RRP): A document meeting the requirements of Section ~~11-18-404~~ 11-18-403.2 that identifies, among other things, sources, quantities, and causes of emissions responsible for meeting or exceeding~~exceedance of~~ any of the risk action levels set forth in Section ~~11-18-221~~11-18-217 and details risk reduction measures that will be implemented to reduce risk.

~~**11-18-221**~~**11-18-220 Significant Risk Threshold:** Any of the following toxic health risk levels:

~~221~~220.1 A cancer risk of 1.0 per million (1.0/M); or

~~221~~220.2 A chronic hazard index of 0.20; or

~~221~~220.3 An acute hazard index of 0.20.

~~**11-18-222**~~**11-18-221 Significant Source:** A source of toxic air contaminants or health risk that poses a risk equal to or greater than a significant risk threshold at any MEI location at which all sources at the facility, taken together, pose a health risk equal to or greater than a risk action level.

11-18-222 Site-Specific Modeling Protocol: A document that describes the process for conducting a Health Risk Assessment required by Air District regulations and programs, and that identifies the steps and assumptions to be taken during the air dispersion modeling and risk assessment process for a specific site.

11-18-223 Source: Any article, machine, equipment, operation, contrivance or related groupings of such that may produce and/or emit air pollutants.

11-18-224 Stationary Diesel-Fueled, Compression-Ignited Engine: An internal combustion engine with operating characteristics significantly similar to the theoretical diesel combustion cycle that is operated, or intended to be operated, at a specific site for more than one year or is attached to a foundation at that site.

11-18-225 Toxic Air Contaminant ~~or~~ (TAC), or Air Toxic: An air pollutant that may cause or contribute to an increase in mortality or in serious illness or that may pose a present or potential hazard to human health. For the purposes of this rule, TACs consist of the substances listed in Table 2-5-1 Toxic Air Contaminant Trigger Levels in Regulation 2, Rule 5.

11-18-226 Toxic Risk Facility: Any facility that manufactures, formulates, uses, or releases any toxic air contaminant or any other substance that reacts to form a TAC.

11-18-227 Unreasonable Economic Burden: When the annualized cost of compliance (the sum of the annual operating cost and annualized capital costs) exceeds ten percent of the annual profits of a facility or one percent of the annual operational budget of a non-profit facility.

11-18-300 STANDARDS

11-18-301 Compliance with Risk Reduction Plan: The owner/operator of a toxic risk facility that poses a health risk, as determined by an APCO-approved HRA, equal to or greater than one or more of the risk action levels in effect pursuant to Section ~~11-18-218~~ 11-18-217 shall obtain and maintain APCO approval of a Risk Reduction Plan in accordance with Section 11-18-403, and shall implement the risk reduction measures on the timeline specified in the approved Risk Reduction Plan and comply with all other requirements and timelines in the approved Risk

Reduction Plan.~~:~~

~~301.1 Submit a proposed Risk Reduction Plan to the APCO in accordance with Section 11-18-403;~~

~~301.2 Obtain and maintain APCO approval of a Risk Reduction Plan in accordance with Section~~**~~s~~** ~~11-18-403, 404, and 405; and~~

~~301.3 Implement the risk reduction measures and comply with all other requirements in the approved Risk Reduction Plan~~

11-18-400 ADMINISTRATIVE REQUIREMENTS

~~**11-18-401 Health Risk Assessment Information Requirement**: Within 60 days of a request from the APCO, a facility owner/operator shall submit to the APCO any information necessary to complete an HRA of the facility. The facility owner/operator may request additional time to submit the requested information (up to an additional 60 days) provided that the facility owner/operator can demonstrate that additional time is necessary.~~

~~**11-18-402 Early Application of Risk Action Levels:** The APCO may conduct an HRA for or apply the risk action levels specified in Section 11-18-218.2 to any toxic risk facility located within a Priority Community at any time after the adoption of this rule.~~

~~**11-18-403 Notification of HRA Results and Submission of Plan:** The APCO shall provide the facility owner/operator with a copy of the preliminary HRA. The facility owner/operator shall be given 90 days to review and comment on the preliminary HRA. After taking into account any comments from a facility on preliminary HRA results and correcting factual errors, the APCO shall notify a facility owner/operator when a final APCO-approved HRA indicates a facility health risk equals or exceeds one or more of the risk action levels set forth in Section 11-18-218 and provide the facility owner/operator with a copy of the final APCO-approved HRA. Within 180 days of notification, the facility owner/operator shall submit a draft Risk Reduction Plan to the APCO that complies with Section 11-18-404. The APCO may allow additional time for the Plan submission to ensure the Plan is compatible with any applicable safety regulations.~~

11-18-401 Health Risk Assessment Procedures – Legacy: For a facility owner/operator that has received notification from the APCO that the site-specific modeling protocol has been finalized by the APCO before [date of rule adoption], the following requirements shall apply as appropriate:

401.1 Submission of Information: Within 60 days of a request from the APCO, the facility owner/operator shall submit to the APCO any information the APCO deems necessary, including, but not limited to, a TAC emissions inventory and TAC emissions release data, to complete an HRA of the facility. The facility owner/operator may request up to 60 additional days to submit the requested information provided that the facility owner/operator can establish, to the APCO's satisfaction, that such additional time is necessary.

401.2 Comment Period: The APCO shall prepare and publish a preliminary HRA report. The APCO shall notify the facility owner/operator and the public of the availability of the preliminary HRA report and hold a 90-day review and comment period.

401.3 Approval and Comparison to Risk Action Levels: After taking into account any comments on the preliminary HRA report and making any alterations to the HRA, the APCO shall approve and finalize the HRA report. The APCO shall notify the facility owner/operator whether the final, APCO-approved HRA indicates a facility health risk equals or exceeds one or more of the risk action levels set forth in Section 11-18-217. The APCO shall provide the facility owner/operator with a copy of the final, APCO-approved HRA report.

11-18-402 Health Risk Assessment Procedures: For a facility owner/operator that has not yet received notification by the APCO as of [date of rule adoption] that the site-specific modeling protocol has been finalized, the following requirements shall apply as appropriate:

402.1 Notification: The APCO shall notify a facility owner/operator that the facility owner/operator must prepare an HRA for the facility when the APCO determines that an HRA is warranted based on the facility's prioritization scores and other relevant factors. With the notification, the APCO shall provide an APCO-approved TAC emissions inventory to the facility owner/operator.

402.2 Site-Specific Modeling Protocol:

2.1 A facility owner/operator shall provide a draft site-specific modeling protocol to the APCO within 60 days of receiving a notification from the APCO pursuant to Section 11-18-402.1. The facility owner/operator may request up to 60 additional days to submit the draft site-specific modeling protocol provided that the facility owner/operator can establish, to the APCO's satisfaction, that such additional time is necessary.

2.2 After receiving the draft site-specific modeling protocol, the APCO shall either:

2.1 Notify the facility owner/operator that the site-specific modeling protocol is approved for use in the preliminary HRA, or

2.2 Notify the facility owner/operator that alterations to the site-specific modeling protocol are required and specify the required alterations.

2.3 If alterations are required, the facility owner/operator shall implement all alterations and resubmit the draft site-specific modeling protocol within 30 days of receiving the notification.

2.4 After receiving the resubmitted draft site-specific modeling protocol, the APCO shall either:

4.1 Notify the facility owner/operator that the site-specific modeling protocol is approved for use in the preliminary HRA, or

4.2 Make additional alterations to the site-specific modeling protocol. After making any alterations, the APCO shall send the facility owner/operator a final site-specific modeling protocol that is approved for use in the preliminary HRA.

402.3 Preliminary HRA Review:

3.1 The facility owner/operator shall submit a draft preliminary HRA report to the APCO within 90 days of receiving approval of a site-specific modeling protocol pursuant to Section 11-18-402.2.4.1 or 11-18-402.2.4.2. In its submission, the facility owner/operator shall provide all information necessary for reproducing the results of the HRA, including, but not limited to, TAC emissions inventory data, documentation of any changes to TAC emissions inventory data, TAC emissions release data, and any assumptions required to reproduce the results of the HRA. The facility owner/operator may request up to an additional 30 days to submit the draft preliminary HRA report provided that the facility owner/operator can establish, to the APCO's satisfaction, that such additional time is necessary.

3.2 If, after receiving the draft preliminary HRA report, the APCO determines that alterations to the draft preliminary HRA report are required, the APCO shall notify the facility owner/operator of the specific alterations to the draft preliminary HRA report that are required, unless the APCO elects to proceed under Section 11-18-402.3.4.

3.3 Upon receiving notice from the APCO that alterations to the draft preliminary HRA report are required, the facility owner/operator shall implement all alterations and resubmit the draft preliminary HRA report within 30 days of receiving the notification from the APCO. The facility owner/operator may request up to an additional 30 days to implement the alterations and resubmit the draft preliminary HRA report provided that the facility owner/operator can establish, to the APCO's satisfaction, that such additional time is necessary. In

its submission, the facility owner/operator shall provide all information necessary for reproducing the results of the HRA.

3.4 The APCO may also, pursuant to Section 11-18-402.6, finalize the preliminary HRA and preliminary HRA report and make any alterations to the preliminary HRA and preliminary HRA report, including, but not limited to, altering TAC emissions inventory data, TAC emissions release data, or assumptions and information underlying the HRA.

402.4 Public Comment: The APCO shall approve and publish a preliminary HRA report. The APCO shall notify the facility owner/operator and the public of the availability of the preliminary HRA report and hold a 90-day review and comment period. The APCO shall consider any written comments received during the comment period.

402.5 Approval and Comparison to Risk Action Levels:

5.1 If, after the public comment period, the APCO determines that alterations to the preliminary HRA report are required, the APCO shall notify the facility owner/operator of the specific alterations to the preliminary HRA report that are required, unless the APCO elects to proceed under Section 11-18-402.5.3.

5.2 Upon receiving notice from the APCO that alterations to the preliminary HRA report are required, the facility owner/operator shall implement all alterations and submit a draft final HRA report within 30 days of receiving the notification from the APCO. The facility owner/operator may request up to an additional 30 days to implement all alterations and submit the draft final HRA report provided that the facility owner/operator can establish, to the APCO's satisfaction, that such additional time is necessary. In its submission, the facility owner/operator shall provide all information necessary for reproducing the results of the HRA.

5.3 The APCO may also, pursuant to Section 11-18-402.6, finalize the final HRA and final HRA report and make any alterations to the HRA and HRA report, including, but not limited to, altering TAC emissions inventory data, TAC emissions release data, or assumptions and information underlying the HRA.

5.4 The APCO shall approve and publish a final HRA report. The APCO shall notify the facility owner/operator if the final, APCO-approved HRA for the facility indicates a facility health risk equals or exceeds one or more of the risk action levels set forth in Section 11-18-217.

402.6 APCO-Prepared HRAs: When it is more expedient to do so or when the facility owner/operator lacks the resources to conduct the HRA, the APCO may use an HRA and/or HRA report prepared in whole or in part by the APCO to determine whether a facility health risk equals or exceeds one or more of the risk action levels set forth in Section 11-18-217.

~~**11-18-404 Risk Reduction Plan Content Requirements:** A Risk Reduction Plan shall include the following:~~

11-18-403 Risk Reduction Plan Procedures:

403.1 Submission of RRP: Within 180 days of receiving a notification pursuant to Section 11-18-401.3 or 11-18-402.5.4 that a facility health risk equals or exceeds one or more of the risk action levels set forth in Section 11-18-217, the facility owner/operator shall submit a draft RRP to the APCO. The APCO may allow additional time for the RRP submission to ensure the RRP is compatible with any applicable safety regulations.

403.2 Contents: A Risk Reduction Plan shall include the following:

~~404~~2.1 The name and address of the facility.

~~404~~2.2 The North American Industry Classification System (NAICS) code for the facility.

~~404~~2.3 A description of risk from the facility including:

3.1 Summary data from the applicable APCO-approved TAC ~~air toxic~~ emissions inventory.

3.2 Summary data from the ~~health risk assessment~~HRA.

3.3 Identification of the processes and emission points that are significant sources contributing to the facility health risks and a characterization of the risk from each.

~~4042~~.4 A list of sources at which risk reduction measures will be implemented and a description of each risk reduction measure to be implemented at each source, including:

4.1 A description of the source and any existing controls that reduce risk,

4.2 A description of each risk reduction measure,

4.3 Anticipated emission reductions from the risk reduction measure,

4.4 Anticipated health risk reduction from the risk reduction measure

~~4042~~.5 A schedule for implementing each risk reduction measure, including:

5.1 Dates for filing applications for permits to construct.

5.2 Dates equipment will be installed (if applicable).

5.3 Dates process changes will be completed (if applicable).

5.4 Dates for demonstrating the effectiveness of risk reduction measures.

~~4042~~.6 A demonstration that:

6.1 The health risk from the facility will be reduced to a level below the risk action levels set forth in Section 11-18-~~218.2~~217 at ~~any~~ each MEI by no later than five years after ~~Plan~~ RRP approval through implementation of the risk reduction measures pursuant to the proposed schedule; or

~~6.2 The health risk from the facility will be reduced to a level below the risk action levels set forth in Section 11-18-218.2 at any MEI by no later than five years after Plan approval plus such time, not to exceed five additional years, as is necessary to address a technical feasibility issue or to avoid placing an unreasonable economic burden on the facility operator; or~~

6.2 All risk reduction measures that are technologically feasible to implement without placing an unreasonable economic burden on the facility owner/operator will be implemented within five years of RRP approval, and the health risk from the facility will be reduced to a level below the risk action levels set forth in Section 11-18-217 at each MEI by no later than five years after RRP approval plus such time, not to exceed five additional years, as is necessary to address a technological feasibility issue or to avoid placing an unreasonable economic burden on the facility owner/operator; or

~~6.3 The facility will comply through application of TBARCT and can show that:~~

~~3.1 The health risk from the facility cannot be reduced to a level below the risk action level because it is not feasible, and~~

~~3.2 TBARCT has been installed on all significant sources of risk, or will be installed no later than five years after Plan approval plus such time, not to exceed five additional years, as is necessary to address a technical feasibility issue or to avoid placing an unreasonable economic burden on the facility operator.~~

6.3 The health risk from the facility cannot be reduced to a level below the risk action levels set forth in Section 11-18-217 because it is not technologically feasible to do so without placing an unreasonable economic burden on the facility owner/operator, and TBARCT has been installed on all significant sources of risk, or will be installed on all such sources no later than five years after RRP approval plus an extension up to five years if granted by the APCO, as is necessary to address a technological feasibility issue or to avoid placing an unreasonable economic burden on the facility owner/operator. Such an extension shall

be limited to the source or group of sources that require the extension.

~~4042~~.7 An estimate of residual health risk following implementation of the risk reduction measures specified in the ~~Plan~~RRP.

~~4042~~.8 A certification that the ~~Plan~~ RRP meets all requirements. The person who makes this certification shall be one of the following:

8.1 An engineer who is registered as a professional engineer pursuant to Section 6762 of the Business and Professions Code; or

8.2 An individual who is responsible for the operations of the facility.~~source; or~~

~~8.3 An environmental assessor registered pursuant to Section 25570.3 of the Health and Safety Code~~.

403.3 Draft RRP Review:

3.1 The APCO shall conduct a review of the draft RRP. The APCO shall notify the facility owner/operator in writing if the APCO determines that the submitted RRP does not meet the requirements of Section 11-18-403.2 and will specify the basis for this determination.

3.2 Upon receipt of such notification, the facility owner/operator shall correct the identified deficiencies and resubmit the draft RRP within 45 days.

3.3 If the APCO determines that the facility owner/operator failed to correct any deficiency identified in the notification or that the RRP otherwise fails to comply with Section 11-18-403.2, the APCO may disapprove the RRP or may notify the facility owner/operator that the draft RRP continues to fail to meet the requirements of Section 11-18-403.2 and provide one additional opportunity to submit a draft RRP in 45 or fewer days.

403.4 Public Comment: The draft RRP, including any revisions made to correct deficiencies, will be made available to the public for 45 days (with the exception of confidential information). The APCO will consider any written comments received during this period prior to approving or disapproving the draft RRP.

403.5 Final Action:

5.1 The APCO shall approve the draft RRP if the APCO determines that the draft RRP meets the requirements of Section 11-18-403.2 and shall provide written notification to the facility owner/operator.

5.2 If the APCO determines after the public comment period that the draft RRP does not meet the requirements of Section 11-18-403.2, the APCO shall notify the facility owner/operator in writing and will specify the basis for this determination.

5.3 Upon receipt of such notification, the facility owner/operator shall correct the identified deficiencies and resubmit the draft RRP within 45 days.

5.4 If the APCO determines that the facility owner/operator failed to correct any deficiency identified in the notification or that the RRP otherwise fails to comply with Section 11-18-403.2, the APCO shall disapprove the draft RRP.

403.6 Public Inspection: Within 30 days of the approval of an RRP under Section 11-18-403.5.1, the APCO shall publish the RRP on the Air District's website, and shall notify any member of the public who submitted comments under Section 11-18-403.4, or who otherwise requested such notification of this action in writing. In making information available for public inspection, the confidentiality of trade secrets, as designated by the facility owner/operator, shall be handled in accordance with Section 7924.510 of the Government Code.

403.7 Disapproval of RRP: If the APCO disapproves an RRP pursuant to Sections 11-18-403.3.3 or 11-18-403.5.4, the disapproval shall constitute a failure to obtain APCO approval of an RRP pursuant to Section 11-18-301, unless the disapproval is of an updated RRP submitted pursuant to Section 11-18-406.

~~**11-18-405 Review and Approval of Risk Reduction Plans:** The procedure for determining whether a draft Plan submitted pursuant to Section 11-18-403 meets the applicable requirements of this rule is as follows:~~

405.1 Review: Within 20 business days of receipt of the draft Plan, the APCO will conduct a completeness review of the draft Plan. The APCO will notify the facility owner/operator in writing if the submitted Plan is lacking information necessary to make an approval determination. The facility owner/operator shall submit a complete draft Plan within 45 days of receipt of this notification. If the APCO determines that the resubmitted draft Plan is still incomplete, the APCO may disapprove the Plan or may notify the facility owner/operator that the draft Plan continues to lack necessary information and provide another opportunity to submit a complete draft Plan in 45 or fewer days.

405.2 Public Comment: The draft Plan, including any revisions made to correct deficiencies, will be made available to the public for 45 days (with exception of confidential information). The APCO will consider any written comments received during this period prior to approving or disapproving the final draft Plan.

405.3 Final Action:

3.1 The APCO will approve the draft Plan if the APCO determines that the draft Plan meets the requirements of Section 11-18-404 and will provide written notification to the facility owner/operator.

3.2 If the APCO determines that the draft Plan does not meet the requirements of Section 11-18-404, the APCO will notify the facility owner/operator in writing and will specify the basis for this determination. Upon receipt of such notification, the facility owner/operator shall correct the identified deficiencies and resubmit the draft Plan within 45 days.

3.3 If the APCO determines that the facility owner/operator failed to correct any deficiency identified in the notification, the APCO will determine that the facility owner/operator has failed to meet the requirements of Section 11-18-404, and will disapprove the draft Plan.

405.4 Public Inspection: Within 30 days of the approval of a Plan under Section 11-18-405.3, the APCO shall post the Plan on the Air District's website, and shall notify any member of the public, who submitted comments under Section 11-18-405.2, or who otherwise requested such notification of this action in writing. In making information available for public inspection, the confidentiality of trade secrets, as designated by the refinery owner/operator, shall be handled in accordance with Section 6254.7 of the Government Code.

11-18-404 Reconsideration of Prioritization Scores:

404.1 Within 30 days of receiving a notification from the APCO pursuant to Section 11-18-402.1, a facility owner/operator may request that the prioritization scores be reevaluated using a revised TAC emissions inventory. In order to request such reconsideration, the facility owner/operator shall recalculate the prioritization scores in accordance with Appendix A.

404.2 Based on the recalculated prioritization scores, the APCO may send the facility owner/operator a notification withdrawing the requirement that the facility owner/operator prepare an HRA if the APCO determines, in the APCO's sole discretion, that the potential health risk from the facility does not warrant HRA review. Unless the APCO withdraws the requirement that the facility owner/operator prepare an HRA, the deadlines for submission of a draft site-specific modeling protocol pursuant to Section 11-18-402.2 and preliminary HRA report pursuant to Section 11-18-402.3 are not altered by submission of a request pursuant to this section.

11-18-405 Additional Emissions Data:

405.1 In its draft preliminary HRA submission pursuant to Section 11-18-402.3.1, the facility owner/operator may request that the APCO consider additional, future testing or studies before finalizing emission data for specific sources. The facility owner/operator shall include a table in the draft preliminary HRA report that lists the sources, the currently estimated emissions for each source (which shall be used in the draft

preliminary HRA), and information regarding the testing and/or studies that it requests to conduct in the future. If the APCO agrees, in its sole discretion based on balancing the potential value of the testing or studies against the burden of potentially reopening the HRA, to consider such additional testing or studies, all updated emission data obtained through the testing and/or studies must be submitted for review and approval to the APCO no later than the date on which the facility owner/operator submits a draft RRP pursuant to Section 11-18-403.1.

405.2 If the APCO has agreed to consider additional testing or studies before finalizing emission data for specific sources, and if the facility owner/operator submits such data, the APCO may alter the final HRA to account for this new information and may, if warranted, rescind its notification to the facility owner/operator pursuant to Sections 11-18-401.3 or 11-18-402.5.4 that a facility health risk equals or exceeds one or more of the risk action levels set forth in Section 11-18-217.

405.3 If the APCO rescinds its notification to the facility owner/operator that a facility health risk equals or exceeds one or more of the risk action levels set forth in Section 11-18-217, the APCO shall subsequently release a revised preliminary HRA report for public comment as described in Section 11-18-402.4 and shall proceed to review and finalize a revised final HRA report and compare the HRA results in the HRA report to the risk action levels as described in Section 11-18-402.5.

405.4 If the APCO alters the final HRA but the risk in the altered HRA remains above one or more of the risk action levels set forth in Section 11-18-217, then the APCO shall base its review of the draft RRP in Section 11-18-403.3 on the altered HRA results, and will release the revised HRA report with the RRP pursuant to Section 11-18-403.4. The APCO shall consider any comments received on the altered HRA report before finalizing the altered HRA report, as described in Section 11-18-402.5.4, and RRP.

405.5 If a facility owner/operator proceeding pursuant to Section 11-18-405.1 submits a draft RRP before the APCO has reviewed and considered any additional emissions data, the draft RRP must include all the elements required in Section 11-18-403.2 both under the assumption that the request for consideration of additional emissions data will be granted and under the assumption that the request will be denied.

11-18-406 Updated Risk Reduction Plan: For an RRP ~~Plan~~ meeting the requirements of Section ~~11-18-404.6.3~~11-18-403.2.6.3, if information becomes available after the initial APCO approval regarding emissions reduction technologies that may be used by a facility owner/operator that would significantly reduce health risks to exposed persons or the feasibility of an RRP ~~Plan~~, the APCO may require or, upon request by a facility owner/operator and approval by the APCO, allow the facility owner/operator to update the RRP ~~Plan~~ to reflect the information and resubmit the RRP ~~Plan~~ to the APCO for approval pursuant to Section 11-18-403, provided the update does not significantly delay implementation of emission reductions from the timeline proposed in the facility's original RRP. The facility's original RRP will remain in effect until the APCO approves the updated RRP. The APCO may disapprove an updated RRP even if the updated RRP meets the requirements of Section 11-18-403.2 if the APCO determines the updated RRP is inconsistent with this Section or would not result in a significant reduction in health risk as compared to the original RRP.

11-18-500 MONITORING AND RECORDS

11-18-501 Progress Reports: The facility owner/operator shall report annually to the APCO progress on the emission reductions achieved by the RRP ~~Plan~~ until the RRP ~~Plan~~ is fully implemented or the facility owner/operator can demonstrate to the APCO compliance with Section 11-18-301~~.2~~. Reports shall be made no later than each anniversary of the date on which the RRP ~~Plan~~ was

approved pursuant to Section ~~11-18-405.3~~11-18-403.5.1 and shall be consistent with a format developed by the APCO.

11-18-600 MANUAL OF PROCEDURES

11-18-601 Prioritization Score Calculation Procedures: A facility owner/operator that requests reconsideration of its prioritization scores pursuant to Section 11-18-404 shall calculate any revised prioritization scores using the procedures set forth in Appendix A and the most current version of the District's Prioritization Score Procedures for Air Toxics Hot Spots Program and Regulation 11, Rule 18.

11-18-602 Health Risk Assessment Procedures: Each Health Risk Assessment shall be prepared in accordance with the District's Health Risk Assessment Guidelines.

Appendix A: Equations for Calculating Standard Prioritization Scores and Alternative Prioritization Scores for Specific Facility Types:

The standard prioritization score (PS) calculation equations are shown below:

$PS_{CANCER} = \Sigma [(E_i) \times (U_i)] \times (PAF) \times (NF_{CANCER})$

$PS_{NON\text{-}CANCER} = \Sigma [(E_i)/(REL_i)/(8760)] \times (PAF) \times (NF_{NON\text{-}CANCER})$

Where the variables for the standard prioritization score equations are:

E_i = Toxic air contaminant emissions from the facility (lbs/year) of each TAC (i)

OEHHA approved toxicity factors for each toxic air contaminant:

U_i = Unit Risk Value for each carcinogenic TAC (i), $(\mu g/m^3)^{-1}$

REL_i = Chronic Reference Exposure Level (REL) for each TAC (i), $\mu g/m^3$

PAF = Proximity Adjustment Factors (PAF) for nearest exposed individual

NF = Normalization Factors (NF) for each type of health effect (NF_{CANCER} and $NF_{NON\text{-}CANCER}$)

The alternative prioritization score (PS) calculation equations are shown below:

$PS_{CANCER} = \Sigma [(E_i) \times (U_i)] \times (PAF_{EI}) \times (EF_{EI}) \times (NF_{CANCER})$

$PS_{NON\text{-}CANCER} = \Sigma\{(E_i)/(REL_i)/(8760)\} \times (PAF_{EI}) \times (EF_{EI}) \times (NF_{NON\text{-}CANCER})$

Where the variables for the alternative prioritization score equations are:

E_i = Toxic air contaminant emissions from the facility (pounds/year) of each TAC (i)

OEHHA approved toxicity factors for each toxic air contaminant:

U_i = Unit Risk Value for each carcinogenic TAC (i), $(\mu g/m^3)^{-1}$

REL_i = Chronic Reference Exposure Level (REL) for each TAC (i), $\mu g/m^3$

PAF_{EI} = Proximity Adjustment Factor (PAF) for each type of exposed individual ($PAF_{RESIDENT}$ or PAF_{WORKER})

EF_{EI} = Exposure Factor (EF) for each type of exposed individual ($EF_{RESIDENT}$ or EF_{WORKER})

NF = Normalization Factors (NF) for each type of health effect (NF_{CANCER} and $NF_{NON\text{-}CANCER}$)

Bay Area Air District

ATTACHMENT B

Proposed Implementation Procedures Amendments for Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities

This page has been intentionally left blank.

Bay Area Air District

Regulation 11, Rule 18

Implementation Procedures

June 2026

Table of Contents

1. Introduction 3
1.1 Background on Air Toxics Programs 4
1.2 Public Engagement 6
2. Purpose 7
2.1 Annual Toxic Air Contaminant Emissions Inventories 7
2.2 Annual Prioritization Scores 7
2.3 Further Review of Toxic Air Contaminant Inventories 8
2.4 Health Risk Assessments 8
2.5 Risk Reduction Plans 8
3. Definitions 9
4. Procedures 9
4.1 Identify Potentially Subject Facilities 10
4.1.1 Rule 11-18 Toxic Air Contaminant Emissions Inventories 10
4.1.2 Prioritization Scores 12
4.1.3 Prioritization Score Thresholds 13
4.1.4 Requests to Reconsider Prioritization Scores 14
4.1.5 Toxic Air Contaminant Emissions Inventory and Toxic Air Contaminant Emissions Release Data Review and Correction Process 16
4.2 Assessing Health Impacts 18
4.2.1 Guidelines for Health Risk Assessments 20
4.2.2 Modeling Protocol for Health Risk Assessments 20
4.2.3 Procedures for Implementing Health Risk Assessments 20
4.3 Implementing Risk Reduction Plan Requirements 24
5. Dispute Resolution Panel 26
6. Stakeholder Meetings 28

BAY AREA AIR DISTRICT
375 BEALE STREET, SUITE 600
SAN FRANCISCO, CA 94105

Regulation 11, Rule 18 Implementation Procedures

1. Introduction

The Bay Area Air District ("Air District") adopted Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18) on November 15, 2017. Rule 11-18 is a health risk-based rule that requires existing facilities to determine their health risk and if that risk equals or exceeds one of the risk action levels, the facility must either (a) reduce health risks below the risk action levels specified in Section 11-18-217 or (b) install best available retrofit controls on all significant sources of health risk.

This document provides additional information about Rule 11-18 and explains how the Air District implements Rule 11-18.

- **Section 1** of this document provides background information about air toxics control in the Air District and explains how Rule 11-18 augments these control programs.
- **Section 2** describes the purpose of this implementation procedures document.
- **Section 3** identifies definitions that apply specifically to the Rule 11-18 program and defines acronyms that are commonly used in air toxics control programs.
- **Section 4** describes the procedures the Air District intends to use to implement Rule 11-18.
- **Section 5** outlines a dispute resolution process for disagreements between refineries and the Air District regarding Rule 11-18, and
- **Section 6** discusses how the Air District will keep the public and industry informed about rule implementation progress.

The purpose of this document is to inform the regulated community and interested public on how the Air District implements Rule 11-18. Unlike Rule 11-18 itself, this document does not have the force of law and does not bind the Air District, regulated entities, or any other person or entity. The Air District may follow different procedures from those described here if it determines that use of such procedures is warranted under the circumstances. The Air District will follow all requirements of Rule 11-18, notwithstanding anything in this document.

1.1 Background on Air Toxics Programs

The Air District has been reducing air toxics emissions from stationary sources for more than thirty years. In addition to adopting and implementing regulations targeting specific toxic air contaminants and specific source types, the Air District began evaluating health risks from stationary source facilities and new or modified projects at these facilities in the early 1990's. In 2005, the Air District adopted Regulation 2: Permits, Rule 5: New Source Review of Toxic Air Contaminants (Rule 2-5) to implement the Air District's new source review limitations for stationary sources of toxic air contaminants (TACs). The Air District amended Rule 2-5 in 2010 and 2016 to add new TACs, revise health effects values, and include updated Health Risk Assessment (HRA) guidelines. In 2021, the Air District amended Rule 2-5 to add a more stringent cancer risk limit for projects located in communities that are overburdened with air pollution and other health stressors.

Although health risks from ambient TAC emissions have declined significantly during the last thirty years, some communities in the Air District continue to have elevated and disparate risk levels. Rule 11-18 was adopted in 2017 pursuant to the Air District's authority to regulate and control TAC emissions from stationary sources.[1] In 2026, the Air District amended Rule 11-18 and updated the Rule 11-18 Implementation Procedures (this document) with aim to improve procedures and implementation efficiency. Rule 11-18 is an important part of the Air District's efforts to protect public health from toxic air pollution and reduce health impacts for disparately impacted communities. Rule 11-18 focuses on reducing health risks from existing facilities that have the highest potential for local health impacts due to stationary source emissions.

The Air District has several relevant documents to support consistent, transparent, and technically sound implementation of its air toxics programs. The table below provides an overview of each document and its role in the Rule 11-18 process.

Table 1. Overview of Key Documents Available

Document	Purpose	Example Contents
Regulation 11, Rule 18 Implementation Procedures (this document)	Procedures for Rule 11-18 implementation.	• List of facilities potentially subject to Rule 11-18 HRA and Risk Reduction Plan (RRP) requirements • Rule 11-18 HRA and RRP submission steps and review timelines • Dispute resolution panel procedures • Stakeholder meetings

[1] California Health and Safety Code § 39666.

Document	Purpose	Example Contents
Air Toxics Control Programs HRA Guidelines[2]	Analytical outline for health risk calculation and evaluation.	• Technical risk calculation methodology • Receptor assumptions • Exposure duration • Interpretation of results • Documentation requirements
HRA Modeling Protocol[3]	Technical instructions for conducting dispersion modeling used in HRAs.	• Technical modeling inputs and setup (e.g., meteorological data, terrain, stack parameters) • Receptor grid spacing • Modeling domain • Output file formats
Prioritization Score Procedures for Air Toxics Hot Spots Program and Regulation 11, Rule 18[4]	Procedures for calculating prioritization scores.	• Prioritization score steps • Standard prioritization score calculation equations • Alternative prioritization score calculation equations for specific facility types
TAC Emission Factor Guidelines[5]	Procedures for identifying representative TAC emission factors for a specific source.	• Overriding principles • Pollutant demonstration • Source-specific TAC emission factors • Default TAC emission factors
TAC Emission Factor Guidelines, Appendix A: Default TAC Emission Factors for Specific Source Categories[6]	Default TAC emission factors for specific source categories.	• Default TAC emission factors for boilers • Default TAC emission factors for gas turbines

[2] **HRA Guidelines:** As of preparation of this document, the most recent version is December 2021 and is available here: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-2-permits/2021-amendments/documents/20211215_hraguidelines-pdf.pdf?rev=eb18ff83f96049fa84d54552b58baee3

[3] **HRA Modeling Protocol:** As of preparation of this document, the most recent version is December 2020 and is available here: https://www.baaqmd.gov/~/media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol-pdf.pdf?rev=0d07ca2f01de4c36a3a22f411c8b8f6f

[4] **Prioritization Score Procedures for Air Toxics Hot Spots Program and Regulation 11, Rule 18**: As of preparation of this document, the most recent version is March 2017 and is available here: https://www.baaqmd.gov/~/media/dotgov/files/rules/regulation-11-rule-18/documents/20171003_priorproc_1118-pdf.pdf?rev=14cd7841f4b64710907d28122806c45e&sc_lang=en

[5] **TAC Emission Factor Guidelines**: As of preparation of this document, the most recent version is August 2020 and is available here: https://www.baaqmd.gov/~/media/files/ab617-community-health/facility-risk-reduction/documents/tac_emission_factor_guidance_august_2020-pdf.pdf

[6] **TAC Emission Factor Guidelines, Appendix A: Default TAC Emission Factors for Specific Source Categories**: As of preparation of this document, the most recent version is August 2020 and is available here: https://www.baaqmd.gov/~/media/files/ab617-community-health/facility-risk-reduction/documents/tac_emission_factor_guidance_appendixa_august_2020-pdf.pdf

Document	Purpose	Example Contents
Petroleum Refinery Emissions Inventory Guidelines[7]	Describes methodologies for calculating and reporting refinery emission inventories	• Overriding principles • Source-specific emission calculation procedures • Other procedures to ensure consistency

1.2 Public Engagement

Rule 11-18 supports the Air District's mission to create a healthy breathing environment for every Bay Area resident. The Air District recognizes the public's desire to understand local health impacts due to air pollution in their communities and to be engaged in the process of reducing these health impacts.

To meet these public expectations and in addition to this document, the Air District regularly posts information about Rule 11-18 and implementation progress on two web pages: (1) the Air District's Facility Risk Reduction Program web page (https://www.baaqmd.gov/community-health/facility-risk-reduction-program) and (2) the Rule 11-18 Risk Reduction Facilities web page (https://www.baaqmd.gov/community-health/facility-risk-reduction-program/facility-risk-reduction-list). Please visit these web pages to find current lists of facilities under review and implementation status updates. These web pages are or will be used to:

- Identify procedures and guidelines to be used when preparing TAC inventories, conducting HRAs, and reviewing RRPs;
- Inform the public about the status and results of the Air District's TAC inventory review, risk assessment results, and risk reduction requirements for individual facilities; and
- Provide opportunities for public review and comment on site-specific HRA results and site-specific RRPs.

The Air District plans to update these Implementation Procedures when any future amendments to Rule 11-18 are adopted. Invitations to workshops and information about public comment opportunities will be posted to the Air District web site, and the Air District will use multiple messaging options to inform the public of these opportunities.

The Air District also plans to have meetings with interested stakeholders to inform the public about the progress of Rule 11-18 implementation, to discuss improvements to the Facility Risk Reduction Program, to learn about community air toxic concerns, and to strategize on ways to improve public health in adversely impacted communities.

[7] **Petroleum Refinery Emissions Inventory Guidelines**: As of preparation of this document, the most recent version is July 2019 and is available here: https://www.baaqmd.gov/~/media/files/engineering/refinery-emissions-inventory-guidelines/draft-refinery-emissions-inventory-guidelines.pdf?rev=3a8ff253965d441a89c25d54a8634714&sc_lang=en

2. Purpose

The main purpose of this document is to describe the procedures the Air District intends to follow to implement Rule 11-18. These procedures are presented in Section 4 of this document. The following gives a brief overview of other Air District air toxic programs and explains how current procedures for these programs are integrated into and used by the Facility Risk Reduction Program.

2.1 Annual Toxic Air Contaminant Emissions Inventories

In accordance with the California AB 2588 Air Toxics "Hot Spots" Information and Assessment Act of 1987, most facilities that have the potential to emit TACs are required to report routine and predictable toxic emissions from stationary sources located at the facility to their local air district on a regular basis. In the Bay Area, the Air District integrates this TAC emission reporting requirement into the annual permit renewal process for the facility. The Air District stores information about each facility, their sources, control equipment, process data, stack data, and emission rates in a computer database. On an annual basis, the Air District requires that facilities report throughput rates, material usage data, and other information to the Air District.

For most facilities, with the exception of the refineries, the Air District uses this "annual update information" in conjunction with stored emission factors to calculate an annual emission inventory for each permitted facility in the Air District. For refineries, annual emissions data are collected in accordance with Regulation 12: Miscellaneous Standards of Performance, Rule 15: Refining Emissions Tracking (Rule 12-15) requirements, which allows for direct emissions reporting from the facility or estimates using a similar procedure as described above for the annual update process. This annual facility inventory includes criteria pollutants, greenhouse gases, and toxic air contaminants. The annual TAC emission rates determined through this process constitute the annual TAC emissions inventory for the facility. The Air District reports the TAC emission inventories for all permitted facilities to the California Air Resources Board (CARB) on an annual basis.

2.2 Annual Prioritization Scores

The Air District uses prioritization scores to rank facilities based on health impact potential. Prioritization scores[8] represent the relative potential for health impacts from a facility based on the amount of TACs emitted from a facility, the relative toxicity of the TACs emitted, and the distance from the sources at the facility to people who are exposed to the emissions.

[8] For more information about prioritization scores, see the Air District's Prioritization Score Procedures: https://www.baaqmd.gov/~/media/dotgov/files/rules/regulation-11-rule-18/documents/20171003_priorproc_1118-pdf.pdf?rev=14cd7841f4b64710907d28122806c45e

In the Bay Area, the Air District's prioritization scoring process occurs automatically during the annual permit renewal process described above (Section 2.1). After the annual TAC emissions inventory is generated, the Air District applies the prioritization score calculation procedures to produce an annual prioritization score for each facility. As described in Section 4 below, the Facility Risk Reduction Program uses these annual prioritization scores to identify facilities that need further inventory review and to help inform the order in which HRAs are conducted for these facilities if HRAs are required.

2.3 Further Review of Toxic Air Contaminant Inventories

If further review is triggered under the Facility Risk Reduction Program, the Air District may re-evaluate the TAC emissions inventory. The Air District reviews the data used to create the annual TAC emissions inventory to ensure that it is based on complete and correct information about the TACs that are emitted from the facility. It is the Air District's intention to use the most accurate TAC emissions data available. Section 4 describes the procedures that need to be followed when preparing or updating TAC emissions inventories for the Facility Risk Reduction Program.

2.4 Health Risk Assessments

If the facility exceeds the prioritization score thresholds described in Section 4, the Air District may notify a facility that a facility-wide HRA is required. The facility will prepare or have a contractor prepare an HRA. The Air District has the authority to review, correct, and approve HRA inputs and results. Existing HRA information that has been previously prepared and approved for the facility to determine if a new or updated facility-wide HRA may be necessary. This existing HRA information may include past HRAs prepared for "Hot Spots" Program purposes. Section 4 describes the procedures that need to be followed when preparing new or updated HRAs to determine Rule 11-18 RRP requirements.

2.5 Risk Reduction Plans

The requirement to submit an RRP is determined based on the results of an Air District-approved HRA. If an Air District-approved HRA indicates that a facility's health risk meets or exceeds one of Section 11-18-217 risk action levels, the facility must submit a draft RRP, obtain and maintain Air District approval of an RRP, and implement the risk reduction measures in accordance with the RRP. The RRP must demonstrate (a) how the facility will reduce health risks below all risk action levels within the required timeframe or (b) that it is not feasible to reduce health risk below the risk action levels and that the facility has installed or will install best available retrofit controls for toxics (TBARCT)[9] on all significant sources of health risk. Section 4 describes the procedures that need to be followed when submitting, reviewing, and approving RRPs.

[9] Section 11-18-204 defines Best Available Retrofit Control Technology for Toxics (TBARCT).

3. Definitions

Many terms or phrases that are used in this document are defined in Rule 11-18. Please see the Rule for those definitions. Additional terms or phrases used in this document are defined below:

CARB means California Air Resources Board.

High-Priority Facility means any facility that has a facility cancer risk prioritization score of 10 or higher or a facility non-cancer prioritization score of 1 or higher. High-priority facilities are potentially subject to Rule 11-18 HRA and RRP requirements, unless the facility meets one of the exemption criteria in Sections 11-18-103 or 11-18-104.

OEHHA means Office of Environmental Health Hazard Assessment.

Potentially Subject Facility means a facility that may be subject to Rule 11-18 HRA and/or RRP requirements. The Air District will conduct a detailed review of the toxic air contaminant emissions inventory for this facility, and the facility may conduct an HRA to assess the applicability of Rule 11-18 RRP requirements.

Proximity Adjustment Factor is a multiplication factor that is used in the calculation of a prioritization score for a facility. Proximity Adjustment Factors represent the potential reduction in ground level concentration of a toxic air contaminant that may occur at increasing distances from the facility emitting the toxic air contaminant. Proximity adjustment factors are determined in accordance with California Air Pollution Control Officers Association procedures based on the distance from the facility to the nearest residence or off-site worker.

REL means Reference Exposure Level. The air concentration or exposure level for a specified exposure duration at or below which adverse non-cancer health effects are not anticipated to occur in the general human population.

4. Procedures

This section describes the procedures the Air District follows to implement Rule 11-18. There are typically four major steps to implementing this rule:

1. Identifying and notifying facilities that are potentially subject to Rule 11-18 HRA requirements based on prioritization scores.
2. Updating TAC emissions inventories and assessing health risks from TAC emissions through a facility-wide HRA.
3. Determining if the HRA results indicate that the facility meets or exceeds any of the RALs in Rule 11-18 and, if so, ensuring an RRP is developed and approved.
4. Implementing approved RRPs for facilities subject to Rule 11-18 RRP requirements.

The first step is to determine which facilities may require an HRA under Rule 11-18 based on prioritization scores, which are calculated using an Air District-approved TAC emissions inventory. After the facilities potentially subject to Rule 11-18 HRA requirements are identified, the Air District may notify them of their obligation to prepare an HRA, and, if an HRA is required, the Air District will provide a copy of the Air District-approved TAC emissions inventory and TAC emissions release data.

In the second step, the HRA results are provided by the facility. The Air District will review and correct, if needed, the HRA results and TAC emissions inventory before approving the HRA results. The adoption of Rule 11-18 and other recent state legislation (AB 197 and AB 617) has resulted in a renewed emphasis on improving the Air District's TAC emissions inventory data. Many facilities have requested to review and to update their TAC emissions inventory data and other facility information that would be used for Air District decisions during these first two steps. The Air District concurs that a current and accurate TAC emissions inventory is a key consideration for this process. Therefore, inventory and facility data improvements have been incorporated into the procedures (Section 4.1.5).

In the third step, the results from the HRA will be compared against the risk action levels to determine whether the facility will be required to submit an RRP. In this step, facilities that exceed any risk action levels are required to develop and submit an RRP for the Air District's review and approval.

Step 4 involves the implementation of the approved RRP, which includes meeting the applicable risk reduction requirements of Rule 11-18 within the specified timeline. This step includes the development, submittal, review, and approval of RRPs.

Procedures and criteria for the typical implementation steps are listed below.

4.1 Identify Potentially Subject Facilities

With minor exceptions, Rule 11-18 applies to any facility that is required to report a TAC emissions inventory to the Air District pursuant to the Air Toxics "Hot Spots" Information and Assessment Act of 1987, California Health and Safety Code, Section 44300 *et seq*. The Air District generally follows CARB's emission inventory, prioritization score, and HRA procedures that were developed for the "Hot Spots" Program when determining Rule 11-18 HRA and RRP applicability. Any deviations from these CARB procedures or clarifications to these CARB procedures are explained in Air District guidance documents or the procedures below.

4.1.1 Rule 11-18 Toxic Air Contaminant Emissions Inventories

For the purposes of Rule 11-18, toxic air contaminant (TAC) emission inventories will generally be consistent with the California Air Resources Board's Emission Inventory Criteria and Guidelines (EICG) for the "Hot Spots" Program. The EICG, last amended

August 18, 2021,[10] describes the types of facilities that must provide TAC emissions inventories to the Air District and what must be included in those inventories. The EICG requires that facilities report routine and predictable TAC emissions from stationary sources at a facility. Emissions from emergency operations are excluded from "Hot Spots" reporting requirements and from Rule 11-18 TAC emissions inventories. Tailpipe emissions from motor vehicles are also excluded from "Hot Spots" Program reporting requirements and Rule 11-18 TAC emissions inventories.

"Hot Spots" Program TAC emissions reporting requirements apply to the full list of compounds identified in Appendix A of the EICG.[11] Since Rule 11-18 requirements depend on health risk thresholds, the Air District is only including in Rule 11-18 TAC emissions inventories compounds that have health risk values listed in Table 2-5-1 of Rule 2-5.[12] This is in accordance with the definition of a toxic air contaminant in Section 11-18-225. The Office of Environmental Health Hazard Assessment (OEHHA) routinely updates the health effects values for toxic compounds that are required to be used for the "Hot Spots" Program. Although the Air District periodically updates Table 2-5-1 of Rule 2-5 to include any new toxic compounds or updated health effects values approved by OEHHA, there will be a lag between OEHHA approval of a new health effect value and Air District adoption of that new health effects value. Thus, Table 2-5-1 may not include all of the compounds with OEHHA-approved health effects values.

The Air District updates the TAC emissions inventory for a facility on an annual basis,[13] and this is consistent with the reporting requirements under EICG/CARB Criteria Pollutant and Toxics Emissions Reporting (CTR) guidelines.[14]

The TAC emissions inventory is generally based on throughput rates, which are updated on an annual basis; toxic air contaminant emission factors, which are updated on an as-needed basis; and emission calculation algorithms specific to each source type.[15] Fugitive equipment sources may also contribute significantly to facility risk but are not directly tied to throughput rates. Emissions from these sources are estimated using protocols appropriate to the source type and incorporated into the inventory to ensure that the HRA reflects all relevant risk drivers. The necessary data for each source are collected and entered into the Air District's database during the permit application process. TAC emission factors are determined in accordance with the Air District's Toxic Air Contaminant Emission Factor Guidelines and the EICG.

For example, a boiler burning natural gas would have a set of TAC emission factors that would include the pounds of formaldehyde generated per thousand cubic feet of natural

[10] California Air Resources Board's Emissions Inventory Criteria and Guidelines for the Air Toxic "Hot Spots" Program is available online here: https://ww2.arb.ca.gov/sites/default/files/2022-10/EICG%20Report.pdf

[11] Appendix A of the EICG is available here: https://ww2.arb.ca.gov/sites/default/files/2022-10/Appendix%20A.pdf

[12] Regulation 2, Rule 5 and Table 2-5-1 are available here: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-2-permits/2021-amendments/documents/20211215_rg0205-pdf.pdf?rev=ddf72e12b699400e953b9b8dc24d2c34

[13] Toxic Air Contaminant Special Reports and Emissions Inventories for each facility are available here: https://www.baaqmd.gov/en/about-air-quality/emission-inventory/toxic-air-contaminants

[14] https://ww2.arb.ca.gov/our-work/programs/criteria-and-toxics-reporting

[15] Petroleum refineries and support facilities must report emissions including emissions of toxic air contaminants pursuant to the requirements and procedures in Rule 12-15.

gas burned in the boiler. The facility reports the amount of natural gas (in thousand cubic feet) burned in the boiler each year. The Air District's computer system multiplies the formaldehyde emission factor by the annual reported throughput rate to calculate the amount of formaldehyde generated at that boiler during the inventory year. Sources equipped with emission control devices would also have abatement factors that are incorporated into this calculation procedure.

For Rule 11-18 purposes, the TAC emissions inventory includes the best estimate of actual annual routine TAC emissions (pounds per year) and not the maximum permitted or maximum potential annual emissions rate for each source, abatement device, or emission point. For hourly emissions, the Rule 11-18 TAC emissions inventory includes the best estimate of the maximum hourly emission rate (pounds per hour) for each TAC.

The TAC emissions inventory that is used for a facility-wide HRA is generally based on a single, representative emissions inventory year and it will usually, but not always, be based on the most recently available inventory year. The inventory year refers to the submission of required data for the 12-month period occurring prior to the year in which the annual permit renewal occurs. For example, a 2022 inventory year would include data pertinent to emissions in a consecutive 12-month period submitted in the annual update for a June 2023 permit renewal. Additionally, for example, as of December 2023, emissions data reported for calendar year 2022 are the most recent available inventory year for many facilities. The Rule 11-18 TAC emissions inventory would generally include 2022 inventory data for all sources at the facility, and not 2021 data for some sources and 2022 data for other sources, unless – due to the transition to annual reporting described above – a single inventory year of data is not available for all sources at a facility. In the latter case, emissions updated for a previous year would be considered to be part of the current inventory year for Rule 11-18.

When determining if an inventory year is representative of normal operations, the Air District intends to consider reported throughput data and other recent or planned changes to the facility that could have a major impact on future TAC emissions, such as new source or control equipment installations, source shutdowns, or material changes. For example, year 2020 is likely not a representative inventory year for many facilities due to very low throughput rates reported by many facilities during the COVID pandemic.

4.1.2 Prioritization Scores

Prioritization scores represent the relative potential for cancer and non-cancer health impacts from a facility. The Air District uses prioritization scores to rank facilities based on health impact potential and to determine when facilities should undergo further review. As described in Section 2, the facility's annual prioritization score (maximum of cancer and non-cancer prioritization scores) is calculated during annual permit renewal. During review and update of the TAC emissions inventory that will be used for a Rule 11-18 applicability determination, the Air District may need to review and revise TAC emissions or proximity adjustment factors and recalculate the prioritization score for a facility. Any

recalculation of the prioritization score for a facility shall follow the Air District's Prioritization Score Procedures.[16]

As explained in the Air District's Prioritization Score Procedures, the three criteria used to calculate prioritization scores are: 1) annual TAC emissions, 2) health effects values for toxic compounds, and 3) proximity adjustment factors. Proximity adjustment factors are intended to account for reductions in health impact potential that normally occur when the distance between a facility and a receptor increases. Most facilities in the Bay Area have a proximity adjustment factor of 1, which means that no reduction in health impact potential is being applied, because most facilities have receptors located less than 100 meters (328 feet) from the facility. Table 2 of the Air District's Prioritization Score Procedures identifies the proximity adjustment factors that may be applied when receptors (residents or off-site workers) are located at least 100 meters away from a facility.

Prioritization scores are conservative screening tools used to rank the relative potential for health impacts from different facilities based on the amount of TACs emitted from a facility, the relative toxicity of the TACs emitted, and the proximity of the facility to possible receptors. The Air District evaluates three categories of health impacts: cancer risk, chronic non-cancer impacts, and acute non-cancer impacts.

As discussed in the Air District's Prioritization Score Procedures, there are two types of prioritization scores: a cancer risk-based prioritization score and a non-cancer-based prioritization score. For Rule 11-18 reviews, the Air District considers both prioritization scores when determining the need for further review.

4.1.3 Prioritization Score Thresholds

In accordance with CARB guidance for the Hot Spots Program, any facility with a facility prioritization score of 10 or higher (PS≥10) is considered a high-priority facility and should undergo further review for health risks. Any facility with a facility prioritization score of less than 1 (PS<1) is considered a low-priority facility that is unlikely to result in significant health impacts and generally requires no further review. Any facility with a facility prioritization score between 1 and 10 (PS≥1 but PS<10) is an intermediate-priority facility that may potentially warrant further review.

For Rule 11-18, the Air District generally follows this "Hot Spots" Program guidance when determining if further review, such as a facility-wide HRA, is necessary. Under Rule 11-18, high-priority facilities are assessed based on both their cancer and non-cancer prioritization scores (see Table 2 below), and the Air District intends to require an updated facility-wide HRA for these facilities. Facilities with only emergency-use stationary diesel-fired engines (EDE Only Facilities) and facilities with only retail gasoline dispensing facilities (GDF Only Facilities) are potentially exempt from Rule 11-18 per Sections 11-

[16] The Air District's Prioritization Score Procedures for ATHS Program and Rule 11-18 can be found online here: https://www.baaqmd.gov/~/media/dotgov/files/rules/regulation-11-rule-18/documents/20171003_priorproc_1118-pdf.pdf?rev=14cd7841f4b64710907d28122806c45e&sc_lang=en

18-103 and 11-18-104. However, these exemptions do not apply if the cancer prioritization score is 250 or higher. The Air District intends to require an HRA for intermediate-priority facilities if the non-cancer prioritization score is greater than 1. Low-priority facilities (facility PS <1) are generally not subject to Rule 11-18 HRA requirements.

Due to the large number of facilities that meet the thresholds above for further review, the Air District split the inventory update and HRA review for these facilities into several phases. Phase I includes facilities with the highest potential for health risks. Phase II facilities have a lower potential for elevated health risks but are still considered high-priority facilities.

Prioritization score thresholds and associated actions for facilities that are potentially subject to Rule 11-18 HRA requirements are summarized in Table 2 below.

Table 2. *Prioritization Score Thresholds for Rule 11-18 Applicability Determinations*

Site Type	Cancer Risk Prioritization Score		Non-Cancer Prioritization Score	Review Phase	Anticipated Next Steps
All Facility Types	≥ 250	OR	≥ 10	Phase I	Facility-Wide HRA Required, Compare Results to: 11-18-217 Risk Action Levels
All Facility Types, Except EDE Only or GDF Only	≥ 10 and < 250	OR	≥ 1 and < 10	Phase II	Facility-Wide HRA Required, Compare Results to: 11-18-217 Risk Action Levels
EDE Only (Meets 11-18-103)	< 250	AND	< 10	NA	None (Exempt)
GDF Only (Meets 11-18-104)	< 250	AND	< 10	NA	None (Exempt)
All Site Types	< 10	AND	< 1	NA	None

During development of Rule 11-18, the Air District evaluated prioritization scores for all facilities and developed lists of potentially subject facilities. The Air District annually reviews prioritization scores for all facilities to ensure that any new facilities or changes to existing facilities are included and that facilities are categorized into the appropriate review phase. Current facility lists are posted here: https://www.baaqmd.gov/community-health/facility-risk-reduction-program/facility-risk-reduction-list.

4.1.4 Requests to Reconsider Prioritization Scores

A facility may choose to request that the Air District reconsider the facility prioritization scores pursuant to Section 11-18-404. The Air District intends to consider such requests

only if the facility can demonstrate that a reevaluation, provided sufficient documentation and justification, would result in a cancer prioritization score lower than 10 and a non-cancer prioritization score lower than 1. After reviewing the request, the Air District may notify the facility that the HRA requirement is withdrawn. Otherwise, the facility must submit the draft site-specific modeling protocol pursuant to Section 11-18-402.2.1. After reviewing the request, the Air District may notify the facility that the HRA requirement is withdrawn. Otherwise, the facility must submit the draft site-specific modeling protocol pursuant to Section 11-18-402.2.1.

As noted, the Air District anticipates reviewing requests only if the resultant recalculated prioritization scores would result in the facility no longer meeting the thresholds at or above which the Air District would generally require an HRA, as described in Section 4.1.3 Prioritization Score Thresholds, based on routine emissions. The Air District anticipates that requests may be submitted for issues including, but not limited to, objective errors in the emissions inventory (e.g., incorrect units, data entry mistakes, or source misidentification) or justified use of a different inventory year that is more representative of emissions. This pathway is not intended to be a forum for deliberation on emissions inventory methodology disagreements.

The Air District anticipates that requests would include all information necessary to sufficiently demonstrate the need for a prioritization score reconsideration including spreadsheets with formulas preserved to allow recalculation and verification. For example, requests regarding corrections of objective errors or use of a different inventory year may include the following:

1. If the facility proposes changes to the emissions inventory due to an objective error in the emission inventory, the submission should include, at a minimum:
    - Recalculated prioritization scores (cancer and non-cancer), demonstrating the facility is below the thresholds that would require an HRA described in Section 4.1.3, based on the inventory year selected by the Air District.
    - A revised emissions inventory based on the inventory year, and
    - Documentation of the changes to the emissions inventory, including, at a minimum:
        - All proposed changes with clear references to the original data,
        - A description of the nature of each proposed change (e.g., correction, addition, deletion), and
        - The justification or basis for each proposed change.
2. If the facility proposes a different inventory year as more representative of its emissions, the submission should include, at a minimum:
    - A justification explaining why the proposed year was chosen and addressing why the Air District–selected inventory year is not representative, including an explanation of significant increases or

decreases on a source and pollutant level between the Air District-selected inventory year and proposed year,

- Recalculated prioritization scores (cancer and non-cancer) based on the proposed inventory year, demonstrating that it is below the thresholds that would require an HRA described in Section 4.1.3, and

A revised emissions inventory based on the proposed inventory year.

Detailed instructions on how to calculate the prioritization scores can be found in the Prioritization Score Procedures hosted on the Air District's Facility Risk Reduction Program web page.

4.1.5 Toxic Air Contaminant Emissions Inventory and Toxic Air Contaminant Emissions Release Data Review and Correction Process

This section describes the emissions inventory review and correction process that occurs during the Rule 11-18 implementation process.

The Air District intends to use the TAC emissions inventory and TAC emission release data that are best available and most representative of routine operations to determine the applicability of Rule 11-18 requirements. The Air District's TAC emission factors and TAC emissions release data, which include, but are not limited to, source-specific information such as source location and stack parameters, were initially entered when a source was first permitted. These data may have undergone limited updates since that time and may therefore be outdated. To ensure that the TAC emissions inventory is accurate, the Air District provides facilities with an opportunity to review and update their TAC emission factors based on source test data or other on-site measurements, updated pooled source test data, new CARB or AP-42 emission factors or other available literature when the facility submits the preliminary HRA report and TAC emissions inventory utilized for the HRA model. The facilities are also given the opportunity to correct and/or provide any missing source-specific data at this time. The Air District also reviews emissions factors and source-specific data, and updates data where appropriate.

The Air District has developed TAC emissions calculation guidance for specific types of sources that will improve the Air District's TAC emissions inventories for many source categories.[17]

In addition to annual emissions, HRAs will require maximum one-hour TAC emissions data. The Air District does not currently maintain short-term TAC emissions data. Therefore, the Air District intends to estimate maximum hourly emissions for each source based on the Air District's best judgement. The maximum one-hour emissions data may

[17] The Air District's Toxic Air Contaminant Emission Factor Guidelines can be found online here: https://www.baaqmd.gov/~/media/files/ab617-community-health/facility-risk-reduction/documents/tac_emission_factor_guidance_august_2020-pdf.pdf?rev=1917e6634bb34bbfa28a0644119384c0

be used to estimate health risks from any toxic air contaminants that have acute reference exposure levels. Some of the common TACs that have acute RELs are: ammonia, benzene, 1,3 butadiene, chloroform, formaldehyde, hydrochloric acid, hydrogen sulfide, isopropyl alcohol, mercury compounds, methanol, methyl ethyl ketone, methylene chloride, nickel compounds, nitric acid, perchloroethylene, sulfuric acid, toluene, vinyl chloride, and xylene. See Table 2-5-1 in Rule 2-5 for a complete list of TACs with acute RELs.

The Air District notifies facilities in writing that an HRA is required in accordance with Section 11-18-401 or 11-18-402. For facilities subject to Section 11-18-402 (current HRA procedures), the Air District intends to first inform the facility that the Air District has started reviewing the facility's TAC emissions inventory; this initial communication will generally be made at least 60 days prior to the Air District providing notification (pursuant to Section 11-18-402.1) that the facility must prepare an HRA. This latter notification initiates the HRA procedures outlined in Section 4.2.3. The notification will generally include the most recent TAC emissions inventory data, which will include both annual emissions and maximum one-hour TAC emissions data, TAC emissions release data for the facility plus information about the facility, source emission rates and emission point data. Facilities may also request additional information from the Air District—such as emission factors, abatement factors, and the basis for the current TAC emissions data—if needed to support the facility's review process.

- For facilities subject to Section 11-18-401 (legacy HRA procedures), facilities are asked to review these data and submit corrected information, if necessary, within 60 days.
- For facilities subject to Section 11-18-402 (current HRA procedures), any necessary corrections to information are submitted with the preliminary HRA, which is due to the Air District within 90 days of receiving the final site-specific modeling protocol, pursuant to Section 11-18-402.2.3.

During the Air District review of TAC emissions inventory data, if the Air District does not agree with a proposed emission factor or TAC emissions inventory rate, the Air District will notify the facility. However, the Air District may move forward with Air District authorized emission factors, without reaching an agreement on emission factors, and approve and publish the preliminary HRA report for public comment pursuant Section 11-18-401.2 or Section 11-18-402.4.

For facilities subject to Section 11-18-402 that would like to request reconsideration of the determination that an HRA is required using a revised TAC emissions inventory in accordance with Section 11-18-404, please see Section 4.1.4 Requests to Reconsider Prioritization Scores.

For facilities that would like to request the Air District consider additional testing or studies before finalizing the emissions data for specific sources, a request may be submitted to conduct additional testing or perform studies in accordance with Section 11-18-405. This provision allows the facility to submit site-specific emissions data and provides the Air

District an opportunity to consider all available data to ensure that the data used for the HRA represent the best available TAC emissions information.

4.2 Assessing Health Impacts

Rule 11-18 is a health risk-based rule. As described in Sections 11-18-401 and 11-18-402, a facility becomes subject to the risk reduction requirements in Rule 11-18 after the Air District notifies the facility that an Air District-approved HRA results in a facility health risk equal to or greater than a risk action level listed in Section 11-18-217. Thus, the Air District will usually determine which facilities are required to undergo HRA review and then review these HRAs to assess the applicability of RRP requirements.

The Air District may inform a facility based on the facility's Air District-approved TAC emissions inventory and the resulting prioritization score if there are any changes to the Rule 11-18 status of the facility. Section 11-18-402 requires facilities to submit a site-specific modeling protocol within 60 days of the notification by the Air District to prepare an HRA, and requires the facility to provide a preliminary HRA report within 90 days of receiving the final site-specific modeling protocol pursuant to Section 11-18-402.2.3.

Section 11-18-402.3 requires facilities to provide all additional information needed for reproducing the results of the HRA with the submission of the preliminary HRA report. The Air District anticipates requiring at least the following:

- Modeling files, so the HRA can be rerun if necessary,
- Annual and hourly source-specific TAC emissions inventory data,
- Source and stack locations,
- Stack parameter data,
- Building parameter data,
- Meteorological data,
- Terrain data,
- Receptor locations, and
- Documentation of changes to the TAC emissions inventory data.[18]

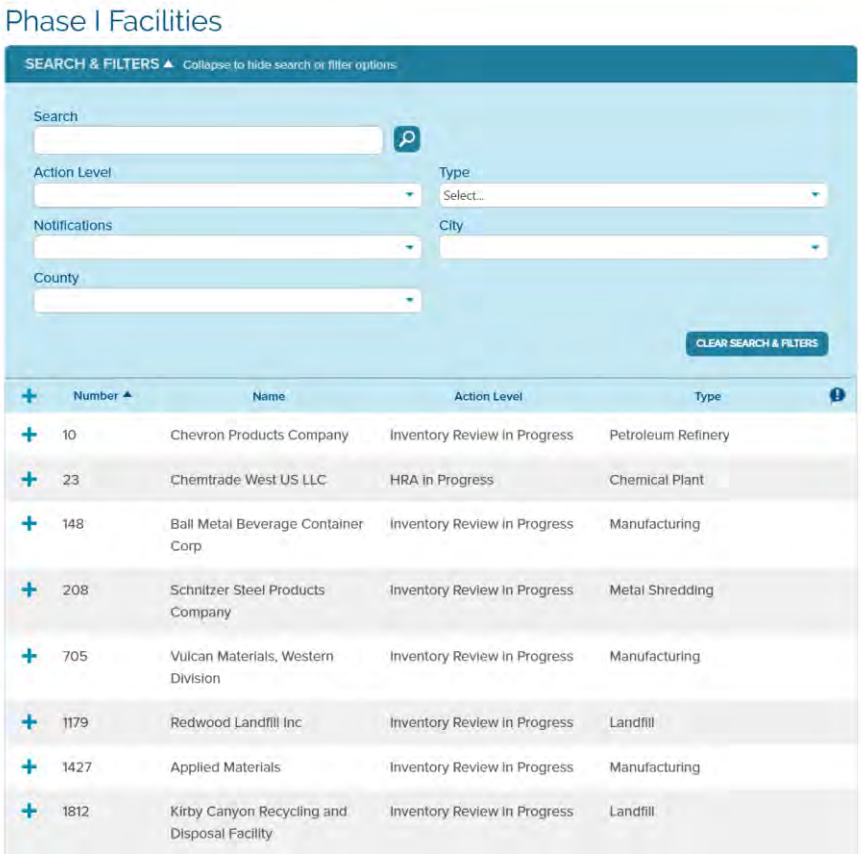
The Air District plans to initiate the TAC emissions inventory and HRA review processes for groups of facilities in small, manageable batches. Generally, the Air District plans to prioritize initiating this review for Phase I facilities, which are facilities with cancer risk prioritization scores (cancer PS) of 250 or higher or non-cancer prioritization scores (non-cancer PS) of 10 or higher. After the review of Phase I facilities is complete, the Air District intends to initiate the review of the remaining facilities in the following order: Phase II facilities with cancer PS of 100 or higher, Phase II facilities with cancer PS of 50 or higher, Phase II facilities with cancer PS of 25 or higher, Phase II facilities with cancer PS of 10 or higher, and finally Phase II facilities with non-cancer PS greater than one. The Air District has initiated this review for the first batch of facilities, which generally focuses on Phase I facilities the Air District has identified as top priority for HRA completion.

[18] The documentation of the emissions inventory changes should include, but is not limited to: all proposed changes with clear references to the original data, a description of the nature of each proposed change (e.g. correction, addition, deletion), and the justification or basis for each proposed change.

Although the Air District generally plans to review facilities in the batches described above, the Air District may prioritize review of TAC emissions inventories and HRAs for Rule 11-18 facilities that are located in Overburdened Communities as defined in Regulation 2: Permits, Rule 1: General Requirements, Section 2-1-243 and the communities selected by the California Air Resources Board for additional resources under Assembly Bill 617 (AB 617) pursuant to Health and Safety Code sections 42705.5(c)-(d) or 44391.2(c). The Air District may also elevate a facility located within an Overburdened Community or AB 617 Community from a future review batch to the current review batch.

The status of the Air District's inventory and HRA review process can be found on the Rule 11-18 Risk Reduction Facilities web page by searching the action level in the facility tables located at:
https://www.baaqmd.gov/community-health/facility-risk-reduction-program/facility-risk-reduction-list

Lists of facilities that are categorized into each phase will also be posted on this page and updated annually. The searchable table shown below currently includes Phase I facilities. The Air District will add the next batch of facilities to this table upon Air District initiation of review for that batch.



4.2.1 Guidelines for Health Risk Assessments

HRAs that will be used to determine applicability of Rule 11-18 risk reduction requirements will be conducted in accordance with the Air District's HRA Guidelines, which are published on Facility Risk Reduction Program web page at: https://www.baaqmd.gov/community-health/facility-risk-reduction-program.[19]

4.2.2 Modeling Protocol for Health Risk Assessments

The Air District has prepared a general HRA modeling protocol that describes how sources should be modeled and how health impacts should be calculated. It is available on the Facility Risk Reduction Program web page at: https://www.baaqmd.gov/community-health/facility-risk-reduction-program.[20]

4.2.3 Procedures for Implementing Health Risk Assessments

Two different procedures are described in this section. Legacy Procedures apply to facilities that have received a notification from the Air District that the site-specific modeling protocol has been finalized before the adoption of the 2026 amendments to Rule 11-18. Current Procedures apply to all other facilities. To the extent these procedures go beyond the specific language in Rule 11-18, they represent the Air District's intent but are subject to change where warranted.

Legacy Procedures (Section 11-18-401)

1. The Air District develops an initial emissions inventory and provides it to the facility for review. The Air District may request information to complete an HRA for the facility.
2. The facility reviews and responds with comments and requested information within 60 days. (Section 11-18-401.1)
3. The Air District reviews the facility's comments and submitted information and may adopt proposed alterations as appropriate. The Air District prepares a site-specific modeling protocol and performs the preliminary HRA. (Section 11-18-401.2)
4. The Air District publishes the preliminary HRA report and notifies the public and facility that the preliminary HRA report is open for comment for 90 days. (Section 11-18-401.2)

[19] HRAs should be conducted in accordance with the most recently approved version of the Bay Area Air District Air Toxics Control Programs HRA Guidelines. As of preparation of this document, the most recent version is December 2021 and is available here: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-2-permits/2021-amendments/documents/20211215_hraguidelines-pdf.pdf?rev=eb18ff83f96049fa84d54552b58baee3

[20] HRA modeling should be conducted in accordance with the most recently approved version of the Bay Area Air District HRA Modeling Protocol. As of preparation of this document, the most recent version is December 2020 and is available here: https://www.baaqmd.gov/~/media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol-pdf.pdf?rev=0d07ca2f01de4c36a3a22f411c8b8f6f

5. For refinery HRAs, the Air District publishes the following, after which the refinery has an opportunity within 15 days to request to convene the Dispute Resolution Panel. (Between Sections 11-18-401.2 and 11-18-401.3)
    a. Response to comments on the preliminary HRA report,
    b. Preliminary determination regarding (1) approval OR (2) deficiencies requiring alteration, and
    c. Preliminary list of identified alterations (if applicable).
6. The Air District reviews comments and may adopt proposed alterations as appropriate. The Air District finalizes and publishes the final HRA report. For non-refinery HRAs, the response to comments is published at the same time as the final HRA report. (Section 11-18-401.3)

Current Procedures (Section 11-18-402)

The Air District requires facilities receiving notifications pursuant to Section 11-18-402.1 to submit HRA results to the Air District. The Air District authorizes the use of a contractor to conduct an HRA.

Although the Air District requires facilities to conduct HRAs and submit HRA reports, it may, under certain circumstances, use an HRA and/or HRA report prepared by the Air District pursuant to Section 11-18-402.6. For example, the Air District anticipates it may prepare HRAs and HRA reports for certain small facilities that lack resources to prepare an HRA. In addition, the Air District also may take over the finalization of the HRA deliverables, including the site-specific modeling protocol, HRAs, and HRA reports.

During Air District review of the HRA deliverables, the Air District has the authority to require the facility to modify the deliverables, including, but not limited to, changing the TAC emissions inventory and TAC emissions release data.

The Air District charges HRA fees pursuant to Regulation 3, Section 3-342 for developing the HRA, including the site-specific modeling protocol. The Air District also charges HRA review fees pursuant to Regulation 3, Section 3-342 for reviewing HRAs, including the site-specific modeling protocol.

If a facility can establish to the Air District's satisfaction that additional time is necessary to complete certain steps of the process, as stated in specific Rule sections, the Air District may choose to approve the request. The facility may request an extension of up to the designated amount of days in each Rule section. If the facility requests additional time, the facility should assume that the provided timelines stand until the facility receives a notification of approval or disapproval for additional time.

Below are the procedures the Air District anticipates following for facilities subject to Section 11-18-402.

1. The Air District informs the facility that the Air District has started reviewing the facility's emissions inventory.
2. No less than 60 days following the start of the Air District's review of the facility's emission inventory, the Air District provides the facility with the notification to prepare an HRA in accordance with Section 11-18-402.1, along with an Air District-approved TAC emissions inventory and TAC emissions release data for the facility. (Section 11-18-402.1)
3. The facility notifies the Air District if the facility plans to use a contractor for the HRA.
4. Within 30 days of receiving a notification to prepare an HRA, a facility may recalculate the facility's prioritization scores using a revised TAC emissions inventory pursuant to Section 11-18-404 and request reconsideration from the Air District of whether an HRA is required. Based on the recalculated prioritization scores, the Air District may send the facility a notification withdrawing the requirement that the facility prepare an HRA. Section 4.1.4 Requests to Reconsider Prioritization Scores includes more details on this process. (Section 11-18-404)
5. The facility submits a draft site-specific modeling protocol that follows the Air District's HRA Modeling Protocol within 60 days of the notification by the Air District to prepare an HRA in accordance with Section 11-18-402.2.1. (Section 11-18-402.2.1)
6. The Air District reviews the draft site-specific modeling protocol. If any revisions to the draft modeling protocol are necessary, the Air District provides a list of necessary revisions to the facility. The facility must implement all revisions and resubmit the protocol within 30 days of receiving the notification with the list of required revisions from the Air District in accordance with Section 11-18-402.2.2. (Sections 11-18-402.2.2 and 11-18-402.2.3)
7. If issues remain in the revised draft modeling protocol, the Air District may reject the draft modeling protocol and use the Air District's HRA Modeling Protocol with default parameters, or make alterations as deemed necessary. After making any alterations, the Air District sends the facility a final modeling protocol. (Section 11-18-402.2.4)
8. The facility or the contractor conducts a preliminary HRA. (Section 11-18-402.3.1)
9. The facility submits to the Air District (1) the draft preliminary HRA report that follows the HRA report template approved by the Air District and (2) all supporting materials within 90 days of the approval of the site-specific modeling protocol by the Air District in accordance with Section 11-18-402.3.1. The draft preliminary HRA submission includes the TAC emissions inventory, documentation of any changes to the emissions inventory data, TAC emissions release data, and any other assumptions and information required to reproduce the HRA results. The documentation should include editable versions of all documents including, but not limited to, Microsoft Word versions of the draft report and supporting material and

all spreadsheets with formulas preserved to allow recalculation and verification. (Section 11-18-402.3.1)

a. The documentation of the emissions inventory changes should include, but is not limited to:

   i. all proposed changes with clear references to the original data,

   ii. a description of the nature of each proposed change (e.g. correction, addition, deletion), and

   iii. the justification or basis for each proposed change.

b. In its submission, the facility may request that the Air District allow the facility to conduct additional tests or studies in the future that might result in different emission data and/or emission factors for a specific source (Section 11-18-405). The Air District may authorize the facility to conduct such testing and/or studies to obtain updated emission data or emission factors.

   The facility shall make this request by including a table in the draft preliminary HRA report that identifies the sources, the Air District-approved emissions and emission factors for each source, and details regarding the tests and/or studies to be conducted. If the Air District approves the facility's request, the Air District shall continue with all the below-noted steps based on the existing, approved emissions and emission factors, but the Air District will leave open the possibility of altering the HRA should the subsequent testing and/or studies demonstrate that different emissions inputs are appropriate. All updated emission data and/or emission factors must be submitted for review and approval to the Air District prior to submittal of the draft RRP. The Air District may rescind approval of the final HRA report or otherwise alter the HRA as warranted by the data.

10. The Air District reviews the draft preliminary HRA report and supporting materials submitted by the facility. If any revisions to the draft preliminary HRA report are necessary, the Air District will provide a list of necessary revisions to the facility. The facility must implement all revisions and resubmit the HRA report and supporting materials within 30 days of receiving the revisions from the Air District in accordance with Section 11-18-402.3.3. (Sections 11-18-402.3.2 and 11-18-402.3.3)

    Once the draft preliminary HRA report meets all applicable requirements and is otherwise adequate, the Air District will approve the preliminary HRA report. (Section 11-18-402.4)

11. The Air District holds a 90-day review and comment process on the preliminary HRA report pursuant to Section 11-18-402.4. (Section 11-18-402.4)

12. The Air District considers all comments on the preliminary HRA report. (Section 11-18-402.4)

13. For refinery HRAs, the Air District publishes the following, after which the refinery has an opportunity within 15 days to request to convene the Dispute Resolution Panel. (Between Sections 11-18-402.4 and 11-18-402.5)
    a. Response to comments on the preliminary HRA report,
    b. Preliminary determination regarding (1) approval OR (2) deficiencies requiring alteration, and
    c. Preliminary list of identified alterations (if applicable).
14. If further revisions to the preliminary HRA report are determined to be necessary by the Air District after public comments, the Air District will provide a list of necessary revisions to the facility. The facility must implement all revisions and resubmit a draft final HRA report and supporting materials within 30 days of receiving the revisions from the Air District in accordance with Section 11-18-402.5.1. (Sections 11-18-402.5.1 and 11-18-402.5.2)

    Once all applicable requirements are met and the Air District otherwise determines the HRA report is adequate, the Air District may approve the final HRA report. (Section 11-18-402.5.4)
15. The Air District notifies the facility in writing of these final HRA results and their obligations under Rule 11-18, such as submittal of a draft RRP and the due date. The Air District publishes the final HRA report on the web site along with the facility's RRP requirements, if any. (Section 11-18-402.5.4)

    For non-refinery HRAs, the response to comments will be published on the web site with the final HRA report.
16. The Air District frequently updates the web site to include posts of preliminary HRA reports for comment and final HRA results that trigger risk reduction requirements.

4.3 Implementing Risk Reduction Plan Requirements

In accordance with Sections 11-18-401.3 and 11-18-402.5.4, the Air District notifies a facility, in writing, if the Air District-approved final HRA results meet or exceed a Rule 11-18 risk action level. As defined in Section 11-18-217, the risk action levels are: a cancer risk of 10 per million, a chronic hazard index of 1, and an acute hazard index of 1. In accordance with Section 11-18-403, this notification triggers the requirement for a facility to submit a draft RRP.

The Air District charges RRP review fees pursuant to Regulation 3, Section 3-341 for Risk Reduction Plan review.

The Air District intends to follow the procedures below for submittal, review, and approval of RRPs:

1. Any facility that receives a notification per Sections 11-18-401.3 or 11-18-402.5.4 prepares a draft RRP that meets the requirements of Section 11-18-403.2. (Section 11-18-403.1 or 11-18-403.2)
2. The facility submits a draft RRP within 180 days of notification that a draft RRP is required. (Section 11-18-403.1)
3. The Air District follows the Section 11-18-403.3 procedures to review and approve draft RRPs.
4. Draft RRPs (excluding confidential information) are posted on the Air District web site for at least 45 days. (Section 11-18-403.4)
5. The Air District considers all comments and prepares a response to comments on the draft RRP. (Section 11-18-403.4)
6. For refinery RRPs, the Air District publishes the following, after which the refinery has an opportunity within 15 days to request to convene the Dispute Resolution Panel. (Between Sections 11-18-403.4 and 11-18-403.5)
    a. Response to comments on the draft RRP,
    b. Preliminary determination regarding (1) approval OR (2) deficiencies requiring alteration, and
    c. Preliminary list of identified deficiencies (if applicable).
7. If the Air District finds that the draft RRP meets the requirements of Section 11-18-403.2, the Air District approves the draft RRP pursuant to Section 11-18-403.5.1 and provides written notification to the facility. (Section 11-18-403.5.1)

    If the Air District determines after the public comment period that the draft RRP does not meet the requirements of Section 11-18-403.2, the Air District notifies the facility in writing and specifies the basis for this determination. Upon receipt of such notification, the facility corrects the identified deficiencies and resubmits the draft RRP within 45 days. (Sections 11-18-403.5.2 and 11-18-403.5.3)

    If the Air District determines that the facility fails to correct any deficiency identified in the notification or that the RRP otherwise fails to comply with Rule Section 11-18-403.2, the Air District disapproves the draft RRP. (Section 11-18-403.5.4)

    For non-refinery RRPs, the response to comments is released with the ultimate decision to approve or disapprove the draft RRP. (Section 11-18-403.5.1 or 403.5.4)
8. The Air District posts the approved final RRP on the web site within 30 days of approval of the RRP. (Section 11-18-403.6)
9. The facility demonstrates compliance by implementing the RRP in accordance with the time frames in the RRP pursuant to Section 11-18-403.2.5 and by submitting Section 11-18-501 Progress Reports on an annual basis. (Sections 11-18-403.2.5 and 11-18-501)

10. The Air District maintains a list of facilities that are subject to the Rule 11-18 RRP requirements on the web site and identifies plan review dates, approval dates, implementation deadlines, and status of RRPs.

5. Dispute Resolution Panel

Consistent with the 2017 Air District Board Resolution originally adopting Rule 11-18 and a 2019 settlement agreement with Western States Petroleum Association and three companies that own and operate local refineries, the Air District intends to convene a panel of technical experts (Dispute Resolution Panel or DRP) to advise the Air District regarding technical disputes that may arise between industry and the Air District regarding implementation of Rule 11-18 at refineries. Refineries may request review of a disputed matter by the DRP after the Air District has considered and responded to comments on preliminary HRAs or draft RRPs.

The DRP consists of at least three independent experts[21] in the fields of toxic air contaminant inventories, HRA, or air pollution control. The DRP may select a chair for each dispute brought before the panel. The DRP may choose to rotate the chair for the different cases brought before the panel.

Per the procedures in Sections 4.2.3 and 4.3, the DRP provides its recommendations before the HRA or RRP is finalized.

Below is the timeline for the DRP:

1. Within 15 days of receiving Air District responses to comments on a preliminary HRA or draft RRP, the refinery that is the subject of the preliminary HRA or draft RRP may notify the assigned Air District contact in writing that they would like to convene the DRP in a request identifying the issues regarding which they are requesting DRP review.
2. The Air District notifies panelists of the case and technical issues and chooses three panel members from those who are available to review the case. The panel may select a chair, if necessary.
3. The Air District provides the DRP with facility comments regarding the technical dispute and Air District responses to comments.
4. The DRP reviews the case and poses any clarifying questions within 15 days of receiving the case information.
5. Each party responds in writing to questions from the DRP within 7 days.
6. The DRP considers the case and makes its recommendation in writing to the Air District within 15 days of receipt of the responses to their questions, or, if the DRP did not pose any questions, within 30 days of receipt of the facility

[21] The DRP independent experts will not include current Air District staff but may include retired Air District staff, staff from other air quality agencies, or other persons with acknowledged expertise relevant to the issue in dispute.

comments regarding the technical dispute and Air District responses to comments.

7. The ultimate decision maker regarding any matter on which the DRP provides a recommendation is the Air District.

Submissions to the DRP are subject to the following requirements and procedures:

1. The request for convening of the DRP for disputes involving HRAs or RRPs will be limited to facilities that are defined as refineries pursuant to Regulation 8: Organic Compounds, Rule 1: General Provisions, Section 8-1-211.
2. Each DRP request must identify specific disagreements with an Air District determination and must provide specific recommended changes or remedies to resolve the disputed matter. Each DRP request must include documents or materials to support the recommended changes or remedy.
3. Each DRP requestor may only raise an issue, propose a recommended change or remedy, or rely on documents or materials if:
   (1) the requestor raised the specific issue, proposed the specific recommended change or remedy, and relied on the specific documents or materials in a comment submitted during the comment period for the preliminary HRA pursuant to Section 11-18-402.4 or the comment period for the draft RRP pursuant to Section 11-18-403.4; or
   (2) the issue involves a dispute regarding a change to a preliminary HRA or draft RRP made after the comment period pursuant to Section 11-18-402.4 or 11-18-403.4, in which case the DRP requestor may submit additional documents and materials, which the Air District shall accept as a valid part of the DRP request if they are relevant to the question at issue and are not unduly burdensome to review.
4. After the Air District responds to comments on preliminary HRAs, the types of matters that can be raised are limited to the inventory and the methodology used for the HRA. Refineries may not use the DRP to challenge an Air District determination not to consider additional emissions data pursuant to Section 11-18-405.1.
5. After the Air District responds to comments on draft RRPs, the types of matters that can be raised are limited to the technological feasibility or economic burden involved in a demonstration pursuant to Sections 11-18-403.2.6.1, 11-18-403.2.6.2, and 11-18-403.2.6.3, determination of TBARCT, and any updates to the inventory that have been made pursuant to Section 11-18-405.
6. A facility is limited to one request to convene a DRP for the HRA and one request for the RRP. Each request will be limited to a total of three issues, where each issue consists of an individual specific disagreement and a specific recommended change or remedy.
7. The Air District may reject an issue in the request if the Air District determines that a disputed matter covers multiple issues, is overly burdensome, or is outside the appropriate scope of the DRP.
8. Matters that have been previously resolved by the DRP without new substantive information will not be reconsidered.

6. Stakeholder Meetings

The Air District intends periodically to hold meetings with interested stakeholders to explain procedures, answer questions, and inform communities and industry about the status of the emissions inventory reviews, HRAs, RRPs, and implementation of risk reduction measures. Stakeholders may also inform the Air District about educational or informational needs or public concerns about Rule 11-18 actions, facilities that are subject to Rule 11-18 or otherwise under review, and general air toxics concerns.

Bay Area Air District

ATTACHMENT C

Final Addendum to the Environmental Impact Report for Rule 11-18

This page has been intentionally left blank.

BAY AREA AIR DISTRICT

Final Addendum to the Environmental Impact Report for Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities

May 2026

State Clearinghouse No. 2016102043
[November 2017 EIR]

Bay Area Air District
375 Beale Street, Suite 600
San Francisco, California 94105

Contact: Katie Gong, Senior Air Quality Engineer,
Regulatory Development Division
(415) 749-4790

Prepared by:
Environmental Audit, Inc.

[This page intentionally left blank]

TABLE OF CONTENTS

FINAL ADDENDUM TO THE EIR FOR RULE 11-18

Page No.

1.0 INTRODUCTION 1

2.0 CALIFORNIA ENVIRONMENTAL QUALITY ACT AND BASIS FOR DECISION TO PREPARE AN ADDENDUM 1

3.0 CEQA DOCUMENTS PREPARED FOR RULE 11-18 3

4.0 MODIFIED PROJECT DESCRIPTION 5

5.0 PROJECT LOCATION 6

6.0 IMPACT ANALYSIS 8

6.1 Air Quality 9

6.2 Greenhouse Gas Emissions 15

6.3 Hazards and Hazardous Materials 17

6.4 Hydrology and Water Quality 20

7.0 POTENTIAL ENVIRONMENTAL IMPACTS FOUND TO BE NOT SIGNIFICANT 24

7.1 Aesthetics 24

7.2 Agricultural and Forestry Resources 26

7.3 Biological Resources 28

7.4 Cultural Resources 30

7.5 Geology and Soils 32

7.6 Land Use and Planning 35

7.7 Mineral Resources 37

7.8 Noise 38

7.9 Population and Housing 40

7.10 Public Services 41

7.11 Recreation 43

7.13 Transportation/Traffic 44

7.14 Utilities and Service Systems 47

8.0 CHANGES TO THE CHECKLIST SINCE 2016 50

9.0 CONCLUSIONS 50

Page No.

10.0 REFERENCES 51

FIGURES

Figure 1: Regional Location Map.....7

TABLES

Table 1: Worst-Case Construction Emissions Under Rule 11-18.....10
Table 2: Worst-Case Operational Emissions Under Rule 11-18 12
Table 3: Predicted Operational GHG Emissions Under Rule 11-18.....15

1.0 INTRODUCTION

Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18) was adopted by the Bay Area Air District (Air District) in 2017 to address facilities whose emissions of toxic air contaminants (TACs) pose an elevated risk to nearby residents and workers. The purpose of Rule 11-18 was to prioritize existing facilities with the highest health impacts across the Bay Area and require them to reduce those impacts. Rule 11-18 required existing facilities with health risks above specified risk action level (RAL) thresholds to either reduce those health risks below the Rule's risk action thresholds or implement Best Available Retrofit Control Technology for Toxics (TBARCT) on all significant sources of health risks.

Since the approval of Rule 11-18, concerns have been raised regarding delays in Rule 11-18 implementation, including the finalization of health risk assessments (HRAs) and the development, submission, and approval of Risk Reduction Plans (RRPs). These concerns about Rule 11-18 were raised at multiple Air District Stationary Source Committee meetings, and community members voiced similar concerns at Assembly Bill (AB) 617 Community Steering Committee meetings. Additionally, the Richmond-North Richmond-San Pablo Path to Clean Air (PTCA) includes a strategy to improve Rule 11-18, including rule amendments to improve efficiency and transparency. To address these needs, the Air District anticipates developing amendments to Rule 11-18 (the proposed project or Modified Project) in two phases:

- Phase 1 (current): focused on procedural improvements and implementation efficiency;
- Phase 2 (future): focused on evaluating and potentially increasing rule stringency.

The Air District is currently developing the Phase 1 amendments to Rule 11-18. The Air District does not yet have a timeline for Phase 2 or set of potential rule amendments that it intends to include in Phase 2, but it anticipates beginning to conduct an analysis of the rule's stringency and other more substantive aspects of the rule after Phase 1 is complete.

2.0 CALIFORNIA ENVIRONMENTAL QUALITY ACT AND BASIS FOR DECISION TO PREPARE AN ADDENDUM

The Air District's review and approval of the currently proposed modifications to Rule 11-18 is a discretionary action subject to CEQA. When Rule 11-18 was originally proposed, the Air District was considered the Lead Agency under CEQA and prepared and certified an Environmental Impact Report (EIR) for the Rule (Approved Project). Feasible mitigation measures to address the potentially significant adverse impacts were identified in the EIR. Findings were made and a Statement of Overriding Considerations was adopted by the Air District.

Adoption of Rule 11-18 was considered a "project" subject to CEQA and the environmental impacts of the project were evaluated in the EIR. The currently proposed modifications to Rule 11-18 are also subject to CEQA. CEQA requires evaluation of the potential adverse environmental impacts of proposed projects and identification of feasible methods to reduce or avoid identified significant adverse environmental impacts of those projects. However, CEQA Guidelines Section

15164(a) allows the preparation of an Addendum to a previously certified EIR if some changes or additions are necessary but none of the following conditions as described in CEQA Guidelines Section 15162 occur:

- Substantial changes which will require major revisions of the previous CEQA document due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

- Substantial changes, with respect to the circumstances under which the project is undertaken, which will require major revisions of the previous CEQA document due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or,

- New information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence at the time the previous CEQA document was certified as complete, shows any of the following:

  – The project will have one or more significant effects not discussed in the previous CEQA document;

  – Significant effects previously examined will be substantially more severe than shown in the previous CEQA document;

  – Identification of mitigation measures or alternatives previously found not to be feasible, but would in fact be feasible, and would substantially reduce one or more significant effects, but the project proponent declines to adopt the mitigation measure or alternatives; or

  – Identification of mitigation measures or alternatives which are considerably different from those analyzed in the previous CEQA document would substantially reduce one or more significant effects on the environment, but the project proponent declines to adopt the mitigation measure or alternative.

To determine whether the conditions described in CEQA Guidelines Section 15162 have occurred, the effects of the proposed modifications to Rule 11-18 were compared to the baseline or the existing setting of the environmental impacts described in the original EIR.

As concluded in Section 6.0 of this Addendum, the currently proposed modifications to Rule 11-18 do not change the conclusions reached in the EIR. The EIR concluded that significant adverse impacts are expected to occur for the topics of: 1) construction air quality impacts for ROG, NOx, PM_{10} and $PM_{2.5}$ emissions; 2) greenhouse gas impacts associated with the implementation of air pollution control equipment for the reduction of TAC emissions under proposed Rule 11-18, as well as cumulative GHG emission impacts; and 3) water demand impacts associated with implementation of air pollution control equipment, as well as cumulative water demand impacts. As explained in Subsections 6.1 through 6.4 of this Addendum, the currently proposed modifications to Rule 11-18 will neither increase the severity of these significant adverse impacts nor result in new significant adverse impacts beyond those previously identified in the EIR.

Further, the Air District is also not aware of any other occurrence, such as a change in circumstances or the existence of new information, that would warrant additional environmental review under CEQA Guidelines Section 15162.

The analysis in Sections 6.0 and 7.0 of this Addendum supports the conclusion that the currently proposed revisions to Rule 11-18 are not expected to trigger any conditions identified in CEQA Guidelines Section 15162 that would require the preparation of a subsequent EIR. Therefore, when considering the effects of the Modified Project, the Air District has determined that an Addendum is the appropriate type of CEQA document to be prepared for evaluating potential environmental impacts.

The previous paragraphs and the impact analyses in Sections 6.0 and 7.0 of this Addendum provide the rationale to comply with CEQA Guidelines Section 15164(e) which requires a brief explanation supported by substantial evidence to be included in the Addendum about the reasoning behind the decision to not prepare a subsequent EIR or supplemental EIR under Guidelines Sections 15162 and 15163, respectively. Although CEQA contains a presumption of finality after an EIR is certified, because there are proposed changes to the Approved Project that require discretionary action by the Air District, this Addendum is appropriate. Finally, pursuant to CEQA Guidelines Section 15164(c), "an addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration," but the Air District is circulating this Addendum for review to ensure the public and regulated entities have an opportunity to provide any input prior to finalization.

3.0 CEQA DOCUMENTS PREPARED FOR RULE 11-18

This section provides summaries of the activities associated with Rule 11-18 that were evaluated in CEQA documents, which are presented in sequential order. The CEQA documents can be downloaded from the Air District Webpage at: https://www.baaqmd.gov/en/rules-and-compliance/rules/regulation-11-rule-18-reduction-of-risk-from-air-toxic-emissions-at-existing-facilities?rule_version=Adopted.

October 2016 Notice of Preparation of an Environmental Impact Report and Initial Study (Air District, 2016): The Air District prepared an Initial Study (IS) and published a Notice of Preparation (NOP) for Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18) and Regulation 12: Miscellaneous Standard of Performance, Rule 16: Petroleum Refining Facility-Wide Emissions Limits (Rule 12-16). The NOP/IS were released for a 30-day public review and comment period on October 14, 2016. The NOP/IS included a project description, project location, and a preliminary discussion of potential adverse environmental impacts. The NOP requested public agencies and other interested parties to comment on the scope and content of the environmental information to be evaluated in the Draft EIR. Public scoping meetings were held on November 14, 2016 and November 16, 2016.

March 2017 Draft EIR (Air District, 2017a): The Air District prepared a Draft EIR, which it released for a 45-day public review and comment period from March 24, 2017 through May 8, 2017. The Draft EIR included a project description, a description of the existing environmental setting, a preliminary analysis of potential adverse environmental impacts (including cumulative

impacts) for each environmental topic that could be adversely affected by the proposed project, mitigation measures, project alternatives, and all other relevant topics required by CEQA. The Draft EIR also included a copy of the October 2016 NOP/IS (Appendix NOP). The Draft EIR concluded that the Project would have significant and unavoidable impacts associated with: 1) air quality impacts during construction activities (NOx emissions) and operational emissions of NOx; 2) greenhouse gas emissions; 3) transportation and use of hazardous materials; and 4) water demand impacts.

The Project would result in less than significant impacts following mitigation for: 1) construction air quality emissions associated with ROG, PM_{10} and $PM_{2.5}$ and odor impacts; and 2) hazard impacts.

Impacts to all other environmental topic areas were concluded to be less than significant.

September 2017, Draft EIR (Air District, 2017b): An additional Draft EIR for Proposed District Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities was released for public review from September 1, 2017 to October 16, 2017. The revised Draft EIR eliminated the review of proposed Air District Rule 12-16.

The Draft EIR discussed proposed revisions to Rule 11-18 and potential air quality impacts associated with implementation of the Rule. . The revised Draft EIR concluded that construction air quality impacts would be significant for ROG, NOx, PM_{10} and $PM_{2.5}$ emissions with implementation of Rule 11-18 due to the potential construction overlap associated with facilities that would be required to comply with the Rule. Operational air quality impacts were concluded to be less than significant. Greenhouse gas impacts associated with the implementation of air pollution control equipment for the reduction of TAC emissions under proposed Rule 11-18 were found to be significant, as well as cumulatively significant. Finally, water demand impacts during the implementation of Rule 11-18 were also considered to be cumulatively considerable and found to be potentially significant following mitigation.

November 2017, Recirculated Final EIR, Regulation 11-18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Air District, 2017c): The Recirculated Final EIR was approved and Rule 11-18 was adopted by the Air District Board of Directors on November 14, 2017. Responses to comments were prepared and minor modifications to the Recirculated Final EIR were made. The changes that were reflected in the Final EIR did not constitute significant new information relating to the environmental analysis or mitigation measures that were presented in the September 2017 Draft EIR. The Recirculated Final EIR was certified on November 14, 2017, and the Board of Directors made Findings and issued a Statement of Overriding Considerations.

4.0 MODIFIED PROJECT DESCRIPTION

Rule 11-18 required facilities whose health risk was determined to exceed a specific action level to either reduce the facility risk below the action level or to install TBARCT on all significant sources of risk. This could include operational changes, increases in stack height for better dispersion, installation of air pollution control equipment, etc.

Air District staff is proposing amendments to Rule 11-18 that would expedite the HRA approval steps, as well as other changes that would improve implementation efficiency of this rule. These proposed amendments focus on measures aimed at accelerating risk reduction and improving program efficiency to implement the requirements of the rule as soon as feasible.

The proposed amendments to Rule 11-18 include the following:

- Health Risk Assessments (HRAs)
    - Require facilities to prepare preliminary HRAs using Air District-approved modeling protocols. The protocols would apply standardized methods customized with site-specific information.
    - Provide updated HRA procedures, including site-specific modeling requirements. A site-specific modeling protocol is required to be submitted to the Air District for review and approval.
    - Give the Air District authority to review, correct, and approve HRA inputs and results;
    - Provide a provision where the Air District can prepare the HRA, when it is more expedient to do so or when the facility owner/operator lacks resources to conduct an HRA.
    - Establish specific deadlines for facilities to respond to Air District comments and corrections;
    - Formalize the current practice of holding a public comment period on the preliminary HRA concurrent with the existing 90-day comment period for the facility; and
    - Outline what happens when additional testing or emissions data may affect the facility's HRA results and RAL status.
- Risk Reduction Plans (RRPs)
    - Revise the terminology and timeline associated with the Air District's review of draft RRPs; and
    - Clarify the circumstances under which extensions to the implementation of an RRP or risk reduction measure may be granted.

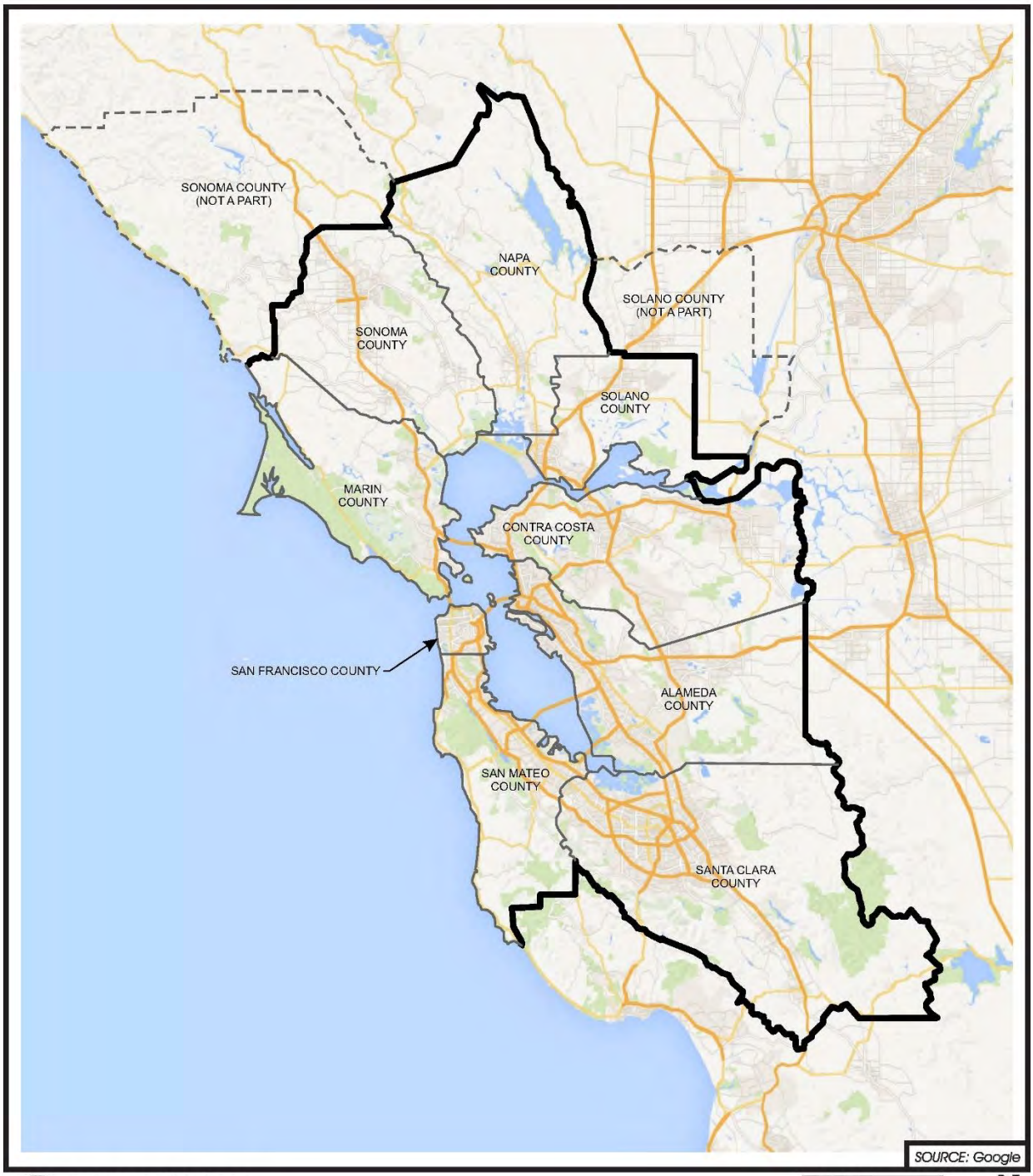
Rule 11-18 applies to all facilities whose emissions of TACs may result in a significant risk to nearby receptors. This includes a broad range of commercial, industrial, and municipal facilities such as data centers, refineries, chemical plants, wastewater treatment facilities, foundries, forges, landfill operations, hospitals, crematoria, power plants, colleges and universities, and military installations.

To comply with the risk action levels for those affected facilities that are required to prepare a risk reduction plan, operators could reduce operations or install TBARCT equipment. Risk reduction measures may include the use of emission capture and control technologies that are intended to capture and remove a TAC or to convert a TAC into a less toxic material, alternative system designs, alternative products, or technologies that reduce or prevent the emission of the TAC or other measures that reduce the amount of TACs to which nearby receptors are exposed. See Chapter 2 of the EIR for a detailed discussion of the potential technologies that were evaluated in the EIR (Air District, 2017b).

5.0 PROJECT LOCATION

The proposed amendments to Rule 11-18 are being implemented to reduce toxic air contaminant emissions within the Air District's jurisdiction. The equipment affected by the proposed rule amendments is located within the jurisdiction of the Air District (see Figure 1). The Air District's jurisdiction includes all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma counties (approximately 5,600 square miles).

The San Francisco Bay Area is characterized by a large, shallow basin surrounded by coastal mountain ranges tapering into sheltered inland valleys. The combined climatic and topographic factors result in increased potential for the accumulation of air pollutants in the inland valleys and reduced potential for buildup of air pollutants along the coast. The basin is bounded by the Pacific Ocean to the west and includes complex terrain consisting of coastal mountain ranges, inland valleys, and bays.



Project No. 3375

Figure 1

N:\3375\Bay Area Quality Management District.cdr

6.0 IMPACT ANALYSIS

The following sections present a summary of the impact analyses contained in the EIR for Rule 11-18 plus the analysis of the impacts of the proposed amendments to Rule 11-18. As required by CEQA Guidelines Section 15125, the EIR included a description of the physical environmental conditions, also referred to as the existing setting or baseline, within the Bay Area as they existed at the time the environmental analysis commenced. Specifically, the baseline was identified in the EIR as 2015, the last full year prior to the release of the NOP/IS.

This Addendum includes an evaluation of the same 19 environmental topic areas evaluated in the November 2017 EIR. The four environmental topic areas fully evaluated in the EIR for which there were less than significant impacts only after mitigation or significant impacts are evaluated in Subsections 6.1 through 6.4. The remaining environmental topic areas that were determined to have no significant or less than significant impacts in the EIR are examined in Section 7.0 of this Addendum. The below analyses support the Air District's conclusion that the proposed amendments to Rule 11-18 are not expected to trigger any conditions identified in CEQA Guidelines Section 15162 that would require the preparation of a subsequent EIR. Thus, a subsequent EIR or a supplement to the EIR as reflected in Guidelines Sections 15162 and 15163, respectively, are not appropriate.

Because this Addendum is associated with modifications to Rule 11-18, the Addendum focuses primarily on whether the modifications to Rule 11-18 constitute changes to the project warranting additional environmental review. The Air District is also not aware of any other changes to the project, changes in circumstances, or new information that would warrant additional environmental review under CEQA Guidelines Section 15162. Most obviously, the Air District is not aware of any changes to the abatement equipment that the Air District would expect to be installed, or to the facilities where that equipment would be installed, that would be sufficiently significant to potentially meet any of the triggers in CEQA Guidelines Section 15162(a)(3)(A)-(D).

6.1 Air Quality

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Conflict with or obstruct implementation of the applicable air quality plan?	No Impact	No	No	No	None
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	Significant Impact	No	No	No	None
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	Less than Significant (Potentially Significant Impact in NOP/IS)	No	No	No	None
d) Expose sensitive receptors to substantial pollutant concentrations?	Less than Significant (Potentially Significant Impact in NOP/IS)	No	No	No	None
e) Create objectionable odors affecting a substantial number of people?	No Impact	No	No	No	None

6.1.1 Construction Emissions

Summary of November 2017 EIR for Rule 11-18

The EIR determined that there were a wide variety of TAC emissions with different physical or chemical characteristics, so that different types of control technologies may need to be installed at affected facilities to reduce risk levels to those required by Rule 11-18. Therefore, to comply with

Rule 11-18, air pollution control equipment may need to be installed, which would generate air emissions during the construction phase.

Based on assumptions of the number and types of air pollution control equipment that would be installed, it was determined that construction emissions associated with implementing Rule 11-18 could generate emissions that exceed the Air District's construction emission thresholds. Therefore, as shown in Table 1, construction air quality impacts were concluded to be significant for ROG, NOx, PM_{10} and $PM_{2.5}$ emissions in the EIR.

TABLE 1

Worst-Case Construction Emissions Under Rule 11-18

ACTIVITY	ROG	CO	NOx	SOx	PM_{10}	$PM_{2.5}$
Construction Emissions Per Unit Under Rule 11-18 (lbs/day)						
Diesel ICE Replacements 1 ICEs	0.88	4.73	4.77	<0.01	1.02	1.00
Diesel ICE Retrofits 1 ICEs	0.27	1.32	2.36	<0.01	0.08	0.06
1 Non-Refinery WGS, Baghouse, or ESP	2.96	15.23	17.99	0.10	2.69	2.44
1 Carbon Adsorption Unit or Thermal Oxidizer	3.27	10.84	16.53	0.01	2.22	2.01
1 Enclosure	1.56	14.08	17.61	0.04	1.54	1.20
Refinery WGS	17	67	84	<1	39	23
Potential Overlapping Emissions	25.94	113.2	143.26	1.15	46.55	29.71
Significance Thresholds	54	None	54	None	82	54
Significant?	No	--	**Yes**	--	No	No
Potential Overlapping Construction Emissions Under Rule 11-18 (lbs/day)						
10 Diesel ICE Replacements	8.8	47.3	47.7	0.1	10.02	10.0
10 Diesel ICE Retrofits	2.74	13.2	23.2	0.01	0.80	0.58
10 Non-Refinery WGS, Baghouse, or ESP	29.6	152.3	179.9	1.0	26.9	24.4
5 Carbon Adsorption Unit or Thermal Oxidizer	16.35	54.25	82.65	0.05	11.1	10.05
3 Enclosures	4.68	42.23	52.82	0.13	4.62	3.60
3 Refinery WGSs	51	201	252	1	117	69
Total Potential Overlapping Emissions (lbs/day)	113.71	510.28	638.27	2.29	170.44	117.63
Significance Thresholds	**54**	None	**54**	None	**82**	**54**
Significant?	**Yes**	--	**Yes**	--	**Yes**	**Yes**
Potential Overlapping Construction Emissions Under Rule 11-18 (tons per year)						
10 Diesel ICE Replacements	0.004	0.024	0.024	0	0.005	0.005
10 Diesel ICE Retrofits	0.001	0.007	0.012	0	0.001	0.001
10 Non-Refinery WGS, Baghouse or ESP)	1.44	7.42	8.77	0.05	1.31	1.20
5 Carbon Adsorption Units or Thermal Oxidizers	0.8	2.64	4.03	0	0.54	0.49
3 Enclosures	0.56	5.05	6.31	0.01	0.55	0.43
3 Refinery WGS	6.3	25.2	31.2	<1	14.1	8.4
Total Potential Overlapping Emissions (tons/year)	2.81	15.14	19.15	0.06	2.41	2.13

ICE = internal combustion engine; WGS = wet gas scrubber; ESP = electrostatic precipitator
Source: Air District, 2017b

Based on the construction emissions in Table 1, the EIR concluded that construction air quality impacts associated with ROG, NOx, PM_{10} and $PM_{2.5}$ would be significant. Construction emissions, however, are temporary as construction emissions would cease following completion of construction activities. Mitigation measures were identified for the potentially significant

construction emissions impacts; nonetheless, it is likely that the construction emissions would remain significant following mitigation.

Impacts of the Modifications to Rule 11-18 (Proposed Project)

The modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the type of facilities that would be affected, air pollution control equipment that would be installed, or construction activities that would be required to comply with the modified rule. Therefore, the construction emissions estimated in the EIR would not be expected to change. The modifications to Rule 11-18 would not have any new or substantially more severe impacts related to construction than the approved Rule 11-18 and would not alter the conclusions of the EIR.

The modifications are anticipated to increase the pace of Rule 11-18 implementation, which one might think could theoretically result in more overlap of construction activities. However, the assumptions utilized to determine the potential for overlap in the EIR were highly conservative; for instance, the EIR relied on an assumption that all facility HRAs for high-priority facilities designated "Phase 1" would be complete within two years. The Air District's subsequent experience has demonstrated that this pace is infeasible and therefore the Air District is confident that the degree of potential overlap examined in the EIR remains conservative.

On February 7, 2024, the U.S. EPA revised the primary (health-based) annual $PM_{2.5}$ ambient air quality standard from 12 micrograms per cubic meter (ug/m^3) to 9 ug/m^3 to provide increased public health protection. Modeling completed by the Air District indicates that the Bay Area air basin is not in attainment of the revised annual $PM_{2.5}$ standard. Although the EIR identified an exceedance of the 24-hour $PM_{2.5}$ standard of 35 ug/m^3, it did not discuss an exceedance of the previous annual standard because the Bay Area air basin had attained that standard.

The existence of the new, lower annual $PM_{2.5}$ standard would not result in any new or substantially more severe air quality impacts. As noted, $PM_{2.5}$ emissions are not expected to increase compared to what was discussed in the EIR, and the EIR already discussed how those emissions may contribute to an exceedance of national ambient air quality standards. Further, the federal government has requested that the U.S. Court of Appeals for the D.C. Circuit strike down the revised annual standard, so it is unclear whether the Bay Area Air Basin will be formally designated nonattainment.

Last, the EIR indicated that the mitigation measures would be imposed through local land use permits for any future projects that require the installation of air pollution control equipment. After further evaluation, the Air District proposes to enforce the mitigation measures through conditions on air permits to simplify and ensure adequate monitoring and enforcement of the measures. This logistical change would not be expected to have any environmental impacts.

6.1.2 Operational Emissions

Summary of November 2017 EIR for Rule 11-18

The net effect of implementing Rule 11-18 was to reduce health risks by reducing TAC emissions from regulated sources. However, some control technologies have the potential to generate secondary or indirect air quality impacts as part of the control process. The air pollution control technologies that have the potential to generate secondary or indirect operational air quality impacts included:

- Diesel Particulate Filters – slight increase in nitrogen dioxide (NO_2) from regenerating filters;
- Carbon Adsorption – increase in combustion emissions from regenerating spent carbon;
- Thermal Oxidizer – potential increase in combustion emissions;
- Wet Gas Scrubber – slight increase in TAC emissions, minor indirect mobile source emissions increases.

As shown in Table 2, adopting Rule 11-18 was not expected to produce operational emissions that exceed either the Air District's daily or annual criteria pollutant significance thresholds. ROG, NOx, PM_{10} and $PM_{2.5}$ emissions would be less than the applicable significance thresholds and, therefore, were concluded to be less than significant.

TABLE 2

Worst-Case Operational Emissions Under Rule 11-18

ACTIVITY	ROG	CO	NOx	SOx	PM_{10}	$PM_{2.5}$
Peak Operational Emissions Per Facility Under Rule 11-18 (lbs/day)						
Regenerating Spent Carbon	0.02	0.08	0.29	<0.01	0.02	0.02
Thermal Oxidizer	0.16	7.10	0.88	0.01	0.17	0.17
Caustic/Catalyst for WGS Unit Truck Trips	0.06	0.26	1.84	0.02	0.04	0.02
Total Potential Overlapping Emissions	0.24	7.44	3.01	0.03	0.23	0.21
Significance Thresholds	54	None	54	None	82	54
Significant?	No	--	No	--	No	No
Peak Operational Emissions for Multiple Facilities Under Rule 11-18 (lbs/day)						
Regenerating Spent Carbon	0.77	0.40	1.43	0.01	0.08	0.08
Thermal Oxidizer	1.6	71.0	8.80	0.1	1.7	1.7
Caustic/Catalyst for WGS Unit Truck Trips	0.04	0.13	23.96	0.26	0.52	0.26
Total Potential Overlapping Emissions	2.41	71.23	34.19	0.37	2.3	2.04
Significance Thresholds	54	None	54	None	82	54
Significant?	No	--	No	--	No	No
Annual Operational Emissions for 1 Facility (tons per year)						
Regenerating Spent Carbon	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thermal Oxidizer	0.03	1.30	0.16	0.00	0.03	0.03
Caustic/Catalyst for WGS Unit Truck Trips	0.003	0.01	0.10	0.00	<0.01	<0.01
Total Potential Overlapping Emissions	0.33	1.31	0.26	0	0.03	0.03
Worst-case Annual Operational Emissions for Multiple Facilities (tons per year)						
Regenerating Spent Carbon (5 Units)	0.14	0.07	0.26	<0.01	0.02	0.02
Thermal Oxidizers (10 Units)	0.29	12.96	1.61	0.02	0.31	0.31
Caustic/Catalyst for WGS Truck Trips (13 Units)	0.04	0.13	1.3	0.01	0.03	0.01
Total Potential Overlapping Emissions	0.47	13.16	3.17	0.04	0.37	0.34
Significance Thresholds tons/year	10	None	10	None	15	10
Significant?	No	--	No	--	No	No

It should be noted that in addition to the estimated emission increases associated with the operation of new air pollution control equipment under Rule 11-18, reduction in air emissions would also be expected. Some of those reductions would be large, for example, a wet gas scrubber (WGS), baghouse, or electrostatic precipitator (ESP) would be expected to result in PM_{10}/$PM_{2.5}$ and TAC emission reductions. However, it is not possible to estimate those emission reductions until the sources that will be controlled are known, the type of air pollution control device has been identified, appropriate engineering analyses have been completed and so forth. Nonetheless, the potential emission increases were expected to be either wholly or partially offset with emission decreases.

To comply with the risk or emission reduction requirements of Rule 11-18, WGS may be used. For example, caustic is used in the operation of a WGS. There are several types of caustic solutions that can be used in WGS operations, but NaOH (50 percent solution, by weight) is the one most commonly used. NaOH is a TAC that is a non-cancerous, but an acutely hazardous substance (i.e., an acute reference exposure level has been established by the California Office of Environmental Health Hazard Assessment). The analysis in the EIR determined that NaOH emissions are expected to be relatively low and would not be expected to impact sensitive receptors. Further, an alternative to using NaOH as the caustic solution is sodium carbonate (Na_2CO_3) which is commonly known as soda ash, a non-toxic, non-cancerous, and nonhazardous substance. This caustic does not have the potential to generate significant adverse TAC emission impacts. For these reasons, it is unlikely that NaOH emissions would create significant adverse acute hazard impacts to any nearby sensitive receptors.

It should be noted that in addition to the estimated TAC emission increases associated with the operation of new air pollution control equipment under Rule 11-18, a reduction in TAC emissions would also be expected. However, it is not possible to estimate those emission reductions until the sources that will be controlled are known, the type of air pollution control device has been identified, appropriate engineering analyses have been completed and so forth. Nonetheless, air pollution control equipment installed to control TAC emissions as a result of the proposed rule was expected to result in a reduction in TAC emissions from affected facilities.

Impacts of the Modifications to Rule 11-18 (Proposed Project)

The modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the type of facilities that would be affected, the type of air pollution control equipment that would be installed, or the potential air emissions associated with operation of any new equipment. Therefore, the operational criteria and TAC emissions are not expected to change from those estimated in the EIR.

Based on the above, the modifications to Rule 11-18 would not have any new or substantially more severe impacts related to criteria pollutants than the Approved Project and would not alter the conclusions of the EIR.

6.1.3 Cumulative Air Quality Impacts

Summary of November 2017 EIR for Rule 11-18

In the analysis of construction air quality impacts, it was concluded that air quality impacts from construction activities would be significant from implementing Rule 11-18 because the potential overlap in construction activities for moderately-sized pieces of air pollution control equipment would likely exceed the applicable significance thresholds for construction air quality impacts, even after implementing mitigation measures. Likewise, the ROG, NOx, PM_{10} and $PM_{2.5}$ air quality impacts due to construction are considered to be cumulatively considerable pursuant to CEQA Guidelines Section 15064 (h)(1) and therefore, generate significant adverse cumulative construction air quality impacts. It should be noted, however, that the air quality analysis is a conservative, "worst-case" analysis so the actual construction impacts are not expected to be as great as estimated in the EIR. Further, the construction activities are temporary and would be terminated once any future construction activities are completed.

Implementing Rule 11-18 was not expected to generate significant adverse project-specific air quality impacts due to operation. Air quality impacts from Rule 11-18 were also not considered to be cumulatively considerable pursuant to CEQA Guidelines Section 15064(h)(1). As discussed above, in addition to the estimated emission increases associated with the operation of new air pollution control equipment under Rule 11-18, reductions in air emissions would also be expected, some of which are potentially large. However, it is not possible to estimate those emission reductions until the sources that will be controlled are known, the type of air pollution control device has been identified, appropriate engineering analyses have been completed and so forth. Nonetheless, the potential emission increases are expected to be either wholly or partially offset with emission decreases.

Impacts of the Modifications to Rule 11-18 (Proposed Project)

Because the modifications to Rule 11-18 are not expected to have any impact on emissions as compared to the impacts analyzed in the EIR, the modifications to Rule 11-18 definitionally cannot have any impact on cumulative air quality impacts.

6.1.4 Conclusions

As discussed above, the modifications to Rule 11-18 would not have any new or substantially more severe impacts related to air quality than the approved Rule 11-18 and would not alter the conclusions of the EIR.

6.2 Greenhouse Gas Emissions

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Significant Impact (Potentially Significant Impact)	No	No	No	None
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less than Significant Impact	No	No	No	None

6.2.1 Summary of November 2017 EIR for Rule 11-18

The EIR determined that the impacts on Greenhouse Gas (GHG) emissions would be significant, as shown in Table 3.

TABLE 3

Predicted Operational GHG Emissions Rule 11-18

Activity	CO_2e MT/Year
Total Amortized Construction Emissions	970
Total Operational Emissions for 5 Carbon Adsorption Units	7
Total Operational Emissions 10 Thermal Oxidizers	4,550
Total Haul Truck Emissions for 13 WGS Units	314
Total Electrical Emissions for 13 WGS Units and 5 ESPs	15,095
Total Potential Overlapping GHG Emissions	20,936
Significance Threshold	10,000 MT/yr
Significant?	**Yes**

See October 2021 Draft EIR, Table 3.3-18 for detailed information.

Evaluation of those air pollution control technologies that would most likely be used to reduce TAC emissions from affected facilities pursuant to Rule 11-18 indicates that Rule 11-18 could generate direct and indirect GHG emission impacts that exceed the Air District's operational GHG emissions significance threshold of 10,000 $MTCO_2e/yr$. Therefore, because the analysis of GHG emission impacts is by definition a cumulative impact analysis, cumulative operational GHG emission impacts for Rule 11-18 were concluded to be significant.

GHG emission increases at facilities that are covered under the California Air Resources Board's (CARB's) Cap and Trade program (e.g., refineries, power plants, manufacturing facilities, etc.) are required to offset GHG emissions on an annual basis. CARB's Cap and Trade program allows covered facilities to buy and sell GHG emissions credits to demonstrate compliance with the program requirements. Rule 11-18 was not expected to generate substantial GHG emissions at any one facility that would interfere with the facility's ability to comply with CARB's Cap and Trade requirements. Since there is no specific information as to where control equipment would be required, it would be speculative to assume that GHG emissions would be offset under Cap and Trade. However, GHG emission increases at facilities that are covered under CARB's Cap and Trade program (e.g., refineries, power plants, manufacturing facilities, etc.) would be required to offset under the Cap and Trade Program. Therefore, a portion of the GHG emission increases that may occur due to implementation of Rule 11-18 are expected to be offset. Since the GHG emissions reductions expected due to compliance with AB 32 and the Cap and Trade Program are speculative, cumulative GHG emission impacts are expected to remain significant for implementing Rule 11-18.

6.2.2 Impacts of the Modifications to Rule 11-18 (Proposed Project)

The modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the type of facilities that would be affected, air pollution control equipment that would be installed, construction activities that would be required to comply with the modified rule, or GHG emissions associated with the operation of new air pollution control equipment. Therefore, the proposed modifications to Rule 11-18 would not change the GHG impacts as evaluated in the EIR.

6.2.3 Conclusions

As discussed above, the impacts of the proposed rule modifications on greenhouse gas emissions are expected to remain significant. The proposed modifications to Rule 11-18 would not have any new or substantially more severe GHG emission impacts than the approved Rule 11-18 and would not alter the conclusions of the EIR. The impacts of Rule 11-18 would remain significant for GHG emissions.

6.3 Hazards and Hazardous Materials

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less than Significant Impact (following mitigation)	No	No	No	None
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Less than Significant Impact	No	No	No	None
c) Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	No Impact	No	No	No	None
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Less than Significant Impact	No	No	No	None
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area?	No Impact	No	No	No	None
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	No Impact	No	No	No	None

Would the Project?	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No Impact	No	No	No	None
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	Less than Significant Impact	No	No	No	None

6.3.1 Summary of November 2017 EIR for Rule 11-18

With the exception of baghouses and dry ESPs, the hazard impacts associated with the installation of air pollution control equipment under Rule 11-18 were expected to be less than significant without mitigation.

For baghouses and dry ESPs, there was the potential for fire or explosion impacts. Therefore, feasible mitigation measures pursuant to CEQA Guidelines Section 15126.4 were identified and are described in Chapter 3.4.5.1 and 3.4.5.2 of the EIR. The hazard impacts under implementation of Rule 11-18 were expected to be less than significant following mitigation.

Installation of most types of air pollution control equipment, if required in the future, is not expected to cause or contribute to significant adverse hazard impacts, with the exception of baghouses or dry ESPs. As a result, feasible mitigation measures pursuant to CEQA Guidelines Section 15126.4 were identified and were described. Implementing those mitigation measures was expected to reduce significant adverse hazards and hazardous materials impacts to less than the applicable hazards and hazardous materials significance thresholds. Therefore, overall hazards and hazardous materials impacts, including accidental releases of hazardous materials during transport, were concluded to be less than significant. Cumulative impacts related to hazards and hazardous materials were also not determined to be significant after mitigation.

6.3.2 Impacts of the Modifications to Rule 11-18 (Proposed Project)

The modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not

expected to change the type of facilities that would be affected, air pollution control equipment that would be installed, construction activities that would be required to comply with the modified rule, or hazard impacts emissions associated with the operation of new air pollution control equipment. Therefore, the proposed modifications to Rule 11-18 would not change the hazard impacts, including the cumulative impacts, as evaluated in the EIR.

6.3.3 Conclusions

As discussed above, the impacts of the proposed rule modification on hazard impacts are expected to remain less than significant following mitigation. The proposed modifications to Rule 11-18 would not have any new or substantially more severe hazard impacts than the approved rule and would not alter the conclusions of the EIR. The impacts of Rule 11-18 would remain less than significant after mitigation for hazard impacts.

6.4 Hydrology and Water Quality

Both Hydrology and Water Quality (discussed in Section 3.5 of the EIR) and Utilities and Service Systems (discussed in Section 3.6.3.13 of the EIR) deal with water demand and water quality impacts. The EIR discussed water demand and water quality impacts in the Hydrology and Water Quality section. This Addendum follows the same approach. Please note that although the checklist in Section 7.14 below, for Utilities and Service Systems, identifies a significant impact related to water demand, this Addendum discusses that impact primarily in this section.

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Violate any water quality standards or waste discharge requirements?	Less than Significant Impact	No	No	No	None
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	Significant Impact	No	No	No	None
c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite?	No Impact	No	No	No	None
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite?	No Impact	No	No	No	None

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
e) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	No Impact	No	No	No	None
f) Otherwise substantially degrade water quality?	Less than Significant Impact	No	No	No	None
g) Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	No Impact	No	No	No	None
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	No Impact	No	No	No	None
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	No Impact	No	No	No	None
j) Inundation by seiche, tsunami, or mudflow?	No Impact	No	No	No	None

6.4.1 Summary of November 2017 EIR for Rule 11-18

The EIR determined that certain types of air pollution control equipment will require water including water for dust suppression during construction activities, as well as the operation of wet electrostatic precipitators, and wet gas scrubbers. Water demand impacts from installing most types of air pollution control equipment that use water as part of the control process would not create water demand impacts that exceed the applicable water demand significance thresholds. However, it is likely that water demand impacts from installing wet gas scrubbers, especially on large refinery equipment, could exceed applicable water demand significance thresholds and, therefore, water demand impacts were concluded to be significant.

Water quality impacts from installing most types of air pollution control equipment that use water as part of the control process would not be expected to exceed applicable water quality significance thresholds and, therefore, were concluded to be less than significant. Wastewater from certain types of air pollution equipment (e.g., wet gas scrubbers and wet electrostatic precipitators) can be treated and then recirculated back to the equipment to be used again. Depending on a facility's wastewater treatment system, the rest of the effluent may be further treated and discharged to the sanitary sewer system. Wet gas scrubbers are most likely to be used on large emission sources such as refinery units, gas turbines or other large industrial facilities that currently have wastewater discharges and wastewater treatment systems. Depending on the type of equipment, some water may be lost as steam. For these reasons, it is not expected that wastewater from air pollution control equipment would exceed a facility's current wastewater discharge limits, require changes to existing wastewater permit conditions, or require new wastewater permits. Refineries and other large manufacturing facilities are large users of water, have large wastewater discharges, have large wastewater treatment facilities, and operate under the requirements of industrial waste discharge permits. Regardless of the facility, wastewater discharges from an industrial facility would be required to be discharged in compliance with applicable wastewater discharge permits. Therefore, water quality impacts are not expected to exceed any applicable water quality significance thresholds, so water quality impacts during operation are concluded to be less than significant.

Mitigation measures for water demand were imposed. However, because of the prevalence of drought conditions in Northern California, in spite of implementing the mitigation measures identified, water demand impacts associated with implementing Rule 11-18 were expected to remain significant, in part because there was no guarantee that reclaimed water will be available to all of the affected facilities.

With regard to water quality, it was concluded that impacts would be less than significant, so no mitigation measures were required.

The EIR determined that water demand and water quality during construction activities would be less than significant. Similarly, it was concluded that water quality impacts from the proposed project during operation would be less than significant. Construction water quality, construction water demand impacts and operational water quality impacts were also not considered to be cumulatively considerable (CEQA Guidelines Section 15064 (h)(1)) and, therefore, were not expected to generate significant adverse cumulative impacts for these environmental topic areas.

The EIR concluded that water demand impacts from the proposed project during operation have the potential to generate significant adverse operational water demand impacts associated with installing a WGS. Therefore, operational water demand impacts during operation of the proposed project are considered to be cumulatively considerable for implementation of Rule 11-18 (CEQA Guidelines Section 15064 (h)(1)).

6.4.2 Impacts of the Modifications to Rule 11-18 (Proposed Project)

The modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not

expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, construction activities that would be required to comply with the modified rule, or water demand or water quality associated with the operation of new air pollution control equipment. Therefore, the water demand impacts associated with the proposed amendments to Rule 11-18 are expected to be the same as those estimated in the EIR, including cumulative impacts, and would not change the hydrology/water quality impacts as evaluated in the EIR.

6.4.3 Conclusions

As discussed above, the modifications to Rule 11-18 will have no additional impacts on hydrology and water quality than the Approved Project evaluated in the EIR.

The proposed modifications to Rule 11-18 would not have any new or substantially more severe hydrology or water quality impacts than the approved rule and would not alter the conclusions of the EIR. The impacts of the implementation of Rule 11-18 on hydrology and water quality would remain significant due to the potential water demand impacts associated with the potential operation of large WGSs at industrial (e.g., refinery) facilities.

7.0 POTENTIAL ENVIRONMENTAL IMPACTS FOUND TO BE NOT SIGNIFICANT

This section discusses the remaining 14 environmental topic areas found not to be significantly affected by implementation of the Rule 11-18 October 2016 NOP/IS and the November 2017 EIR, and as a result of the currently proposed modifications to Rule 11-18. The EIR found that the following topics would have less than significant or no impacts. The proposed amendments to Rule 11-18 would have similar or reduced impacts as compared to the currently approved Rule 11-18 for these resources, as discussed below. These environmental topic areas were found not to be significant in the October 2016 NOP and the EIR. The effect of the proposed Rule 11-18 modifications on the conclusions relating to each of these environmental topic areas is discussed in the following sections. The currently proposed modifications to Rule 11-18 are not expected to create new significant impacts or worsen the potential less than significant impacts for the environmental topic areas discussed in this section.

7.1 Aesthetics

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Have a substantial adverse effect on a scenic vista?	No Impact	No	No	No	None
b) Substantially damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?	No Impact	No	No	No	None
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	Less than Significant Impact	No	No	No	None
d) Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	Less than Significant Impact	No	No	No	None

Rule 11-18 required facilities whose health risk is determined to exceed a specific action level to either reduce the facility risk below the action level or to install TBARCT on all significant sources of risk. Some control options include stack modifications. Stack modifications are another common and generally inexpensive risk reduction measure that are often used to reduce risk by increasing the stack height, for example, providing better dispersion of emissions. Rule 11-18 could also result in the installation of new air pollution control equipment to mitigate TAC emissions. While these control devices may be visible to surrounding areas, they would be installed within existing industrial or commercial areas, would be subject to local height limits, and were not expected to block any scenic vista, degrade visual character or quality or an area, or result in significant adverse aesthetic impacts.

The facilities affected by Rule 11-18, including petroleum refineries, may need to install or modify air pollution control equipment or modify operations to implement risk reduction measures. However, it is unlikely that any of the changes would result in additional night-time operation that would require extra lighting. New light sources, if any, were not expected to be noticeable in residential areas. Most local land use agencies have ordinances that limit the intensity of lighting and its effects on adjacent property owners. Therefore, implementation of Rule 11-18 was not expected to have significant adverse aesthetic impacts to the surrounding community.

The proposed modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the aesthetic impacts as evaluated in the EIR.

7.2 Agricultural and Forestry Resources

In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	No Impact	No	No	No	None
b) Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?	No Impact	No	No	No	None
c) Conflict with existing zoning for, or cause rezoning of, forest land as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	No Impact	No	No	No	None
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact	No	No	No	None

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	No Impact	No	No	No	None

As discussed in the EIR, the facilities that would be affected by Rule 11-18 are located primarily in industrial and commercial areas where agricultural or forest resources are generally not located. Some construction activity is expected to result from compliance with Rule 11-18; but such activities were expected to occur on the premises of the affected facilities and, therefore, would not impact agricultural and forestry resources.

The modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the agricultural and forestry resource impacts as evaluated in the EIR.

7.3 Biological Resources

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	No Impact	No	No	No	None
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	No Impact	No	No	No	None
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?	No Impact	No	No	No	None
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	No Impact	No	No	No	None

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
e) Conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact	No	No	No	None
f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	No Impact	No	No	No	None

As discussed in the EIR, the facilities affected by Rule 11-18 are expected to be located in the commercial and industrial areas within the Bay Area. These commercial/industrial areas have been graded to develop the various structures, and are typically surrounded by other commercial and industrial facilities. Native vegetation, other than landscape vegetation, has usually been removed from these facilities.

Similarly, modifications at existing facilities would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with native or resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Further, since the Rule 11-18 would primarily regulate stationary emission sources at commercial or industrial facilities, it would not directly or indirectly affect riparian habitat or other sensitive natural communities identified in local or regional plans, policies, or regulations, or identified by the California Fish and Wildlife or U.S. Fish and Wildlife Service. Improved air quality resulting from Rule 11-18 would be expected to provide health benefits to plant and animal species in the Bay Area. Therefore, implementation of Rule 11-18 was not expected to have significant adverse biological resource impacts.

The modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the impacts on biological resources as evaluated in the EIR.

7.4 Cultural Resources

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	No Impact	No	No	No	None
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	No Impact	No	No	No	None
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	No Impact	No	No	No	None
d) Disturb any human remains, including those interred outside of formal cemeteries?	No Impact	No	No	No	None

As discussed in the EIR, implementing Rule 11-18 was primarily expected to result in controlling stationary source emissions at commercial or industrial facilities. Affected facilities are typically located in appropriately zoned commercial or industrial areas that have previously been graded and developed. Because controlling stationary source emissions from existing facilities does not typically require extensive cut-and-fill activities, or excavation, it is unlikely that additional stationary source control measures that may result from Rule 11-18 will: (1) adversely affect historical or archaeological resources as defined in CEQA Guidelines Section15064.5; (2) destroy unique paleontological resources or unique geologic features; or (3) disturb human remains interred outside formal cemeteries.

In a small number of cases, Rule 11-18 may require minor site preparation and grading at an affected facility to install new or modify existing equipment. Under this circumstance, it is possible that archaeological or paleontological resources could be uncovered. Even if this circumstance were to occur, significant adverse cultural resource impacts are not anticipated because there are existing laws in place that are designed to protect and mitigate potential adverse impacts to cultural resources. As with any construction activity, should archaeological resources be found during construction that results from implementing the rule, the activity would cease until a thorough archaeological assessment is conducted. Therefore, no significant adverse impacts to cultural resources were expected due to implementation of Rule 11-18.

The modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the impacts on cultural resources as evaluated in the EIR.

7.5 Geology and Soils

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	No substantial change to prior analysis
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	No Impact	No	No	No	None
ii) Strong seismic ground shaking?	Less than Significant Impact	No	No	No	None
iii) Seismic-related ground failure, including liquefaction?	Less than Significant Impact	No	No	No	None
iv) Landslides?	Less than Significant Impact	No	No	No	None
b) Result in substantial soil erosion or the loss of topsoil?	No Impact	No	No	No	None
c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	Less than Significant Impact	No	No	No	None

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	No substantial change to prior analysis
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	No Impact	No	No	No	None
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	No Impact	No	No	No	None

As discussed in the EIR, some new structures, or structural modifications at existing affected facilities may occur as a result of installing control equipment or making process modifications to comply with Rule 11-18. However, the rule will not directly expose people or structures to earthquake faults, seismic shaking, seismic-related ground failure including liquefaction, landslides, mudslides or substantial soil erosion. Existing affected facilities or modifications to existing facilities would be required to comply with relevant California Building Code requirements in effect at the time of initial construction or modification of a structure.

The California Building Code is considered to be a standard safeguard against major structural failures and loss of life. The goal of the Code is to provide structures that will: (1) resist minor earthquakes without damage; (2) resist moderate earthquakes without structural damage but with some non-structural damage; and (3) resist major earthquakes without collapse but with some structural and non-structural damage. Therefore, compliance with the California Building Code requirements is expected to minimize the potential impacts associated with earthquakes as well as liquefaction. The issuance of building permits from the local cities or counties will assure compliance with the California Building Code requirements. Therefore, no significant impacts from earthquakes, groundshaking, liquefaction, collapse or expansive soils were expected.

Although Rule 11-18 may require modifications at existing industrial or commercial facilities, such modifications are not expected to require substantial grading or construction activities. Any new air pollution control equipment is not expected to substantially increase the area subject to compaction since the subject areas would be limited in size and, typically, have already been graded or displaced in some way. Therefore, significant adverse soil erosion impacts were not anticipated from implementing Rule 11-18.

Rule 11-18 would only affect existing industrial or commercial facilities, which already are hooked up to appropriate sewerage facilities, and therefore no impacts on septic tanks or alternative wastewater disposal systems were expected.

The modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the impacts on geology and soils as evaluated in the EIR.

7.6 Land Use and Planning

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Physically divide an established community?	No Impact	No	No	No	None
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to a general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	No Impact	No	No	No	None
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	No Impact	No	No	No	None

As discussed in the EIR, Rule 11-18 was designed to reduce risk from existing stationary sources located throughout the Bay Area. Potential risk reduction measures include measures that would limit emissions of TACs. The rule does not include any components that would require major modifications to existing commercial or industrial facilities and, therefore, the rule would not result in impacts that would physically divide an established community or generate additional development.

Rule 11-18 was not expected to require any new substantial construction or development. New or modified pollution control equipment or enclosures may be required and would be located within existing commercial or industrial facilities. Construction activities would be limited to the confines of existing facilities which are zoned for commercial or industrial land use. Modifications to equipment would be limited to the confines of existing facilities and are not expected to affect adjacent land uses, divide an established community, conflict with any applicable land use plan or policy or conflict with any habitat conservation plan. Therefore, no impacts on land use and planning were expected.

The currently proposed modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that

would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the land use and planning impacts as evaluated in the EIR.

7.7 Mineral Resources

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	No Impact	No	No	No	None
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	No Impact	No	No	No	None

As discussed in the EIR, Rule 11-18 was designed to reduce risk from existing stationary sources located throughout the Bay Area. Potential risk reduction measures include measures that would limit emissions of TACs. The rule is not associated with any action that would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state, or of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. Therefore, no impacts on mineral resources were expected.

The modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the mineral resources impacts as evaluated in the EIR.

7.8 Noise

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Exposure of persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Less than Significant Impact	No	No	No	None
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	Less than Significant Impact	No	No	No	None
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	Less than Significant Impact	No	No	No	None
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	Less than Significant Impact	No	No	No	None
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport would the project expose people residing or working in the project area to excessive noise levels?	No Impact	No	No	No	None
f) For a project within the vicinity of a private airstrip would the project expose people residing or working in the project area to excessive noise levels?	No Impact	No	No	No	None

As discussed in the EIR, Rule 11-18 was designed to reduce risk from existing stationary sources located throughout the Bay Area. Potential risk reduction measures include measures that would limit emissions of TACs. New modifications are expected to be limited to the commercial and industrial facilities. The existing noise environment at each of the affected facilities is typically dominated by noise from existing equipment onsite, vehicular traffic around the facilities, and trucks entering and exiting facility premises. No new major industrial equipment was expected to

be required to be installed due to the implementation of Rule 11-18, so that no noise impacts associated with the operation of the rule are expected. Air pollution control equipment is not generally a major noise source. Further, all noise producing equipment must comply with local noise ordinances and applicable OSHA and Cal/OSHA noise requirements. Therefore, industrial operations affected by the Rule 11-18 were not expected to result in noise that would exceed levels established by local noise control laws or ordinances.

As discussed in the EIR, construction activities associated with Rule 11-18 may generate some noise associated with temporary construction equipment and construction-related traffic. Construction would likely require truck trips to deliver equipment, a construction crew of up to about 15 workers, and a few pieces of construction equipment (e.g., forklift, welders, backhoes, cranes, and generators). All construction activities would be temporary and are expected to occur within the confines of existing commercial or industrial facilities so that no significant increase in noise was expected.

As discussed in the EIR, Rule 11-18 was not expected to generate or expose people to excessive groundborne vibration or groundborne noise. No major construction equipment that would generate vibration (e.g., backhoes, graders, jackhammers, etc.) is expected to be required. Therefore, Rule 11-18 was not expected to generate excessive groundborne vibration or noise.

The currently proposed modifications to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the noise resources impacts as evaluated in the EIR.

7.9 Population and Housing

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Induce substantial population growth in an area either directly (e.g., by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)?	No Impact	No	No	No	None
b) Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?	No Impact	No	No	No	None
c) Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?	No Impact	No	No	No	None

As discussed in the EIR, Rule 11-18 was not anticipated to generate any significant effects, either directly or indirectly, on the Bay Area's population or population distribution. The rule would affect commercial and industrial facilities. It is expected that the existing labor pool would accommodate the labor requirements for any new or modified equipment at the facilities. In addition, it is not expected that the affected facilities would need to hire additional personnel to implement the rule. In the event that new employees are hired, it is expected that the existing local labor pool in the Bay Area (comprised from a population of approximately seven million people) can accommodate any increase in demand for workers that might occur as a result of adopting the rule. As such, adopting Rule 11-18 was not expected to induce substantial population growth.

As discussed in the EIR, Rule 11-18 could result in the installation of air pollution control equipment operated in commercial and industrial settings. However, Rule 11-18 was not expected to result in the creation of any industry that would affect population growth, directly or indirectly induce the construction of single- or multiple-family units, or require the displacement of people or housing elsewhere in the Bay Area. Based upon these considerations, significant population and housing impacts were not expected from the implementation of the rule.

The currently proposed amendments to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the population and housing impacts as evaluated in the EIR.

7.10 Public Services

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:					
Fire protection?	No Impact	No	No	No	None
Police protection?	No Impact	No	No	No	None
Schools?	No Impact	No	No	No	None
Parks?	No Impact	No	No	No	None
Other public facilities?	No Impact	No	No	No	None

As discussed in the EIR, Rule 11-18 was designed to reduce toxic health risks from stationary sources in the Bay Area. Rule 11-18 could require minor construction activities and modifications at existing facilities. The modifications were not expected to require additional service from local fire or police departments above current levels.

As noted in the "Population and Housing" discussion above, implementation of Rule 11-18 was not expected to induce population growth because the local labor pool (e.g., workforce) is expected to be sufficient to accommodate any activities that may be necessary at affected facilities. Additionally, modifications to existing facilities were not expected to require an increase in employees. Therefore, there was no expected increase in local population and thus no impacts were expected to local schools or parks.

The rule would not result in the need for new or physically altered government facilities in order to maintain acceptable service ratios, response times, or other performance objectives. There was not an expected increase in population as a result of the adoption of the rule, therefore, no need for physically altered government facilities.

The currently proposed amendments to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the public services impacts as evaluated in the EIR.

7.11 Recreation

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	No Impact	No	No	No	None
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	No Impact	No	No	No	None

As discussed under "Land Use" above, there were no provisions in Rule 11-18 that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments; no land use or planning requirements will be altered by Rule 11-18. Air pollution control equipment, if necessary, would be installed within the confines of existing facilities, including refineries, and would not impact existing recreational facilities.

As noted in the "Population and Housing" discussion above, Rule 11-18 was not expected to induce population growth because the local labor pool (e.g., workforce) was expected to be sufficient to accommodate any activities that may be necessary at affected facilities. Additionally, operation of new air pollution control equipment is not expected to require a substantial increase in employees. Therefore, there was no expected increase in local population and thus no impacts were expected to local recreational facilities.

The currently proposed amendments to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the recreation impacts as evaluated in the EIR.

7.13 Transportation/Traffic

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior Analysis?
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	Less than Significant Impact	No	No	No	None
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	Less than Significant Impact	No	No	No	None
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	No Impact	No	No	No	None
d) Substantially increase hazards because of a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	No Impact	No	No	No	None

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior Analysis?
e) Result in inadequate emergency access?	No Impact	No	No	No	None
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	No Impact	No	No	No	None

As discussed in the EIR, Rule 11-18 was designed to reduce health risks from stationary sources in the Bay Area. Any new or modified pollution control equipment is expected to be located in commercial, industrial, or institutional facilities and may require construction activities. It was estimated that approximately 30 facilities per year were expected to meet reductions by implementing either a baghouse or an enclosure. The construction of enclosures is expected to require the most construction equipment and workers, e.g., up to 34 delivery and/or disposal trucks and up to about 45 construction worker trips on a peak construction day (during the building construction phase for enclosures). Given the size of the Bay Area, this amount of construction traffic would not be noticeable, particularly since construction activities would be expected at existing commercial, industrial and institutional land uses and would be temporary. Rule 11-18 was not expected to require modification to circulation for temporary construction activities. As a result, construction traffic from Rule 11-18 was not expected to have significant impacts on the performance of the circulation system or on standards established for congestion management.

Waste products may be generated from the use of several types of control technologies. Wastes could include: spent carbon generated from the carbon adsorption process; spent metal catalysts from the catalytic oxidation process; and dry solids from filtration controls. The majority of wastes will likely need to be transported to disposal or recycling facilities. The catalysts in catalytic oxidizers need to be replaced every few years so this potential waste product was considered to contribute to the waste transport impacts.

As discussed in the EIR, for a "worst case" analysis, it was assumed that about 180 facilities per year would be required to install a control device to comply with the rule. These facilities at any given day would generate an additional one-two truck trips per day in the entire Air District for delivery and disposal. These potential truck trips were not expected to significantly adversely affect circulation patterns on local roadways near affected facilities. In addition, this volume of additional daily truck traffic is negligible over the entire area of the Air District. Finally, the number of waste disposal transport trips substantially overestimates the number of anticipated trips

because owners/operators at affected facilities may use other types of add-on control equipment or limit throughput rates or operating times which would have no impact on traffic. No increase in worker traffic was expected as the operation of air pollution control equipment of the type expected under the rule is not expected to require any additional employees. Therefore, operational traffic under the Rule 11-18 was expected to be less than significant.

Rule 11-18 was not expected to involve the delivery of materials via air, so no increase in air traffic was expected. The addition of new or modified air pollution control equipment is not expected to change air traffic patterns or result in a change in location that results in substantial safety risks.

Rule 11-18 was not expected to increase traffic hazards or create incompatible uses. The Rule does not involve construction of any roadways or other transportation design features, so no changes to current roadway designs that would increase traffic hazards were expected. Emergency access at the commercial and industrial facilities affected by Rule 11-18 was not expected to be impacted by the rule. Each affected facility is expected to continue to maintain their existing emergency access. The rule was not expected to increase vehicle trips or to alter the existing long-term circulation patterns. The rule was not expected to require a modification to circulation, thus, no long-term impacts on the traffic circulation system were expected to occur.

Rule 11-18 was not expected to affect the performance of mass transit or non-motorized travel to street, highways and freeways, pedestrian or bicycle paths. No conflicts with any congestion management programs, to include level of service and travel demand measures, or other standards established by county congestion management agencies for designated roads or highways, were expected. No changes were expected to parking capacity at or in the vicinity of affected facilities as the rule only pertains to equipment located within existing commercial and industrial facilities. Therefore, no significant adverse impacts resulting in changes to traffic patterns or levels of service at local intersections were expected.

The currently proposed amendments to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the transportation/traffic impacts as evaluated in the EIR.

7.14 Utilities/Service Systems

Both Hydrology and Water Quality (discussed in Section 3.5 of the EIR) and Utilities and Service Systems (discussed in Section 3.6.3.13 of the EIR) deal with water demand and water quality impacts. The EIR discussed water demand and water quality impacts in the Hydrology and Water Quality section. This Addendum follows the same approach. Please note that although the checklist in this section identifies a significant impact related to water demand, this Addendum discusses that impact primarily in Section 6.4, above.

Would the project:	Conclusion in EIR	New significant impact	Substantially more severe significant impact	Refusal to adopt new mitigation/ alternative that would substantially reduce significant impact	Substantial change to prior analysis?
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	Less than Significant Impact	No	No	No	None
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	Less than Significant Impact	No	No	No	None
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	No Impact	No	No	No	None
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements needed?	Significant Impact	No	No	No	None
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less than Significant Impact	No	No	No	None
f) Be served by a landfill with sufficient permitted capacity to	Less than Significant Impact	No	No	No	None

	accommodate the project's solid waste disposal needs?					
g)	Comply with federal, state, and local statutes and regulations related to solid waste?	Less than Significant Impact	No	No	No	None

As discussed in the EIR, Rule 11-18 was designed to reduce health risks from stationary sources in the Bay Area. The facilities affected by the rule already exist and already use water, generate wastewater, treat wastewater, and discharges wastewater under existing wastewater discharge permits. The potential water demand impacts associated with implementation of Rule 11-18 were addressed under Hydrology and Water Quality (see above Section 6.4 for a summary of the water demand impacts). Water demand impacts were considered potentially significant in the EIR as certain types of air pollution control equipment (e.g., wet gas scrubbers) can require the use of substantial amounts of water (see Section 6.4.1 above for a more detailed discussion).

Wastewater/water quality impacts are also discussed in Section 6.4 and concluded to be less than significant. While certain types of air pollution control equipment may use substantial amounts of water, because of the expense and size associated with this type of equipment, it is expected that their use would be limited to large manufacturing facilities, e.g., refineries. Further, wet gas scrubbers can use substantial amounts of water, they lose a lot of water through steam generation and loss. Further, large manufacturing facilities are expected to have their own wastewater treatment facilities so any increase in wastewater would be handled by their own wastewater treatment facilities and any impacts on public facilities would be limited and less than significant.

Implementation of Rule 11-18 may require new or modified pollution control equipment within the confines of existing facilities. These modifications would not alter the existing drainage system or require the construction of new storm water drainage facilities. Nor would the changes required by the rule create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. Therefore, no significant adverse impacts on storm drainage facilities were expected.

Rule 11-18 would reduce health risk posed by existing commercial or industrial facilities. The primary method for reducing these health impacts would be to reduce emissions of TACs, including the use of control technology like baghouses and catalytic oxidizers. Baghouses and catalytic oxidizers will generate solid waste, but they are not expected to require annual replacement events. The baghouses and spent catalyst are only expected to generate a few tons of waste per change out. It is assumed that any hazardous material will be taken to the U.S. Ecology Beatty Nevada hazardous waste facility for treatment and disposal. U.S. Ecology, Inc. is currently receiving waste, and is in the process of extending the operational capacity for an additional 35 years (U.S. Ecology, 2015). Clean Harbors in Grassy Mountain, Utah is also available to receive hazardous waste and is expected to continue to receive waste for an additional 70 years (Clean Harbors, 2015). Therefore, the impacts of implementation of Rule 11-18 on hazardous waste landfills are less than significant. Rule 11-18 was not expected to generate any significant increase in solid waste. Therefore, no significant adverse impacts were expected to solid waste as a result of the rule.

The currently proposed amendments to Rule 11-18 are expected to involve procedural revisions and minor technical changes to improve implementation and program efficiency. The proposed modifications are not expected to change the number or type of facilities that would be affected, air pollution control equipment that would be installed, or alter the construction activities that would be required to comply with the modified rule. Therefore, the proposed amendments to Rule 11-18 would not change the utilities and service system impacts as evaluated in the EIR.

8.0 CHANGES TO THE CHECKLIST SINCE 2016

At the time the NOP/IS for the Rule 11-18 EIR was circulated for public review and comment, and at the time of the certification of the November 2017 EIR, the environmental checklist did not include tribal cultural resources or wildfires as specific environmental topics. However, the CEQA Guidelines have since been updated to include these specific topics.

Tribal cultural resources were previously generally included under Cultural Resources (see Section 7.4). As with other cultural resources, the facilities affected by Rule 11-18 are typically located in commercial or industrial areas that have previously been graded and developed. Because emission control devices for stationary sources do not typically require extensive cut-and-fill activities or excavation, it is unlikely that additional stationary source control measures that may be required by implementation of Rule 11-18 will adversely impact tribal cultural resources.

Wildland fires were previously addressed in Hazards and Hazardous Materials, in question h (see Section 6.3). As discussed in the October 2016 NOP/IS, no increase in hazards associated with wildfires was anticipated from implementing Rule 11-18. The existing facilities affected by the proposed rule already exist and operate within the confines of existing commercial or industrial areas. Native vegetation has been removed from the operating portions of the affected facilities to minimize fire hazards. Therefore, implementation of Rule 11-18 was not expected to increase the risk of hazards associated with wildland fires.

It should be noted that the checklist has also been revised for transportation to focus on vehicle miles travelled (VMT) as opposed to level of service or congestion impacts. VMT as per CEQA Guidelines Section 15064.3 refers to the amount and distance of automobile travel attributable to a project. The State Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA do not require that transportation or VMT analyses be calculated for trucks or construction activities associated with a project (OPR, 2018). Therefore, project-related trucks are not part of this assessment. Further, construction workers are temporary and traffic related to construction activities will cease following the completion of construction.

As discussed above, implementation of Rule 11-18 is not expected to require additional employees following the construction phase. As a result, implementation of Rule 11-18 is not anticipated to generate additional VMT associated with worker vehicles.

9.0 CONCLUSIONS

As explained in Sections 6.0 and 7.0 of this Addendum, the analysis of the currently proposed amendments to Rule 11-18 indicate that no new significant adverse impacts would be created for any environmental areas analyzed in the EIR, nor would the modifications make substantially more severe any existing significant adverse impacts. Further, none of the other triggers for additional environmental review in CEQA Guidelines Section 15162 are met. Based on the environmental analysis prepared for the currently proposed modifications to Rule 11-18, the Air District has quantitatively and qualitatively demonstrated that the currently proposed modifications to Rule 11-18 qualify for an Addendum to the previously certified EIR.

10.0 REFERENCES

Air District, 2022. Bay Area Air Quality Management District 2022 CEQA Guidelines, April 2022, https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines

Air District, 2016. NOP/IS for Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18) and Regulation 12: Miscellaneous Standard of Performance, Rule 16: Petroleum Refining Facility-Wide Emissions Limits (Rule 12-16), October, 2016. Available at: aaqmd.gov/~/media/dotgov/files/rules/regulation-11-rule-18/documents/20161012_nop_is_1216_1118-pdf.pdf?rev=c3eb782653e6492998e6f6f0580c3ec2&sc_lang=en

Air District, 2017a. Draft EIR for Regulation 11-18: Toxic Risk Reduction Rule and Regulation 12-16: Petroleum Refining Emissions Limits and Risk Thresholds, March 2017. Available at: https://www.baaqmd.gov/~/media/dotgov/files/rules/regulation-11-rule-18/documents/20170325_deir_1118_1216-pdf.pdf?rev=8a3cf32356ff4fc7a4c320c6c5c361db&sc_lang=en

Air District, 2017b. Recirculated Draft EIR for Regulation 11-18: Reduction of Risk from Air Toxic Emissions at Existing Facilities. August 2017. Available at: https://www.baaqmd.gov/~/media/dotgov/files/rules/regulation-11-rule-18/documents/20170901_rdeir_1118-pdf.pdf?rev=baa99d88fb0344cb9b4acba35eeec4a5&sc_lang=en

Air District, 2017c. November 2017, Recirculated Final EIR, Regulation 11-18: Reduction of Risk from Air Toxic Emissions at Existing Facilities. November 2017. Available at: https://www.baaqmd.gov/~/media/dotgov/files/rules/regulation-11-rule-18/documents/20171115_rfeir_1118-pdf.pdf?rev=055e56fae4e0474dbbc1393e5252f22e&sc_lang=en

Office of Planning and Research, 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. Available at: https://lci.ca.gov/docs/20190122-743_Technical_Advisory.pdf

Bay Area Air District

ATTACHMENT D

Mitigation Monitoring and Reporting Program for Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities

This page has been intentionally left blank.

BAY AREA AIR DISTRICT

Mitigation Monitoring and Reporting Program for the Final Addendum to the Environmental Impact Report for Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities

May 2026

State Clearinghouse No. 2016102043
[November 2017 Recirculated Final EIR]

Bay Area Air District
375 Beale Street, Suite 600
San Francisco, California 94105

Contact: Katie Gong, Senior Air Quality Engineer,
Regulatory Development Division
(415) 749-4790

Prepared by:
Environmental Audit, Inc.

[This page intentionally left blank]

TABLE OF CONTENTS

MITIGATION MONITORING AND REPORTING PROGRAM FOR THE FINAL ADDENDUM TO THE EIR FOR RULE 11-18

Page No.

1.0 MITIGATION MONITORING AND REPORTING PROGRAM....1
2.0 MITIGATION MEASURES....1
2.1 AIR QUALITY IMPACTS AND MITIGATION MEASURES....2
2.2 GREENHOUSE GAS IMPACTS AND MITIGATION MEASURES....3
2.3 HAZARDS AND HAZARDOUS MATERIALS IMPACTS AND MITIGATION MEASURES....4
2.4 HYDROLOGY AND WATER QUALITY IMPACTS AND MITIGATION MEASURES....6

TABLES

Table 1: Mitigation Monitoring and Reporting Program for Air District Rule 11-18....7

[This page intentionally left blank]

BAY AREA AIR DISTRICT

Rule 11-18: Reduction of Risk from Air Toxic Emissions at Existing Facilities

1.0 MITIGATION MONITORING AND REPORTING PROGRAM

The Mitigation Monitoring and Reporting Program (MMRP) is a required component of the California Environmental Quality Act (CEQA) process, when mitigations are imposed on projects for which Environmental Impact Reports (EIRs) or Mitigated Negative Declarations have been prepared.

When a public agency conducts an environmental review of a proposed project in conjunction with approving it, the lead agency shall adopt a program for monitoring or reporting on the measures it has imposed to mitigate or avoid significant adverse environmental effects pursuant to the requirements of CEQA Guidelines §15097 and PRC §21081.6. PRC §21081.6 states in part that when making the findings required by §21081(a):

"... the public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead or responsible agency, prepare and submit a proposed reporting or monitoring program."

Enforcement of the mitigation, monitoring, and reporting requirements described in this program is primarily the responsibility of the Bay Area Air District (Air District) as the lead agency under CEQA. The mitigation measures discussed herein are primarily the responsibility of the project applicants to implement. To certify compliance, documentation that mitigation measures have been implemented will be maintained by the project applicants to ensure potential environmental impacts are mitigated in accordance with the performance standards in the FEIR.

2.0 MITIGATION MEASURES

During the preparation of the Final EIR for Rule 11-18, potentially significant impacts were identified for air quality, greenhouse gases (GHG), hazards and hazardous materials, and hydrology and water quality (water demand) impacts. The following mitigation measures were imposed.

2.1 AIR QUALITY IMPACTS AND MITIGATION MEASURES

Based on the evaluation of those air pollution control technologies that would most likely be used to reduce toxic air contaminant (TAC) emissions from affected facilities (if applicable) pursuant to proposed Rule 11-18, air quality impacts from construction activities associated with the proposed project could generate emissions that exceed the Air District's construction emission thresholds. Therefore, construction air quality impacts were concluded to be significant for ROG, NOx, PM10 and PM2.5 emissions. Air quality emissions were determined to be less than significant during the operational phases associated with implementation of Rule 11-18.

The following mitigation measures were imposed.

A-1 Develop a Construction Emission Management Plan for each affected facility to minimize emissions from vehicles including, but not limited to: consolidating truck deliveries; scheduling deliveries to avoid peak hour traffic conditions; describing truck routing; describing deliveries including logging delivery times; describing entry/exit points; identifying locations of parking; identifying construction schedule; and prohibiting truck idling in excess of five consecutive minutes or another timeframe as allowed by the California Code of Regulations, Title 13 §2485 - CARB's Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. The Construction Emission Management Plan shall be submitted to Air District staff for approval prior to the start of construction. At a minimum, the Construction Emission Management Plan would include the following types of mitigation measures.

On-Road Mobile Sources:

A-2 The Construction Emission Management Plan shall include measures to minimize emissions from vehicles including, but not limited to, consolidating truck deliveries, prohibiting truck idling in excess of five minutes as contract conditions with carriers and by posting signs onsite, specifying truck routing to minimize congestion emissions, specifying hours of delivery to avoid peak rush-hour traffic, allowing ingress/egress only at specified entry/exit points to avoid heavily congested traffic intersections and streets, and specifying allowable locations of onsite parking.

Off-Road Mobile Sources:

A-3 Prohibit construction equipment from idling longer than five minutes at the facility under consideration as contract conditions with construction companies and by posting signs onsite.

A-4 Maintain construction equipment tuned up and with two- to four-degree retard diesel engine timing or tuned to manufacturer's recommended specifications that optimize emissions without nullifying engine warranties.

A-5 The facility operator shall survey and document the locations of construction areas and identify all construction areas that are served by electricity. This documentation shall be provided as part of the Construction Emissions Management Plan. Electric welders shall be used in all construction areas that are demonstrated to be served by electricity.

A-6 The facility operator shall survey and document the locations of construction areas and identify all construction areas that are served by electricity. This documentation shall be provided as part of the Construction Emissions Management Plan. Onsite electricity rather than temporary power generators shall be used in all construction areas that are demonstrated to be served by electricity.

A-7 If cranes are required for construction, cranes rated 200 hp or greater equipped with Tier 4 or equivalent engines shall be used. Engines equivalent to Tier 4 may consist of Tier 3 engines retrofitted with diesel particulate filters and oxidation catalysts, selective catalytic reduction, or other equivalent NOx control equipment. Retrofitting cranes rated 200 hp or greater with PM and NOx control devices must occur before the start of construction. If cranes rated 200 hp or greater equipped with Tier 4 engines are not available or cannot be retrofitted with PM and NOx control devices, the facility operator shall use cranes rated 200 hp or greater equipped with Tier 3 or equivalent engines. The facility operator shall provide documentation in the Construction Emissions Management Plan or associated subsequent status reports as information becomes available that cranes rated 200 hp or greater equipped with Tier 4 or equivalent engines are not available.

A-8 For off-road construction equipment rated 50 to 200 hp that will be operating for eight hours or more, the facility operator shall use equipment rated 50 to 200 hp equipped with Tier 4 or equivalent engines. Engines equivalent to Tier 4 may consist of Tier 3 engines retrofitted with diesel particulate filters and oxidation catalysts, selective catalytic reduction, or other equivalent NOx control equipment. Retrofitting equipment rated 50 to 200 hp with PM and NOx control devices must occur before the start of construction. If equipment rated 50 to 200 hp equipped with Tier 4 engines is not available or cannot be retrofitted with PM and NOx control devices, the facility operator shall use equipment rated 50 to 200 hp equipped with Tier 3 or equivalent engines. The facility operator shall provide documentation in the Construction Emissions Management Plan or associated subsequent status reports as information becomes available that equipment rated 50 to 200 hp equipped with Tier 4 or equivalent engines are not available.

2.2 GREENHOUSE GAS IMPACTS AND MITIGATION MEASURES

Based on the evaluation of those air pollution control technologies that would most likely be used to reduce TAC emissions from affected facilities (if applicable) pursuant to proposed Rule 11-18, GHG emission impacts could exceed the Air District's operational GHG emissions significance threshold of 10,000 $MTCO_2e$/yr. Therefore, because the analysis of GHG emission impacts is by

definition a cumulative impact analysis, cumulative operational GHG emission impacts for Rule 11-18 are concluded to be significant.

While potentially significant GHG emission impacts were identified, no feasible mitigation measures were identified. However, some GHG emissions may be offset under the California Cap-and-Trade Program (renamed to be called the Cap-and-Invest Program).

Under the Cap-and-Invest program, industrial sectors receive allowances. An allowance is a tradable permit to emit one metric ton of a carbon dioxide equivalent GHG emissions. Allowances are distributed among facilities based on their complexity and energy efficiency. The more energy efficient a facility is, the greater the allocation it receives. Further, the AB32 Cap and Trade Program requires that the facilities subject to the program offset any GHG emissions in excess of the total allowance obtained through the program. As the emissions cap is gradually reduced over time, and as additional sources are brought under the cap to include the vast majority of GHG emissions in the State, the program will ensure that California remains on track to continually reduce GHG emissions. Operational GHG emission increases would be offset if they occurred at facilities that are included in the Cap-and-Invest Program. However, since there is no specific information as to where the air pollution control equipment would occur it would be speculative to assume that GHG emissions would be offset under the AB 32 Cap-and-Invest Program at this time. Nonetheless, some or all of the GHG emissions that may be generated to comply with Rule 11-18 may be offset under the Cap-and-Invest Program.

2.3 HAZARDS AND HAZARDOUS MATERIALS IMPACTS AND MITIGATION MEASURES

Based on the evaluation of those air pollution control technologies that would most likely be used to reduce TAC emissions from affected facilities if required pursuant to proposed Rule 11-18, hazards and hazardous materials impacts from the use of baghouses and dry electrostatic precipitators to comply with Rule 11-18 are potentially significant.

The following mitigation measures were imposed.

Baghouses

HHM-1 Maintain a comprehensive dust control program, with hazard dust inspections, testing, housekeeping, and control initiatives.

HHM-2 Ground the filter elements using grounding wires, rods, etc., to prevent sparks that could be generated during cleaning.

HHM-3 Install additional explosion rupture panels and vent outdoors.

HHM-4 If the collector filters are to be replaced, the first procedure is to remove as much flammable or explosive dusts from the filters as possible. Reverse the exhaust fan's

direction to maintain a low flow and prevent dust from returning to the hood. Clean the collector one section at a time allowing time for the dust to settle into the collection hopper. After several complete cleaning cycles a large portion of the dust will be ejected, which is expected to lower the exposure of the worker in handling the filter elements.

HHM-5 Perform all hot work (welding, acetylene cutting, grinding, etc.) away from the collector, if possible.

HHM-6 Ensure that power tools and impact hand tools (such as hammers, chippers, etc.) used by maintenance personnel that could present a sparking hazard are not used in high dust concentrations. When such work is being performed on the structure itself, make certain the dust concentrations within the enclosure are well below combustible levels.

HHM-7 Ensure adherence to National Fire Protection Agency (NFPA) standards including, but not limited to, NFPA 499, Recommended Practice for the Classification of Combustible Dusts and of Hazardous (classified) Locations for Electrical Installations in Chemical Process Areas.

Dry Electrostatic Precipitators

HHM-8 Fire and explosion risks can be reduced by equipping dry ESPs with CO sensors that send a signal to a safety system to stop the process when CO concentrations exceed the critical limit. This solution reduces the risk dramatically.

HHM-9 Modern digital electronic controls shall be used to automate this process to assure the dry ESP operates at peak performance levels at all times.

HHM-10 The bottom and top of each wire should be covered with shrouds to help minimize sparking and metal erosion at these points.

HHM-11 To further reduce fire and explosion hazards, affected operators shall establish the inspection frequency of all dry ESP components through a formal inhouse maintenance procedure. Vendors' recommendations for an inspection schedule shall be followed and shall include at a minimum, the following procedures.

Daily: On a daily basis operation of hoppers and ash removal system should be checked; the control room ventilation system should be examined; any abnormal arcing in the ESP enclosure and ducts (typically caused by broken wires, which may swing freely causing shorting between discharge and collector electrodes) should be investigated; and electrodes should be checked.

Weekly: Air filters should be checked and cleaned on a weekly or more frequently.

Semianually: On a semiannual basis the operator should check the exterior for visual signs of deterioration, and abnormal vibration, noise, or leaks.

2.4 HYDROLOGY AND WATER QUALITY IMPACTS AND MITIGATION MEASURES

Based on the evaluation of those air pollution control technologies that would most likely be used to reduce TAC emissions from affected facilities (if applicable) pursuant to Rule 11-18, large wet gas scrubber(s) installed to comply with Rule 11-18 requirements could result in significant water demand impacts due to operation of new scrubbers.

The following mitigation measures were imposed.

HWQ-1 When air pollution control equipment is installed and water is required for its operation, the facility is required to use recycled water, if available, to satisfy the water demand for the air pollution control equipment.

HWQ-2 In the event that recycled water cannot be delivered to the affected facility, the facility is required to submit a written declaration with the application for a Permit to Construct for the air pollution control equipment, to be signed by an official of the water purveyor indicating the reason(s) why recycled water cannot be supplied to the project.

Table 1 below provides the information required in the MMRP for mitigation measures imposed by the Final EIR for Rule 11-18. The Rule was adopted to reduce health risks from all facilities whose emissions of toxic air contaminants may result in a significant risk to nearby residents and workers. Rule 11-18 applies to numerous facilities, including data centers, petroleum refineries, a cement kiln, chemical plants, to name a few. As discussed above, mitigation measures were identified for construction air quality impacts, hazard impacts, and water demand (hydrology and water quality).

TABLE 1-1

Mitigation Monitoring and Reporting Program for Air District Rule 11-18

Mitigation Measure Summary	Monitoring Action	Responsible Party/Agency	1. Enforcement Agency 2. Monitoring Entities 3. Monitoring Phase
Air Quality			
A-1: Develop a Construction Emission Management Plan for each affected facility to minimize emissions from vehicles.	Applicants are responsible for preparation of the Construction Emission Management Plan and maintaining records documenting implementation. Air District is responsible for reviewing and approving the Plan. Records shall be maintained for two years following the completion of construction activities.	Applicant to develop plan Air District to review/approve plan	1. Air District 2. Air District 3. Prior to start of construction and during construction
A-2: The Construction Emission Management Plan shall include measures to minimize emissions from vehicles including, but not limited to, consolidating truck deliveries.	Applicants are responsible for preparation of the Construction Emission Management Plan and maintaining records documenting implementation. Air District is responsible for reviewing and approving the Plan. Records shall be maintained for two years following the completion of construction activities.	Applicant to develop plan Air District to review/approve plan	1. Air District 2. Air District 3. Prior to start of construction and during construction
A-3: Prohibit construction equipment from idling longer than five minutes at the facility under consideration as contract conditions with construction companies and by posting signs onsite.	Prepare notification letter explaining idling limitation during construction, include in contract, remind contractors during shift meetings, and provide copy of letter to all contractors. Post signs on-site. Records shall be maintained for two years following the completion of construction activities.	Applicant to implement	1. Air District 2. Air District/Applicant 3. Prior to start of construction and daily during construction.
A-4: Maintain construction equipment tuned up and with two- to four-degree retard diesel engine timing or tuned to manufacturer's recommended specifications that optimize emissions without nullifying engine warranties.	Applicants to maintain records of vehicle maintenance activities. Records shall be maintained for two years following the completion of construction activities.	Applicant to implement	1. Air District 2. Air District/Applicant 3. During construction

TABLE 1-1

Mitigation Monitoring and Reporting Program for Air District Rule 11-18

Mitigation Measure Summary	Monitoring Action	Responsible Party/Agency	1. Enforcement Agency 2. Monitoring Entities 3. Monitoring Phase
Air Quality (cont.)			
A-5: The facility operator shall survey and document the locations of construction areas and identify all construction areas that are served by electricity. Electric welders shall be used in all construction areas that are demonstrated to be served by electricity.	Prepare site plan that identifies construction areas where electricity is not available and non-electric (gasoline or diesel) welders are permissible. If applicable, identify areas where safety prohibits the use of electric power tools. Maintain records of use of non-electric welders including location, date, duration of use, and fuel type. Records shall be maintained for two years following the completion of construction activities.	Applicant to implement	1. Air District 2. Air District/Applicant 3. Prior to start of construction and daily during construction.
A-6: The facility operator shall survey and document the locations of construction areas and identify all construction areas that are served by electricity. Onsite electricity rather than temporary power generators shall be used in all construction areas that are demonstrated to be served by electricity.	Prepare site plan that identifies construction areas where electricity is not available and non-electric (gasoline or diesel) temporary power generators are permissible. If applicable, identify areas where safety prohibits the use of electric power generators. Maintain records of use of non-electric generators including location, date, duration of use, and fuel type. Records shall be maintained for two years following the completion of construction activities.	Applicant to implement	1. Air District 2. Air District/Applicant 3. Prior to start of construction and during construction.
A-7: If cranes are required for construction, cranes rated 200 hp or greater equipped with Tier 4 or equivalent engines shall be used.	Maintain records of all crane with engines rated at more than 200 hp including 1) equipment description; 2) equipment ID; 3) dates operated on-site; 4) engine hp rating; 5) engine tier certification; 6) description of control technologies and CARB certification; and, 7) justification for use of equipment with less than Tier 4 engines, if Tier 4 engines are not available. Records shall be maintained for two years following the completion of construction activities.	Applicant to implement	1. Air District 2. Air District/Applicant 3. Prior to start of construction and during construction.

TABLE 1-1

Mitigation Monitoring and Reporting Program for Air District Rule 11-18

Mitigation Measure Summary	Monitoring Action	Responsible Party/Agency	1.Enforcement Agency 2.Monitoring Entities 3.Monitoring Phase
Air Quality (cont.)			
A-8: For off-road construction equipment rated 50 to 200 hp that will be operating for eight hours or more, the facility operator shall use equipment rated 50 to 200 hp equipped with Tier 4 or equivalent engines.	Maintain records of all diesel-fueled construction equipment with engines rated at more than 50 hp including 1) equipment description; 2) equipment ID; 3) dates operated on-site; 4) engine hp rating; 5) engine tier certification; 6) description of control technologies and CARB certification; and, 7) justification for use of equipment with less than Tier 4 engines, if Tier 4 engines are not available. Records shall be maintained for two years following the completion of construction activities.	Applicant to implement	1. Air District 2. Air District/Applicant 3. During construction
Hazards and Hazardous Materials			
HHM-1: Maintain a comprehensive dust control program, with hazard dust inspections, testing, housekeeping, and control initiatives.	Applicant to develop and implement dust control program for installation of new baghouses. Maintain records documenting inspections, testing, housekeeping and control initiatives. Compliance records shall be maintained for two years.	Applicant to implement	1. Air District 2. Air District/Applicant 3. Prior to and during operation
HHM-2: Ground the filter elements using grounding wires, rods, etc., to prevent sparks that could be generated during cleaning.	Applicant to maintain records of grounding. Compliance records shall be maintained for two years.	Applicant to implement	1. Air District 2. Air District/Applicant 3. Prior to and during operation
HHM-3: Install additional explosion rupture panels and vent outdoors.	Applicant to maintain records of installation of rupture panels and venting. Compliance records shall be maintained for two years.	Applicant to implement	1. Air District 2. Air District/Applicant 3. Prior to and during operation

TABLE 1-1

Mitigation Monitoring and Reporting Program for Air District Rule 11-18

Mitigation Measure Summary	Monitoring Action	Responsible Party/Agency	1.Enforcement Agency 2.Monitoring Entities 3.Monitoring Phase
Hazards and Hazardous Materials (cont.)			
HHM-4: If the collector filters are to be replaced, remove as much flammable or explosive dusts from the filters as possible. Reverse the exhaust fan's direction to maintain a low flow and prevent dust from returning to the hood. Clean the collector one section at a time allowing time for the dust to settle into the collection hopper.	Applicant to maintain records of installation of cleaning activities. Compliance records shall be maintained for two years.	Applicant to implement	1. Air District 2. Air District/Applicant 3. Prior to and during operation
HHM-5: Perform all hot work (welding, acetylene cutting, grinding, etc.) away from the collector, if possible.	Applicant to maintain records of installation of rupture panels and venting. Compliance records shall be maintained for two years.	Applicant to implement	1. Air District 2. Air District/Applicant 3. Prior to and during operation
HHM-6: Ensure that power tools and impact hand tools (such as hammers, chippers, etc.) used by maintenance personnel that could present a sparking hazard are not used in high dust concentrations. Make certain the dust concentrations within the enclosure are well below combustible levels.	Applicant to monitor and maintain records of dust concentrations prior to maintenance activities. Compliance records shall be maintained for two years.	Applicant to implement	1. Air District 2. Air District/Applicant 3. During operation
HHM-7: Ensure adherence to National Fire Protection Agency (NFPA) standards.	Applicant to monitor and maintain records associated with compliance with NFPA standards relating to hazards and hazardous materials. Compliance records shall be maintained for two years.	Applicant to implement	1. Air District 2. Air District/Applicant 3. During operation

TABLE 1-1

Mitigation Monitoring and Reporting Program for Air District Rule 11-18

Mitigation Measure Summary	Monitoring Action	Responsible Party/Agency	1.Enforcement Agency 2.Monitoring Entities 3.Monitoring Phase
Hazards and Hazardous Materials (cont.)			
HHM-8: Equip dry ESPs with CO sensors.	Applicant to maintain records of installation of CO sensors on new dry ESPs. Compliance records shall be maintained for two years.	Applicant to implement	1. Air District 2. Air District/Applicant 3. Prior to and during operation
HHM-9: Modern digital electronic controls shall be used to automate this process to assure the dry ESP operates at peak performance levels at all times.	Applicant to maintain records of installation of electronic controls on dry ESPs. Compliance records shall be maintained for two years.	Applicant to implement	1. Air District 2. Air District/Applicant 3. Prior to and during operation
HHM-10: The bottom and top of each wire should be covered with shrouds to help minimize sparking and metal erosion at these points.	Applicant to maintain records of installation of covered shrouds on wires. Compliance records shall be maintained for two years.	Applicant to implement	1. Air District 2. Air District/Applicant 3. Prior to and during operation
HHM-11: To further reduce fire and explosion hazards, applicant shall establish the inspection frequency of all dry ESP components through a formal inhouse maintenance procedure. Vendors' recommendations for an inspection schedule shall be followed and shall include: **Daily:** Check operation of hoppers and ash removal system; examine the control room ventilation system; investigate any abnormal arcing in the ESP enclosure and ducts (typically caused by broken wires); and check electrodes. (cont.)	Applicant to maintain records of all inspection activities. Compliance records shall be maintained for two years.	Applicant to implement	1. Air District 2. Air District/Applicant 3. During operation

TABLE 1-1

Mitigation Monitoring and Reporting Program for Air District Rule 11-18

Mitigation Measure Summary	Monitoring Action	Responsible Party/Agency	1.Enforcement Agency 2.Monitoring Entities 3.Monitoring Phase
Hazards and Hazardous Materials (cont.)			
Weekly: Check and clean air filters. **Semianually:** Check the exterior for visual signs of deterioration, and abnormal vibration, noise, or leaks.			
Hydrology and Water Quality			
HWQ-1: When air pollution control equipment is installed and water is required for its operation, the facility is required to use recycled water, if available, to satisfy the water demand for the air pollution control equipment.	Applicant to maintain water purchase records. Compliance records shall be maintained for two years.	Applicant	1. Air District 2. Air District/Applicant 3. Prior to and during operation
HWQ-2: In the event that recycled water cannot be delivered to the affected facility, the facility is required to submit a written declaration with the application for a Permit to Construct for the air pollution control equipment, to be signed by an official of the water purveyor indicating the reason(s) why recycled water cannot be supplied to the project.	If applicable, applicant to obtain and provide declaration from water purveyor and include as part of the application for air permits to the Air District.	Applicant	1. Air District 2. Air District/Applicant 3. Prior to and during operation

Bay Area Air District

Proposed Amendments to Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities

Board of Directors Meeting

June 3, 2026

Katie Gong
Senior Air Quality Engineer
Regulatory Development Division

Abbreviations / Acronyms

- CEQA: California Environmental Quality Act
- EIR: Environmental Impact Report
- HRA: Health Risk Assessment
- RRP: Risk Reduction Plan
- RAL: Risk Action Level
- DRP: Dispute Resolution Panel
- TAC: Toxic Air Contaminant, or Air Toxic
- SSC: Stationary Source Committee
- Q#: Quarter #

Recommended Action

Air District staff recommends that the Board adopt the Resolution, which includes:

- Proposed amendments to Rule 11-18;
- Findings of necessity, authority, clarity, consistency, non-duplication, and reference;
- Proposed updates to the Rule 11-18 Implementation Procedures;
- Addendum to the Environmental Impact Report (EIR) for Rule 11-18; and
- Mitigation Monitoring and Reporting Program for Rule 11-18.

Presentation Outline

- Background
- Rule 11-18
  - Proposed Amendments to Rule Language
  - Proposed Updates to Implementation Procedures
  - Findings
- Public Engagement and Comments
- Resolution and Recommendation

Bay Area Air District

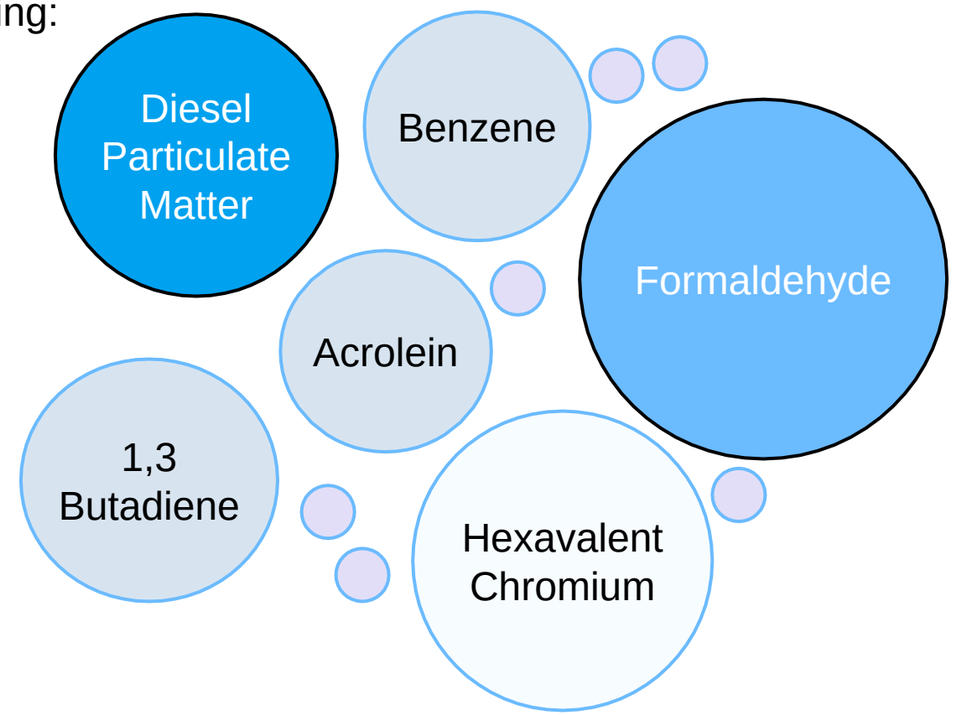
Background of Rule 11-18: Reduction of Risk from Air Toxic Emissions at Existing Facilities

Air Toxics in the Bay Area

What Do We Mean by
Toxics?

An air pollutant which may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health

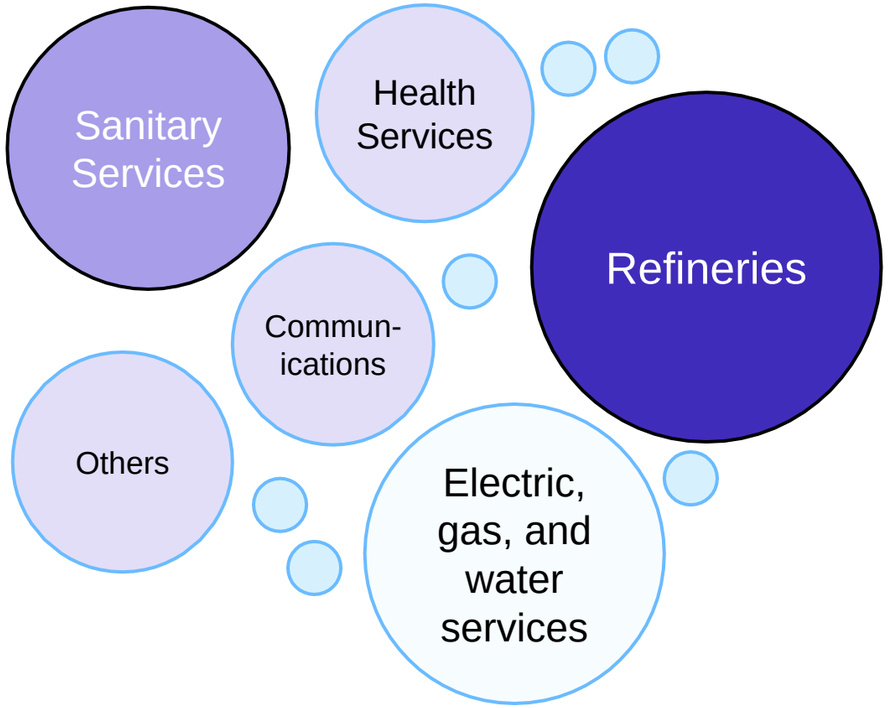
→ Approx. 200 individual chemicals, including:



Air Toxics in the Bay Area

- Thousands of facilities report their air toxic emissions to the Air District
  - Estimated 300+ facilities will be prioritized for Rule 11-18 review
  - Diverse types of facilities
- Types of sources at these facilities:
  - Diesel-fueled internal combustion engines
  - Combustion sources
  - Waste water treatment
  - Evaporative and fugitive emissions

Types of Facilities with Highest Prioritization Scores



Overview of Rule 11-18

- Rule was adopted in 2017
- Goal: **Reduce the risk from existing sources of air toxic emissions**



- **Identify facilities** that pose elevated health risks due to toxic air contaminant emissions (via a Health Risk Assessment, HRA)



- Require those facilities to **reduce health risks**.
- By developing and implementing a Risk Reduction Plan (RRP) to
  (a) reduce facility health risks below Risk Action Levels, or
  (b) install best available retrofit controls on each significant source of health risk

Feedback on Rule 11-18 Implementation

Concerns:

- **Only two preliminary HRA reports published for public comment**
- **Delays in Rule 11-18 implementation and risk reduction progress**

Raised at:

- Air District Stationary Source Committee
- Assembly Bill (AB) 617 Community Steering Committees
  - Richmond-North Richmond-San Pablo Path to Clean Air (PTCA): Fuel Refining Strategy 4.1
  - East Oakland Right to Breathe: Commercial And Industrial Sources (C&I) Strategy 2
  - West Oakland Community Action Plan: Strategy 69

Delays in Rule 11-18 Implementation

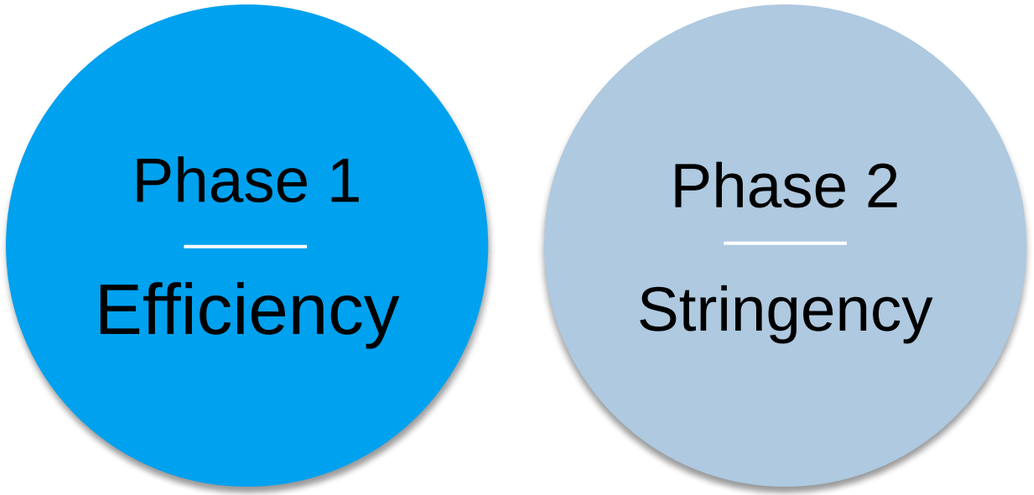


- **Delays in current HRA process are preventing progress toward risk reduction**
- Bottlenecks in current HRA process:
  - Back and forth with facilities during consideration of facility-specific characteristics
  - Limited deadlines for facility responses
  - HRA model setup

Air District Actions

- Working on and enacting process improvements
- Website additions and updates for improved transparency
- Significant community outreach efforts

- Initiated 2-phased **rule amendment** process:



Proposed Amendments Overview

Proposed Amendments to Rule 11-18

- Health Risk Assessments
- Risk Reduction Plans

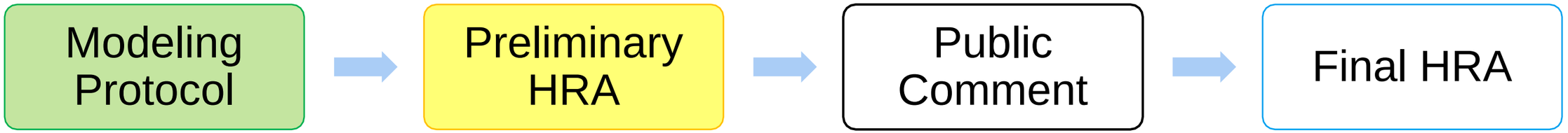
Proposed Updates to Implementation Procedures

Bay Area Air District

Proposed Amendments to Rule Language

Proposed Rule Amendments: *Health Risk Assessments*

- Require facilities to prepare preliminary HRAs using Air District-approved modeling protocols
  - Standardized methods
  - Customized with site-specific information
- Give the Air District authority to review, correct, and approve HRA inputs and results
- Establish specific deadlines for facilities to respond to Air District comments and corrections



Proposed Rule Amendments: *Health Risk Assessments* (cont.)

- Formalize the current practice of holding a public comment period on the preliminary HRA concurrent with the existing 90-day comment period for the facility
- Outline what happens when additional testing or emissions data may affect the facility's HRA results and whether or not they exceed a Risk Action Level

Proposed Rule Amendments: *Health Risk Assessments* (cont.)

Proposed HRA procedures would enhance efficiency by:

- Saving considerable Air District time inputting modeling parameters
- Reducing back and forth between Air District and facility
- Enabling more preliminary HRAs to move forward simultaneously
- Focusing on high impact pollutants and sources with a targeted emissions inventory review

Proposed HRA procedures would accelerate progress toward risk reduction



Proposed Rule Amendments: *Risk Reduction Plans*

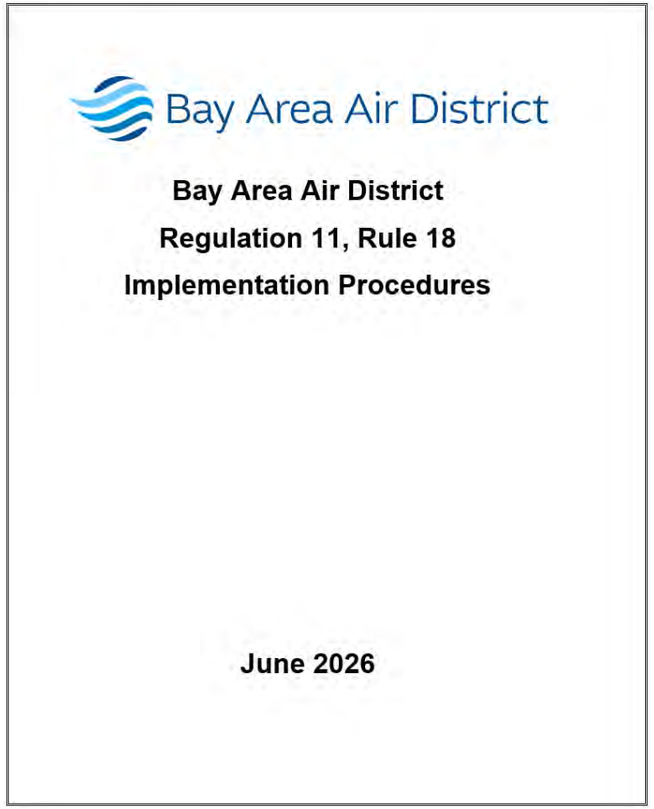
- Revise the terminology and timeline associated with the Air District's review of draft RRPs prior to public comment; and
- Clarify the circumstances under which extensions to the implementation of an RRP or risk reduction measure may be granted.

Bay Area Air District

Proposed Updates to Implementation Procedures

Overview of Implementation Procedures

- The Implementation Procedures are a set of procedural guidelines developed to support consistent and transparent application of Rule 11-18
- The Implementation Procedures were most recently revised in 2024 after a public comment period



Proposed Implementation Procedures: *General*

- Administrative corrections and clarifications
- Proposed updates made to reflect the revised requirements and procedures described in the proposed amendments to Rule 11-18 (e.g. steps for facilities conducting preliminary HRAs)

Proposed Implementation Procedures: *Dispute Resolution Panel*

- In the 2017 Board Resolution approving Rule 11-18 and a 2019 settlement agreement with Western States Petroleum Association (WSPA), the Air District included provisions to convene a panel of technical experts

- This Dispute Resolution Panel (DRP) is intended to advise the Air District regarding technical disputes that may arise regarding implementation of Rule 11-18 at refineries

Proposed Implementation Procedures: *Dispute Resolution Panel (cont.)*

- **Eligibility**: Limit to facilities defined as refineries
- **Submission Content**: Requests must identify specific disagreements with an Air District determination, propose specific remedies, and include supporting materials
- **Limits on Requests**: One request for the HRA and one for the RRP, each covering up to three distinct issues (each with a specific disagreement and proposed remedy)

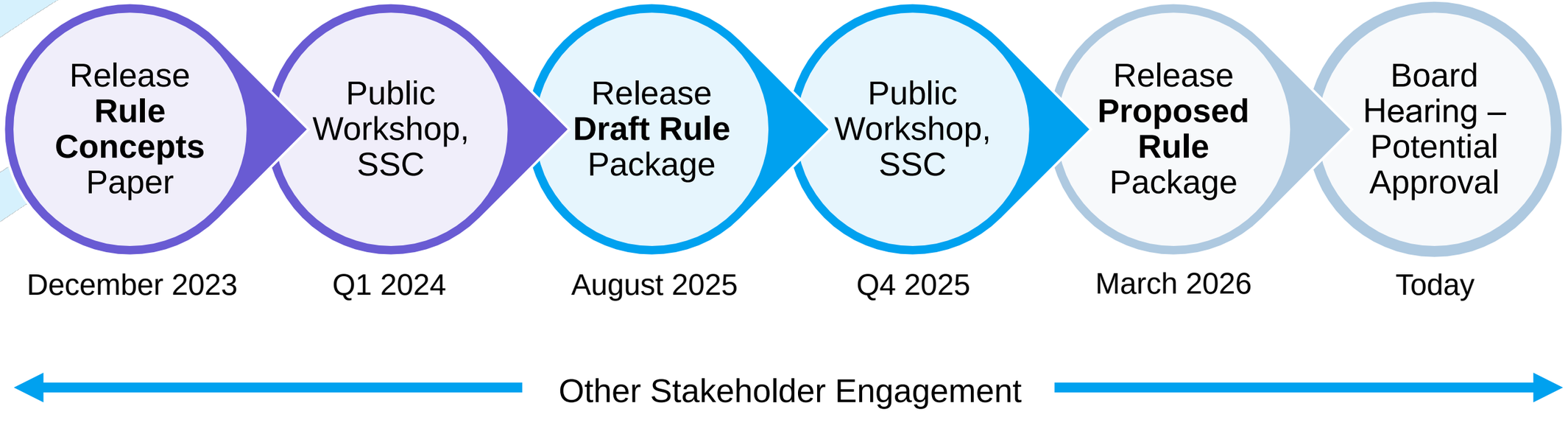
Proposed Implementation Procedures: *Dispute Resolution Panel (cont.)*

- **Scope of Disputes**:
  - After the Air District responds to comments on preliminary HRAs, disputes are limited to inventory and methodology issues
  - After the Air District responds to comments on draft RRPs, disputes are limited to technological feasibility, economic burden, determinations on best available retrofit controls for toxics, or updates to inventories that have been made with additional data
- **Timeliness and Prior Participation**: Only issues, remedies, or materials raised during the public comment period may be included, unless they address post-comment period changes made to the HRA or RRP

Bay Area Air District

Rule 11-18 Proposed Amendments Package

Public Participation Process



Public Comments Received

Eight written comment letters received regarding the proposed amendment materials

- Three from community stakeholders
- Five from industry stakeholders

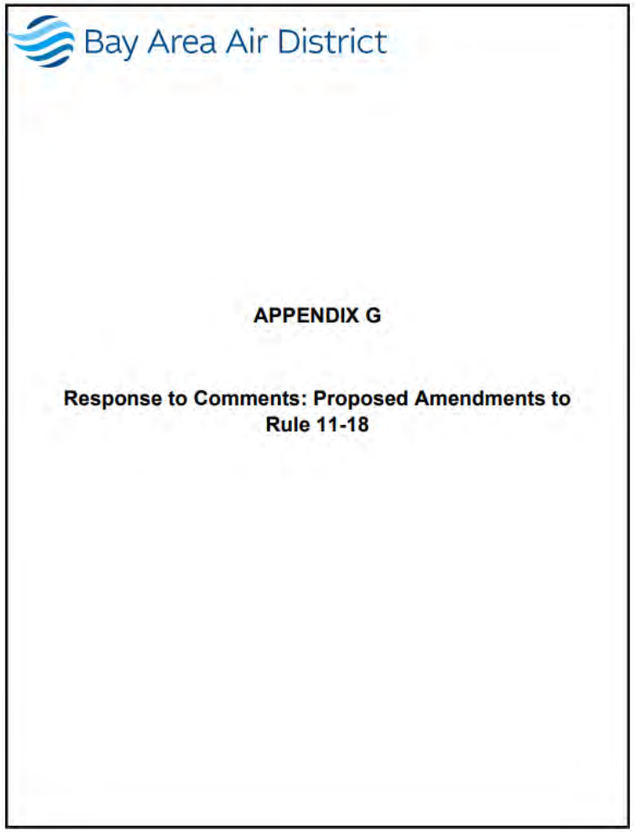
General:

- Support: AB 617 PTCA Community Steering Committee member and a resident
- Oppose: Communities for a Better Environment (CBE) and five other organizations oppose, stating HRAs initially prepared by facilities could undermine trustworthiness of the results
- Other commenters:
  - Western States Petroleum Association (WSPA), Chevron, Phillips 66, California Council for Environmental and Economic Balance (CCEEB), Bay Area Clean Water Agencies (BACWA)

Public Comments Received (cont.)

Topics including:

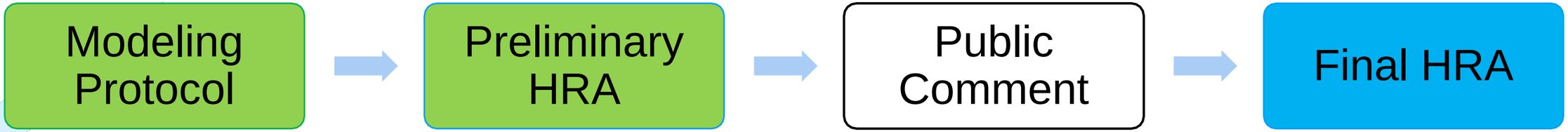
- Air District vs. facility-prepared HRAs
- Legacy vs. new HRA procedures
- Timelines
- Emissions inventory transparency and review
- Additional comment periods (facility and public)
- Dispute Resolution Panel (DRP)


Bay Area Air District

APPENDIX G

Response to Comments: Proposed Amendments to Rule 11-18

Air District Oversight of Facility-Prepared HRAs

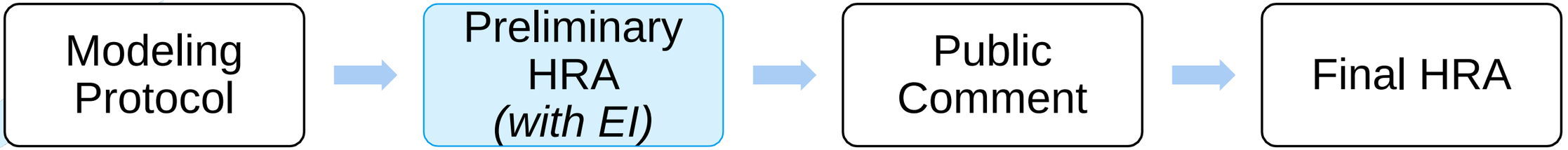


Air District prepares initial emissions inventory

1. Facility prepares draft (input parameters)
2. Air District reviews
3. *If Air District requires alterations, facility must implement*
4. *Air District reviews*
5. Air District approves

Air District maintains authority to prepare HRA in whole or in part

Emissions Inventory (EI) Review Timing



- **Problem:** Ideal to approve EI first, but health risk drivers are unknown until draft preliminary HRA complete
- **Solution:** Prioritize the most important emissions as indicated by the draft preliminary HRA

Cost-Effectiveness & Incremental Cost-Effectiveness

- Evaluation of costs compared to expected emission reductions for rules/amendments that change emissions limitations
- Proposed amendments do not significantly impact emissions limitations of the currently-adopted existing Rule 11-18 (limited to procedural aspects of the Rule)
- Cost-effectiveness of the proposed amendments and alternatives were therefore not evaluated

Compliance Costs

- Proposed amendments total compliance cost estimates included:
  - Increased cost of facilities to conduct HRAs, and
  - Fees the Air District would assess to review facility-prepared HRAs
- Proposed amendments estimated compliance cost per affected facility:
  - Maximum estimated cost: $220,000
  - Annual cost (amortized): $10,000 - $52,000 per year
- Proposed amendments total compliance cost estimates do not assess:
  - Costs to implement RRPs and associated socioeconomic impacts were evaluated with original rule adoption in 2017
  - Costs associated with disagreements about emissions inventory methodology that are inconsequential to health risk

Socioeconomic Impacts

- 342 facilities: 231 private-sector, including 24 small businesses

- **Average impact:** Approximately 1.6% of annual profit
  - Estimated annual compliance costs per year per facility $11,600
  - Ranges from $10,000 to $52,000

- **Significant impacts:** An estimated 3% of privately-operated facilities (8 facilities, all identified as small businesses), could be significantly impacted (costs >10% profit) if required to contract with third parties to conduct the HRA

Commitment to Small Businesses

- Proposed rule language allows for Air District to conduct HRAs when facility lacks the resources (Proposed Section 11-18-402.6)
  - Would not require these facilities to contract with third parties for HRAs
  - Would result in no additional facility costs from the proposed amendments
- Air District commits to conducting the HRAs for small businesses facilities
  - Estimated 24 small businesses, including 8 facilities that would have faced potentially significant impacts
  - Anticipated to eliminate the significant impacts from the proposed amendments

Air District Impacts

- Proposed amendments are expected to allow more efficient and effective use of Air District staff resources to implement the Rule
- With the vast majority of facilities conducting the HRAs themselves, Air District staff will instead focus on the review of Rule 11-18 deliverables

California Environmental Quality Act Requirements

- An Environmental Impact Report (EIR) was certified in 2017 with original adoption of Rule 11-18
- An addendum to the 2017 EIR has been prepared
  - The proposed amendments would neither substantially increase the severity of significant environmental impacts nor result in new significant environmental impacts
- A Mitigation Monitoring and Reporting Program has been prepared

Statutory Findings

Before adopting, amending, or repealing a rule, the Board of Directors must make the following findings:

- **Necessity** – California Health & Safety Code (H&SC) Section 40727(b)(1)
- **Authority** – H&SC Section 40727(b)(2)
- **Clarity** – H&SC Section 40727(b)(3)
- **Consistency** – H&SC Section 40727(b)(4)
- **Non-Duplication** – H&SC Section 40727(b)(5)
- **Reference** – H&SC Section 40727(b)(6)

Recommended Action

Air District staff recommends that the Board adopt the Resolution, which includes:

- Proposed amendments to Rule 11-18;
- Findings of necessity, authority, clarity, consistency, non-duplication, and reference;
- Proposed updates to the Rule 11-18 Implementation Procedures;
- Addendum to the Environmental Impact Report (EIR) for Rule 11-18; and
- Mitigation Monitoring and Reporting Program for Rule 11-18.

Questions & Discussion

For more information:

Katie Gong | Senior Air Quality Engineer | kgong@baaqmd.gov

Andrea Anderson, PhD | Senior Air Quality Specialist | aanderson@baaqmd.gov

Regulatory Development Division | ruledevelopment@baaqmd.gov

BAY AREA AIR DISTRICT
Memorandum

To: Chairperson Lynda Hopkins and Members of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: June 3, 2026

Re: Toxic Air Contaminant Control Program Annual Report - 2026

RECOMMENDED ACTION

The purpose of this item is to present the Air District's Toxic Air Contaminant Control Program Annual Report for 2026 and discuss its content and significance. No formal action by the Board of Directors is required.

BACKGROUND

Since 1987, the Air District has implemented toxic air contaminant (TAC) control programs that are designed to identify and reduce the public's exposure to TACs. The Air District's risk management strategies and local toxic control regulations with support from California and federal toxic regulations have been successfully reducing health risks both regionally and locally.

The Air District's TAC Control Program Annual Report for 2026 provides a comprehensive discussion of all Air District toxic control programs. This report includes the elements required for the California Assembly Bill (AB) 2588 Air Toxics Hot Spots (ATHS) Program's annual report (California Health and Safety Code 44363). In addition, the report has an expanded scope to provide an overview of all TAC control work conducted by the Air District during the reporting period from April 2025 through March 2026. This expanded approach builds upon last year's report to offer a more complete picture of the Air District's efforts to reduce health impacts from TACs.

DISCUSSION

The Air District continues to implement a coordinated approach to evaluating and reducing public health risks from toxic air contaminants through a combination of regulatory programs, permitting, monitoring, and community-focused initiatives. This work aligns with the Air District's Strategic Plan and ongoing efforts to prioritize health protection in overburdened communities.

The 2026 Annual Report provides an overview of these efforts and highlights key program updates during the reporting period from April 2025 through March 2026. Major program areas include:

Facility Risk Reduction (AB 2588 and Rule 11-18):
The Air District continued implementation of the ATHS Program and Regulation 11, Rule 18. Fourteen health risk assessments (HRAs) were completed under the ATHS program, and no facilities were found to exceed thresholds requiring public notification based on finalized assessments using current methodologies. Rule 11-18 implementation progressed through updated facility prioritization, advancement of a facility-wide HRA for Chevron, and continued evaluation of Chemtrade. Proposed amendments to Rule 11-18 and updates to implementation procedures were released in March 2026 to improve program efficiency and accelerate risk reduction.

Air Toxics New Source Review (NSR):
The Air District continued to evaluate TAC emissions from new and modified sources through the permitting program. During the reporting period, 234 HRAs were received and 210 were completed, with approximately 27 percent of completed projects located in overburdened communities.

TAC Emissions Inventory:
The Air District maintained and updated its toxics emissions inventory, which supports regulatory analysis, facility prioritization, and public transparency. This information continues to be made available through online tools, including the Facility Toxics Emissions and Prioritization Tool.

Air Toxics Ambient Air Monitoring:
The Air District continued operation of regional monitoring stations and expanded targeted community monitoring efforts, including projects in East Oakland and Bayview-Hunters Point. Work is also underway to update the Air District's monitoring strategy to support more targeted data collection and improved understanding of localized exposures.

Community Health Protection and Incentive Programs:
The Air District continued to implement community-focused initiatives, including AB 617 programs and grant funding to reduce emissions from high-impact sources. In 2025, approximately $113 million in incentive funding was awarded, with over 90 percent directed to projects benefiting priority communities.

This report provides additional detail on each of these program areas and reflects the Air District's continued efforts to identify, assess, and reduce toxic air pollution and protect public health across the Bay Area.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Simrun Dhoot
Reviewed by: Ariana Husain, Pamela Leong, Kelly Crawford

ATTACHMENT(S):

1. Toxics Control Programs Annual Report 2026
2. Toxics Control Programs Annual Report Presentation

Toxic Air Contaminant Control Programs

Annual Report 2026



Bay Area Air District

Table of Contents

EXECUTIVE SUMMARY 2

INTRODUCTION 3

FACILITY RISK REDUCTION PROGRAMS 4

- Air Toxics Hot Spots Program 4
- Regulation 11, Rule 18 6

EVALUATING AIR TOXICS IN PERMITTING 10

- Program Evolution 10
- Current Assessment and Progress 10

CONTROL MEASURES 12

- Airborne Toxic Control Measures 12
- National Emission Standards for Hazardous Air Pollutants 13
- Air District Toxics Control Regulations 13

AIR TOXICS EMISSIONS INVENTORY 15

AIR TOXICS AMBIENT AIR MONITORING 16

COMMUNITY HEALTH PROTECTION PROGRAMS 21

CONCLUSION 24

APPENDIX A – FACILITIES WITH APPROVED HRAs

APPENDIX B – FACILITY RANKINGS AND REVIEW PHASES

EXECUTIVE SUMMARY

This report summarizes efforts by the Bay Area Air Quality Management District (Air District) to evaluate and reduce public health risks from toxics air contaminants (TACs) in the Bay Area from April 2025 to March 2026. The work described in this report encompasses permitting, facility risk reduction programs, emissions inventory development, air monitoring, rule development, and community-focused initiatives, all of which support the Air District's goal of protecting public health, particularly in Overburdened Communities.

Under the Air Toxics Hot Spots (ATHS) Program, the Air District reviewed facility-reported emissions data and conducted health risk assessments (HRAs) to evaluate potential impacts to nearby communities. During the reporting period, 14 HRAs were completed, with additional assessments in progress. Based on finalized HRAs using current methodologies, no facilities were found to exceed thresholds requiring public notification or mandatory risk reduction.

Implementation of Regulation 11, Rule 18, *Reduction of Risk from Air Toxic Emissions at Existing Facilities,* progressed through updated facility prioritization and continued evaluation of high-risk facilities. As of December 2025, 35 facilities were identified in Phase I and 285 in Phase II. Key activities included advancement of a facility-wide HRA for Chevron Products Company and continued evaluation of Chemtrade West in Richmond. In March 2026, the Air District also released proposed amendments to Rule 11-18 and associated implementation procedures to improve program efficiency and accelerate risk reduction.

Through the permitting program, the Air District evaluated TAC emissions from new and modified sources. A total of 234 HRAs were received and 210 were completed during the reporting period, with approximately 27 percent of completed projects located in Overburdened Communities.

The Air District maintained its toxics emissions inventory, which compiles facility-reported data and supports regulatory analysis, air quality planning, and public transparency. This information is updated annually and made available through online tools, including the Facility Toxics Emissions and Prioritization Tool.

Air toxics monitoring efforts included region-wide long-term monitoring stations, targeted community monitoring projects, and expansion of near-source monitoring near refineries. Ongoing projects in communities such as East Oakland and Bayview-Hunters Point are improving understanding of localized exposures and informing future actions. Work is also underway to update the Air District's toxics monitoring strategy to support more targeted data collection.

The Air District also implemented incentive-based programs to reduce toxic emissions. The Air District administered grant and incentive programs and supported AB 617 community initiatives. In 2025, approximately $113 million in funding was awarded to reduce emissions from heavy-duty equipment, with over 91 percent of funding directed to projects benefiting priority communities.

Together, these efforts reflect the Air District's work to identify, assess, and reduce toxic air pollution and to improve public health outcomes across the Bay Area.

INTRODUCTION

Since 1987, the Bay Area Air Quality Management District (Air District) has implemented programs to identify, evaluate, and reduce public health risks from toxic air contaminants (TACs). These efforts are grounded in California's Air Toxics "Hot Spots" (ATHS) Information and Assessment Act (AB 2588), which establishes a statewide framework for assessing and reducing health risks from TAC emissions.

Under AB 2588, facilities are required to report their TAC emissions, which are used by air districts to prioritize facilities based on potential health risk. Facilities with elevated risk may be required to conduct health risk assessments (HRAs), notify affected communities, and implement risk reduction measures. The Air District plays a key role in this process by reviewing emission inventories, conducting prioritization analysis, evaluating HRAs, and ensuring that facilities take appropriate actions to reduce health risks and protect nearby communities.

Beyond meeting statutory requirements, the Air District's toxics program includes a broad range of initiatives to further reduce emissions, improve transparency, and support communities disproportionately affected by air pollution. This report summarizes the Air District's implementation of AB 2588 and highlights additional efforts undertaken during the reporting period, from April 2025 through March 2026.

The Air District's toxics program includes the following key components:

Facility Risk Reduction Programs: Through implementation of the ATHS Program and Regulation 11, Rule 18, the Air District identifies facilities with potentially elevated health risks and works to reduce those risks while ensuring transparent communication with affected communities.

Evaluating Air Toxics in Permitting: This preconstruction review process ensures that new and modified sources meet strict health impact standards, with enhanced protection for overburdened communities.

Control Measures: The Air District implements federal, state, and local regulations, including Airborne Toxic Control Measures (ATCM), National Emission Standards for Hazardous Air Pollutants (NESHAPS), and Air District toxics control rules.

Emissions Tracking: The Air District maintains a comprehensive database of emissions from permitted and registered stationary sources. This information supports regulatory analysis and planning. The Air District has increased public transparency of this information through the development of the Facility Toxic Emissions and Prioritization tool introduced in 2024.

Air Toxics Ambient Air Monitoring: The Air District operates region-wide monitoring stations, conducts targeted community monitoring projects, and is expanding near- source monitoring near refineries to better understand localized air quality impacts and support data-driven decision-making.

Community Health Protection Initiatives: In addition to technical assessments, the program includes community-focused efforts through AB 617, collaborative initiatives in priority communities, and Air District grant and incentive programs.

FACILITY RISK REDUCTION PROGRAMS

Air Toxics Hot Spots Program

The Air Toxics Hot Spots (ATHS) Program, established by Assembly Bill (AB) 2588 in 1987, provides a statewide framework for identifying facilities with elevated toxic air contaminant (TAC) emissions, evaluating associated health risks, and informing affected communities.

Program Framework

Under the ATHS Program, industrial, commercial, and public facilities are required to report the types and quantities of TACs they emit. The Air District reviews this information annually to evaluate potential health impacts and determine whether further action is necessary.

The ATHS Program follows a process that includes emissions inventory reporting, facility prioritization, health risk assessment (HRA), public notification, and, where applicable, risk reduction. Based on this process, facilities are evaluated against established cancer and non-cancer health risk thresholds to determine appropriate next steps.

Facilities with health risks exceeding applicable thresholds are required to notify affected communities and may be subject to additional requirements to reduce risk. These requirements vary depending on the level of risk, as summarized in Table 1.

Table 1. AB2588 Program Notification and Risk Reduction Requirements

	Risk Level	Public Notification	Risk Reduction
Level 0	Cancer Risk < 10 in a million and Non-Cancer Hazard Index < 1	None	None
Level 1	Cancer Risk of 10-99 in a million or Non-Cancer Hazard Index of 1-9	Status letter to households & 1 public meeting	Voluntary
Level 2	Cancer Risk of 100-490 in a million or Non-Cancer Hazard Index of 10 or higher	Level 1 + explanation letters for higher risk areas & public meetings	Mandatory audit and source reduction, possible regulation
Level 3	Cancer Risk of 500 in a million or higher	Level 2 & quarterly public meetings	Mandatory audit and source reduction, possible regulation

ATHS Program Implementation

The ATHS Program is implemented through five key steps.

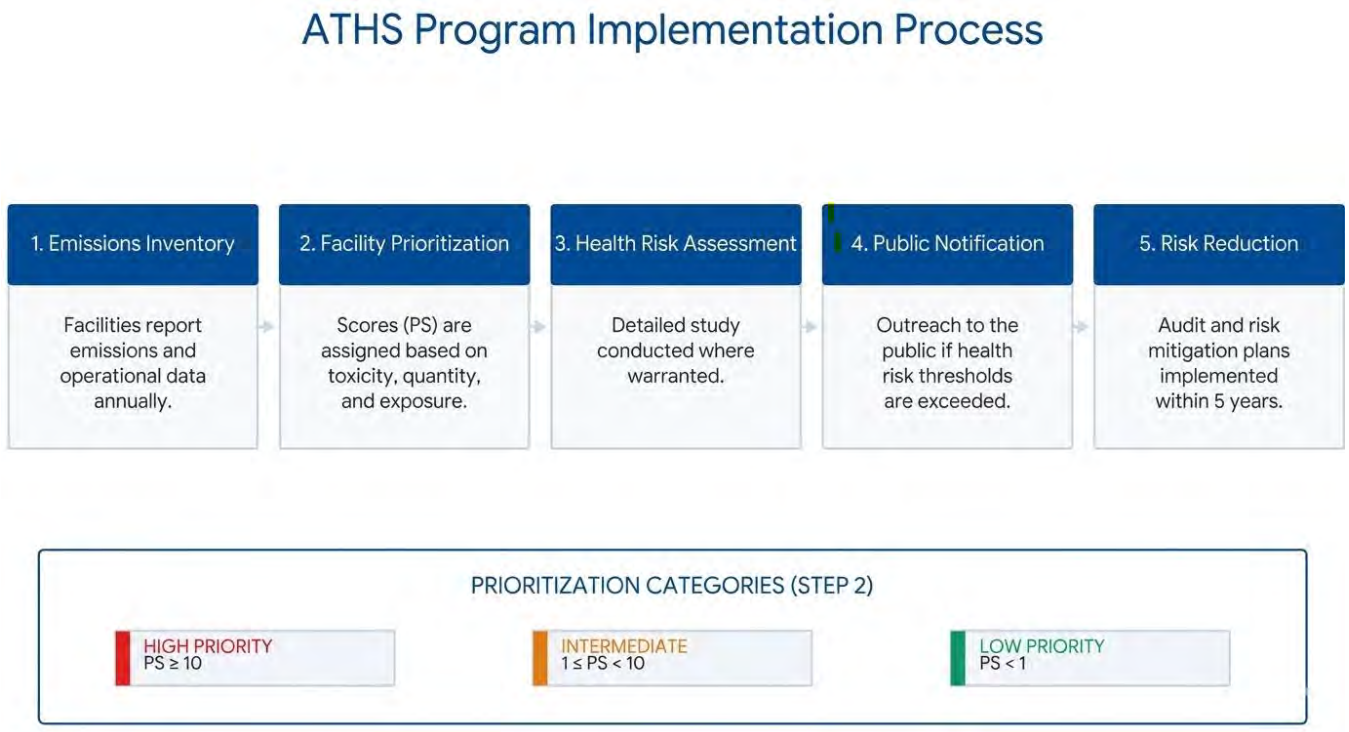


Figure 1. ATHS Program Implementation

Emissions Inventory: Facilities report TAC emissions and operational data annually. The Air District uses this information to maintain emissions inventories, verify compliance, and comply with reporting requirements.

Facility Prioritization: Facilities are assigned a total prioritization score (the greater of cancer and non-cancer prioritization scores) based on emissions quantity, toxicity, and exposure to nearby populations. Facilities are classified as:

1. High Priority (PS ≥ 10): Potential for significant health risk
2. Intermediate Priority (PS ≥ 1 and PS < 10): Potential risk warranting further evaluation
3. Low Priority (PS < 1): Minimal risk requiring no further investigation

Health Risk Assessment: High-priority facilities are evaluated through HRAs to assess potential acute and chronic health impacts, consistent with the Office of Environmental Health Hazard Assessment's (OEHHA's) Risk Assessment Guidelines.

Public Notification: Facilities exceeding risk thresholds must notify affected households and workplaces and conduct at least one public meeting to explain HRA results.

Risk Reduction: Facilities with significant risk are required to conduct a risk reduction audit and implement measures to reduce risk, typically within five years. Voluntary, enforceable actions may also be used to reduce risk and improve facility status.

To improve transparency, the Air District developed the Facility Toxic Emissions and Prioritization tool, an interactive map displaying facility locations and prioritization scores. The tool is updated annually with the latest emissions and is available on the Air District's website[1].

Updates on Health Risk Assessments

Appendix A lists the facilities for which the Air District has conducted HRAs. Table A-1 in Appendix A lists the facilities in descending order of their cancer risks and Table A-2 in Appendix A lists the facilities in descending order by their chronic non-cancer risks. The data in these tables is based on the Air District's 2024 permitted source inventory submitted to the California Air Resources Board (CARB)[2]. The HRA results shown are representative of potential risk associated with maximum allowable emissions. The Air District has not confirmed, by a finalized HRA based on actual emissions, that any facilities have health impacts that are meeting or exceeding the public notification thresholds of 10 in a million cancer risk or 1.0 non-cancer hazard index. Therefore, no facilities are subject to public notification at this time.

One facility is reported with a cancer risk of exactly 10 in a million, six facilities are reported with a chronic non-cancer hazard index of exactly 1.0, and three facilities are reported with an acute non-cancer hazard index of exactly 1.0 or greater. The cancer risk and chronic non-cancer values reflect the use of conservative historical screening methods for diesel-fired emergency engines, which rounded results to threshold values rather than representing actual risk levels. These reported values were not intended to indicate that public notification thresholds were met or exceeded. Updated Air District policy now reports these risks below the thresholds (e.g., 9.9 in a million for cancer risk and 0.1 or less for hazard index) to more accurately reflect the low level of health impact. The reported values will be updated in a future reporting cycle. Two of the acute non-cancer values of exactly 1.0 reflect the use of conservative emissions estimates that were not based on routine operations. These projects will be re-evaluated using actual emissions and compared to the public notification thresholds in a future reporting cycle. One acute non-cancer value greater than 1.0 reflects a reporting error and will be corrected in a future reporting cycle.

During the reporting period from April 2025 through March 2026, the Air District completed 14 HRAs, with an additional two HRAs still in progress at the end of the period. A total of 17 HRAs were completed in 2025 under the ATHS Program.

[1] Bay Area Air Quality Management District (Air District), Facility Toxic Emissions and Prioritization Tool, available at: https://www.baaqmd.gov/en/about-air-quality/emission-inventory/toxic-air-contaminants/toxic-mapping-tool

[2] Air District, Toxics Air Contaminants, available at: https://www.baaqmd.gov/en/about-air-quality/emission-inventory/toxic-air-contaminants

Regulation 11, Rule 18

Building on the foundation of the ATHS Program, which requires facilities to develop emissions inventories, conduct health risk assessments, and evaluate potential community health impacts, the Air District adopted Regulation 11, Rule 18, *Reduction of Risk from Air Toxic Emissions at Existing Facilities,* (Rule 11-18) on November 15, 2017. The rule is intended to reduce health risks from TAC emissions from existing facilities. Rule 11-18 establishes a local regulatory framework to prioritize facilities with elevated risk and require additional risk reduction actions. Under Rule 11-18, facilities that exceed established risk action levels must either reduce health risks below those levels or demonstrate that all significant sources of the risk are controlled using Best Available Retrofit Control Technology for Toxics (TBARCT).

Framework

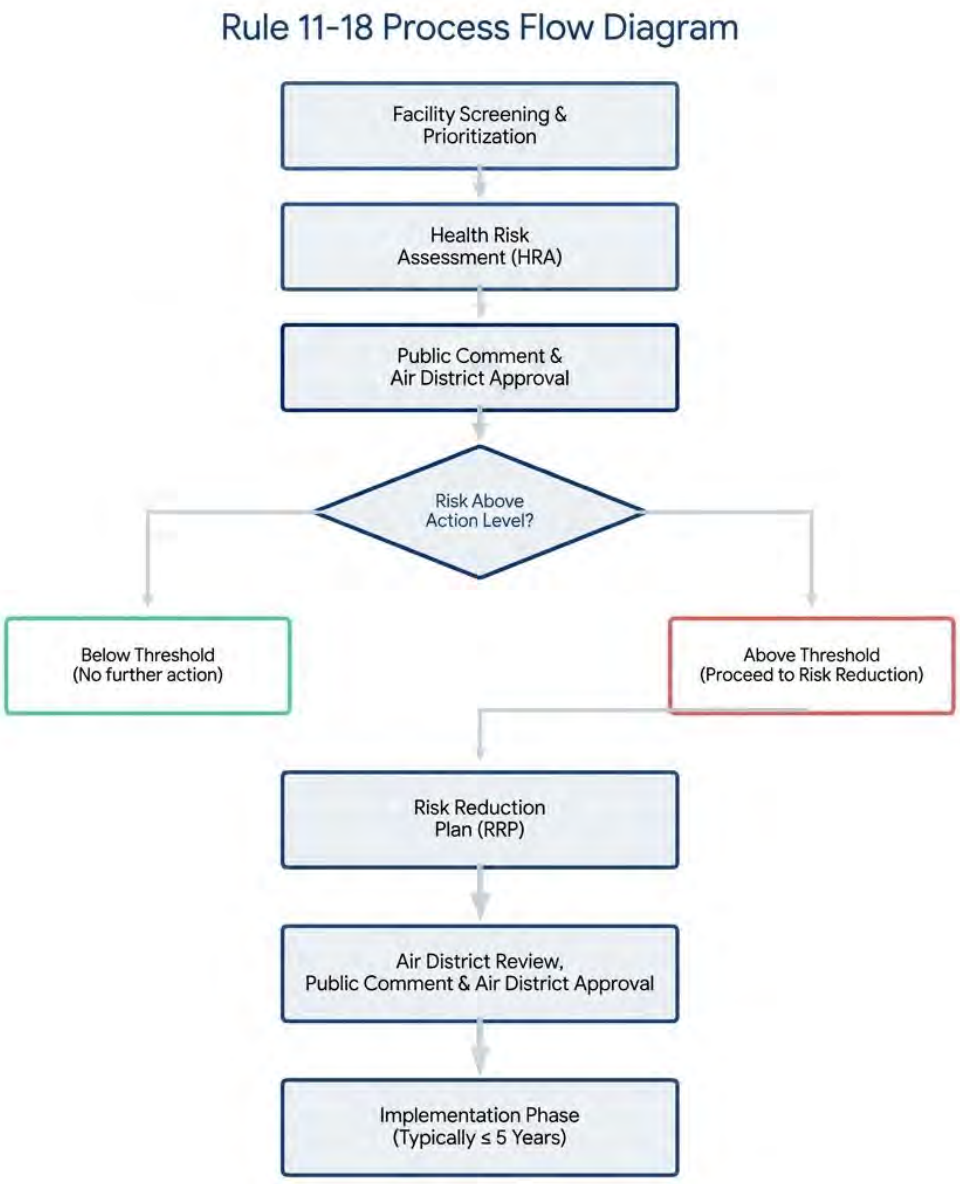


Figure 2. Rule 11-18 Process Flow

As shown in Figure 2, the Rule 11-18 process begins with facility screening and prioritization. Facilities are assigned to phased review groups based on their prioritization scores, which reflect potential health risk. Table 2 summarizes the criteria used to categorize facilities into each review phase.

Table 2. Facility Review Phases

Review Phase	Prioritization Score Thresholds
Phase I Facilities	High Priority with cancer PS ≥ 250 or High Priority with non-cancer PS ≥ 10
Phase II Facilities	High Priority with cancer PS ≥ 10 and PS < 250 or Intermediate Priority with non-cancer PS ≥ 1 and PS < 10
Phase III Facilities	High Priority Industry-Wide Facilities[3] PS ≥ 10 and PS < 250

For prioritized facilities, the Air District prepares an HRA in accordance with Air District and OEHHA guidelines. The HRA quantifies cancer risk, non-cancer chronic and acute hazard indices, and identifies the primary contributors to facility risk. Results are compared against Rule 11-18 risk action levels to determine next steps. Facilities with risks below applicable thresholds require no further action, while those exceeding one or more thresholds must proceed to risk reduction.

Facilities subject to risk reduction must prepare a Risk Reduction Plan (RRP) identifying feasible measures to reduce risk within a defined timeframe. These measures include operational changes, emission controls, or installation of Best Available Retrofit Control Technology for Toxics (TBARCT). The Air District reviews the RRP, including technical evaluation, public notification, and an opportunity for public comment, prior to approval with enforceable conditions.

Following approval, facilities enter the implementation phase, during which risk reduction measures are installed and verified, typically within five years depending on facility-specific considerations. Through this process, Rule 11-18 ensures that facilities with elevated health risks are identified and required to take action to reduce impacts on surrounding communities.

Implementation Progress

The Air District updates facility prioritization scores annually to reflect the most current emissions and risk information. The most recent facility list, published in December 2025, identifies 35 facilities in Phase I and 285 facilities in Phase II.

The Air District continued to make progress implementing Rule 11-18 during this reporting period, with several key milestones achieved through risk assessment and community engagement efforts.

- The Air District expects to complete a preliminary facility-wide HRA for Chevron Products Company (Facility ID 10) by summer 2026. A copy of the preliminary HRA will be released to the facility and the public for a 90-day review and comment period. The preliminary HRA will incorporate results from sampling and analysis of heavy liquid materials conducted and completed by Chevron Products Company on August 14, 2025. As a next step, the Air District will consider comments received from both the facility and the public on the preliminary HRA results before finalizing and approving the HRA.

[3] Rule 11-18 exempts gasoline dispensing facilities (GDF) and facilities with only emergency standby diesel engines unless the facility prioritization score equals or exceeds 250. Any high priority GDFs and emergency diesel engine facilities with prioritization scores between 10 and 250 are classified as industry-wide facilities and will be evaluated later, during review Phase III, under the ATHS program.

- The Air District resumed its evaluation of Rule 11-18 applicability for Chemtrade West US LLC (Facility ID 23) in Richmond using a toxic emissions inventory based on 2022 emissions data. On March 16, 2026, the Air District provided Chemtrade with the draft 2022 toxic emissions inventory and release data along with a Rule 11-18 HRA modeling protocol. The protocol describes the procedures and assumptions that will be used to conduct a site-wide HRA. Chemtrade was requested to review the emissions inventory, provide corrections as needed, and return the revised data within 60 days. Following receipt and review of the updated emissions information, the Air District will finalize the emissions inventory and proceed with the facility-wide HRA to determine if the facility exceeds Rule 11-18 risk action levels.
- The Air District conducted its fourth and fifth Regular Meetings on July 02, 2025, and January 14, 2026, fulfilling requirements under a settlement agreement with Communities for a Better Environment. The meeting addressed Rule 11-18 implementation updates, Rule 11-18 amendment updates, and progress on web transparency.

Rule 11-18 Amendments

The Air District continues to refine the Rule 11-18 program through strategic improvements and stakeholder engagement. These efforts reflect the Air District's commitment to continuously improving health risk management strategies.

On March 18, 2026, the Air District published proposed amendments to Rule 11-18 and proposed updates to the Rule 11-18 Implementation Procedures for public review and comment. The Air District Board of Directors will conduct a public hearing on Wednesday, June 3, 2026 to consider the adoption of the proposed amendments to Rule 11-18 and the proposed updates to the Rule 11-18 Implementation Procedures. These amendments aim to expedite the HRA approval step, as well as to make other changes that would improve the implementation efficiency of Rule 11-18. These amendments focus on measures aimed at accelerating risk reduction and on improving program efficiency to implement the requirements of Rule 11-18 as soon as feasible. The proposed amendments are expected to expedite not only the overall implementation of Rule 11-18 but also the reduction of toxic emissions and health risks from affected facilities.

This regulatory proposal follows previous Air District work on rule amendments and Implementation Procedures updates. The Air District released draft revised Rule 11-18 Implementation Procedures and a Rule 11-18 Concept Paper outlining potential regulatory amendments for public review and comment in December 2023 and held a public workshop to solicit feedback in February 2024. In April 2024, the Air District revised the Implementation Procedures document and made available a response to comments on both the draft Implementation Procedures document and Concept Paper. The Air District then published draft amendments to Rule 11-18 and draft updates to the Rule 11-18 Implementation Procedures for public review and comment in August 2025 and held a public workshop to solicit feedback in October 2025. Staff reviewed and considered all feedback received on the draft materials in the further development of the regulatory proposal.

EVALUATING AIR TOXICS IN PERMITTING

Program Evolution

Since its inception in 1987, the Air District's Air Toxic New Source Review (NSR) Program has continuously refined its approach to managing TACs, with significant milestones including:

- 2001: Adding diesel engine exhaust particulate matter to TAC assessments
- 2005: Adopting Rule 2-5, strengthening conformity with state guidelines
- 2010: Incorporating new TACs and Age Sensitivity Factors to enhance protection for children
- 2017: Updating health effects values, addressing cumulative impacts, and creating a hybrid procedure for gas station emissions
- 2021: Implementing a lower cancer risk limit for overburdened communities and increasing the project lookback period to five years to address cumulative impacts.

The program's stringency has increased through two primary mechanisms:

1. Updated HRA methodology
2. Reduced risk action levels

Notably, the current methodology results in health risk calculations 1.5 to 3 times higher than 2005 methods resulting in overall allowable project emission rates decreasing to less than half of those permitted in the 1990s.

Current Assessment and Progress

The Air District evaluates potential TAC emissions from proposed projects. If emissions exceed the screening levels in Table 2-5-1 of Regulation 2-5, an HRA is required. HRAs use air dispersion modeling guidance from OEHHA to estimate cancer risk and non-cancer health impacts from the project. A project includes all sources in a permit application plus related sources permitted within the last 5 years. Analyses may range from conservative screening-level evaluations to refined assessments.

Air District regulations prohibit approval of a project if the HRA shows risk exceeding the following:

- 6.0 in a million cancer risk for projects located in Overburdened Communities (as defined in Regulation 2-1)
- 10 in a million cancer risk for projects located outside of Overburdened Communities
- 1.0 chronic hazard index
- 1.0 acute hazard index

In practice, when initial results exceed these thresholds, the Air District works with applicants to reduce risk and achieve compliance. This may include lowering throughput, limiting operating hours, improving source configuration, or installing more effective emission controls

The following table presents HRA statistics for the reporting period of April 2025 through March 2026 including the number of HRAs received and completed, with identification of projects located in Overburdened Communities.

Table 3. Health Risk Assessment Statistics for April 2025 through March 2026

	HRAs Received	HRAs Completed	Projects in OBC	Percentage of HRAs Completed in OBC	Site-wide Projects	Percentage of HRAs Completed as Site-wide Projects
2025 Quarter 2 (April – June)	56	56	19	34%	27	48%
2025 Quarter 3 (July – September	82	82	29	34%	39	48%
2025 Quarter 4 (October – December)	45	45	9	18%	19	42%
2026 Quarter 1 (January – March)	51	29	16	14%	30	35%
Total	234	210	73	27%	115	44%

In addition to conducting project-level health risk assessments, the Air District participates in regional and statewide efforts to improve and standardize TAC control approaches. These efforts promote regulatory consistency across jurisdictions and strengthen implementation of the New Source Review program.

California Air Pollution Control Officers Association Engineering Managers and Toxics Air Risk Managers Committee Meeting and Engineering & Toxics Symposium

In October 2025, the Air District participated in a two-day symposium held at the Air District Headquarters in San Francisco. The symposium provided a valuable forum for knowledge exchange among air quality agencies throughout California. Air District staff contributed meaningful updates on several initiatives, including updates on the ongoing composting workgroup and refinery emission reporting uniformity efforts.

Air District staff showcased the latest updates to the Air District's permitting tracking system, a key tool in measuring the current efforts to improve permit efficiency. The symposium featured presentations from partner agencies covering topics such as CARB's Technology Clearinghouse and development of training for health risk assessments.

CONTROL MEASURES

Airborne Toxic Control Measures

The primary mechanism for the development of retrofit air toxics control measures in California has been through the Toxic Air Contaminant Act, which was enacted in 1983 with the passage of AB-1807. Under this legislation, Airborne Toxic Control Measures (ATCMs) adopted by CARB are implemented and enforced by the local air districts. Seventeen statewide ATCMs for stationary sources and one statewide ATCM for portable sources have been implemented in the Bay Area and are listed in Table 4.

Table 4. Airborne Toxic Control Measures

Regulation	ATCM	Date Adopted and Last Amended
17 CCR 93101	Benzene ATCM for Retail Service Stations	05/13/1988
17 CCR 93102 17 CCR 93102.16	Hexavalent Chromium ATCM for Decorative and Hard Chrome Plating and Chromic Acid Anodizing Operations	02/18/1988 05/25/2023
17 CCR 93101.5	ATCM for Thermal Spraying	12/09/2004
17 CCR 93103	Chromate Treated Cooling Towers	03/09/1989
17 CCR 93104	Dioxins ATCM for Medical Waste Incinerators	07/13/1990
17 CCR 93105	Asbestos ATCM for Construction, Grading, Quarrying, and Surface Mining Operations	07/26/2001
17 CCR 93106	Asbestos ATCM for Surfacing Applications	04/12/1990 07/20/2000
17 CCR 93107	ATCM for Emissions of Toxic Metals from Non-Ferrous Metal Melting	01/14/1993
17 CCR 93108 17 CCR 93108.5	Ethylene Oxide ATCM for Sterilizers and Aerators Parts 1 & 2	05/21/1998
17 CCR 93109	ATCM for Emissions of Perchloroethylene from Dry Cleaning Operations	10/14/1993 01/25/2007
17 CCR 93110	Environmental Training Program Regulation for Perchloroethylene Dry Cleaning Operations	10/14/1993
17 CCR 93111	ATCM for Emissions of Chlorinated Toxic Air Contaminants from Automotive Maintenance and Repair Activities	04/27/2000
17 CCR 93112	ATCM for Emissions of Hexavalent Chromium and Cadmium from Motor Vehicle and Mobile Equipment Coatings	09/20/2001
17 CCR 93113	ATCM to Reduce Emissions of Toxic Air Contaminants from Outdoor Residential Waste Burning.	02/21/2002
17 CCR 93114	ATCM to Reduce Particulate Emissions from Diesel-Fueled Engines -- Standards for Nonvehicular Diesel Fuel	07/24/2003
17 CCR 93115	ATCM for Stationary Compression Ignition Engines	02/26/2004 10/21/2010
17 CCR 93116	ATCM for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater	02/26/2004 11/16/2017
17 CCR 93120	ATCM to Reduce Formaldehyde Emissions from Composite Wood Products	04/26/2007

National Emission Standards for Hazardous Air Pollutants

The Air District continues to enforce National Emission Standards for Hazardous Air Pollutants (NESHAPs)[4] established by the U.S. Environmental Protection Agency (EPA), which are frequently referred to as Maximum Achievable Control Technology (MACT) Standards. These federal regulations primarily target emissions control at facilities classified as "major sources" of hazardous air pollutants (HAPs). Facilities qualify as major sources when they emit, or have the potential to emit, 10 tons or more of any single HAP annually, or 25 tons or more of combined HAPs per year. The Air District must implement and enforce all MACT Standards, or alternative rules that provide equal or greater stringency. In recent years, U.S. EPA has expanded NESHAP regulations to include smaller "area sources" (facilities with HAP emissions below major source thresholds).

Air District Toxics Control Regulations

In addition to enforcing ATCMs and NESHAPs, the Air District adopts regulations to control toxic emissions from local sources of concern. Usually, the Air District's toxic control rules are identified under Air District Regulation 11, Hazardous Pollutants. However, toxic emission control measures may also be included in other regulations, such as Air District Regulation 6, Particulate Matter or Air District Regulation 9, Inorganic Gaseous Pollutants, when toxic emission limits are included with other particulate or inorganic gas rule amendments. A complete list of current Air District toxic regulations are summarized in Table 5.

Table 5. Air District Regulations for Toxics Emissions

Regulation	Title and Applicability	Date Adopted and Last Amended
Reg. 6, Rule 5	Particulate Emissions from Refinery Fluidized Catalytic Cracking Units – Limits PM, sulfur dioxide, and ammonia emissions from fluidized catalytic cracking units located at refineries	12/15/2015 11/03/2021
Reg. 9, Rule 2	Hydrogen Sulfide – Limits ground level concentrations of hydrogen sulfide at any location outside of the property line where the emissions occur	03/17/1982 10/06/1999
Reg. 9, Rule 13	Nitrogen Oxides, Particulate Matter, and Toxic Air Contaminants from Portland Cement Manufacturing Operations - Limits NOx, PM, total hydrocarbons, and TACs (ammonia, dioxins/furans, hydrogen chloride, and mercury) from Portland Cement Manufacturing Operations	09/19/2012 10/19/2016
Reg. 11, Rule 1	Lead – Limits daily emissions and ground level concentrations of lead	03/17/1982
Reg. 11, Rule 2	Asbestos Demolition, Renovation and Manufacturing – Controls emissions of asbestos during demolition, renovation, milling, and manufacturing and establishes control measures for asbestos waste disposal operations	12/15/1976 10/7/1998
Reg. 11, Rule 3	Beryllium – Limits beryllium emissions from incineration and beryllium processing operations	03/17/1982

[4] U.S. Environmental Protection Agency, National Emission Standards for Hazardous Air Pollutants (NESHAP), https://www.epa.gov/stationary-sources-air-pollution/national-emission-standards-hazardous-air-pollutants-neshap-8.

Reg. 11, Rule 4	Beryllium Rocket Motor Firing – Limits beryllium emissions from rocket motor test sites	03/17/1982
Reg. 11, Rule 5	Mercury – Limits mercury emissions from plants processing mercury ore and from sludge incineration and sludge drying plants	
Reg. 11, Rule 6	Vinyl Chloride – Limits vinyl chloride from plants producing vinyl chloride, polymers containing vinyl chloride, or ethylene dichloride	04/21/1982
Reg. 11, Rule 7	Benzene – Limits emissions from pumps, compressors, valves, pressure relief devices, flanges, other connectors, and any associated abatement equipment from components handling fluids containing 10% benzene or more	05/15/1985
Reg. 11, Rule 8	Hexavalent Chromium – Replaced by Hexavalent Chromium ATCM for Decorative and Hard Chrome Plating and Chromic Acid Anodizing Operations	07/20/1998 11/4/1998
Reg. 11, Rule 9	Ethylene Oxide Sterilizers – Replaced by Ethylene Oxide ATCM for Sterilizers and Aerators Parts 1 & 2	11/01/1989 05/17/2000
Reg. 11, Rule 10	Hexavalent Chromium Emissions from All Cooling Towers and Total Hydrocarbon Emissions from Refinery Cooling Towers – Prohibits use of hexavalent chromium chemicals in cooling towers and sets total hydrocarbon leak standards and monitoring requirements for refinery cooling towers	11/15/1989 11/03/2021
Reg. 11, Rule 11	National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants and Benzene Storage Vessels – Adopted by Reference to EPA NESHAP: 40 CFR Part 60, Subparts L and Y	07/18/1990
Reg. 11, Rule 12	National Emission Standard for Benzene Emissions from Benzene Transfer Operations and Benzene Waste Operations – Adopted by Reference to EPA NESHAP: 40 CFR Part 60, Subparts BB and FF	07/18/1990
Reg. 11, Rule 13	Medical Waste Incinerators – Limits dioxin and furan emissions from medical waste incinerators	01/16/1991
Reg. 11, Rule 14	Asbestos-Containing Serpentine – Prohibits use of asbestos-containing serpentine in road surfacing materials	07/17/1991
Reg. 11, Rule 15	Airborne Toxic Control Measure for Emissions of Toxic Metals from Non-ferrous Metal Melting – Adopted by reference to ATCM for Emissions of Toxic Metals from Non-Ferrous Metal Melting	04/06/1994
Reg. 11, Rule 16	Perchloroethylene and Synthetic Solvent Dry Cleaning Operations – Prohibits use of halogenated solvents (including perchloroethylene, 1.1.1-trichloroethane, and trichloro-trifluoroethane) in dry cleaning operations	12/21/1994 03/04/2009
Reg. 11, Rule 17	Limited Use Stationary Compression Ignition (Diesel) Engines in Agricultural Use – Limits use of diesel engines for agricultural operations	05/18/2011
Reg. 11, Rule 18	Reduction of Risk from Air Toxic Emissions at Existing Facilities – Requires risk reductions for facilities determined to have health risks exceeding risk action levels	11/15/2017

The Air District continues to update existing rules and adopt new rules to control toxic emissions. Some of the recent work includes:

Regulation 11, Rule 18: The Air District is currently enhancing its Rule 11-18 Facility Risk Reduction Program[5]. As of April 2024, the Implementation Procedures document has been updated. Additionally, proposed amendments to Rule 11-18 and proposed updates to Rule 11-18 Implementation Procedures were published in March 2026, and the Air District Board of Directors will conduct a public hearing on Wednesday, June 3, 2026 to consider the adoption of the proposed materials. These amendments focus on measures aimed at accelerating risk reduction and on improving program efficiency to implement the requirements of Rule 11-18 as soon as feasible.

Regulation 6, Rule 4: The Air District released a white paper in July 2024 as the first phase in evaluating potential regulatory amendments to Regulation 6, Rule 4, *Particulate Matter, Metal Recycling and Shredding Operations*[6]. This document discusses impacts associated with metal shredding and recycling operations and explores potential strategies for impact reduction. In mid-2025, the Air District held two public workshops to provide the public with an opportunity to learn about, discuss, and comment on potential changes to Regulation 6, Rule 4 being evaluated. The Air District is continuing to develop potential amendments to Regulation 6, Rule 4.

AIR TOXICS EMISSIONS INVENTORY

The Air District maintains a database of permitted and registered facilities and their associated toxic air contaminant emissions in the Bay Area. Emissions are quantified through direct source testing or estimated using engineering calculations based on process throughput and source-specific emission factors. The TAC inventory characterizes routine, predictable emissions and does not include accidental releases or emissions from extreme events outside normal facility operations. The Air District reviews and verifies data submitted by regulated facilities before including them in the inventory. TAC inventories are updated annually and published on the Air District's website for public access. Since 2024, the web-based tool, Facility Toxic Emission and Prioritization Tool, is available to the public to access facility emissions and prioritization scores in their communities through an interactive map.

Permitted and registered facilities are only one type of source that contributes to toxic exposure risk. In many Bay Area communities, diesel mobile sources (e.g., heavy-duty trucks and construction equipment) and unpermitted area sources (e.g., commercial cooking and residential fuel combustion) are the largest risk contributors. The Air District has developed TAC emissions inventory for all AB 617 communities and is making progress to create a regional TAC emissions inventory that includes all permitted facilities, unpermitted area sources, and on-road and off-road mobile sources. The Air District continuously improves its emissions inventories to better understand the processes and industries that emit pollutants in the Bay Area. These inventories provide critical information to support rule development, regional air quality modeling, enforcement actions, local air quality assessments, and monitoring programs. The TAC inventory, together with the regional inventories of

[5] Air District, Regulation 11, Rule 18: Risk from Air Toxic Emissions at Existing Facilities, available at: https://www.baaqmd.gov/rules-and-compliance/rules/regulation-11-rule-18-reduction-of-risk-from-air-toxic-emissions-at-existing-facilities.

[6] Air District, Regulation 6, Rule 4: Metal Recycling and Shredding Operations, available at: https://www.baaqmd.gov/en/rules-and-compliance/rules/reg-6-rule-4--metal-recycling-and-shredding-operations.

criteria air pollutants (CAP) and greenhouse gases (GHG), is periodically submitted to CARB to support statewide air quality planning and strategies that protect public health and the environment.

The following inventories are available on the Air District's website:

- Emissions Lookup Tool[7] and Regional CAP Inventory report presents the contribution of each criteria air pollutant by sector and year from 1990 to 2040.[8]
- Facility-level TAC emissions by county and city for each year from 2003 through 2024 are available through the Air District's Toxic Air Contaminants webpage.[9]
- Regional GHG inventory and dashboard are available for base year 2023.[10]

AIR TOXICS AMBIENT AIR MONITORING

The Air District measures the concentrations of air toxics in ambient air as part of several monitoring programs, including air monitoring stations to track region-wide long-term trends, refinery community air monitoring, and short-duration targeted air monitoring projects to assess localized impacts in overburdened communities. These air monitoring programs are designed to improve the information about the sources of emissions in the Bay Area, their influence on air toxics concentrations over time, and their air quality impacts on nearby communities.

Region-Wide Long-Term Air Monitoring Stations

The Air District operates 20 long-term air monitoring stations that measure the 24-hour average concentrations of 22 volatile organic compounds (VOCs) that are also TACs. These stations are designed to characterize air toxics levels across the Bay Area, accounting for diverse emission sources and their impact on various locations, including overburdened communities. In the Bay Area, these measured TACs are emitted at significant levels, and can contribute to the production of other harmful pollutants such as ozone.

Two of the Air District's long-term air monitoring stations measure additional TACs as a part of CARB's statewide air toxics air monitoring program (see the Air District's Annual Monitoring Network Plan[11] for details)

Given the extensive historical records at many of these air monitoring stations, these data are useful for examining long-term TAC trends. As an example, Figure 3 shows that the annual average concentrations of benzene (a well-known carcinogen emitted from fuel combustion, evaporation of fuels or solvents, and other sources), have decreased considerably since the 1980s. Prior to the mid-1990s, annual average concentrations were typically above 1 ppb, and currently concentrations are

[7] Air District, Emissions Lookup Tool, available at: https://www.baaqmd.gov/en/about-air-quality/emission-inventory/emissions-lookup-tool.
[8] Air District, Criteria Air Pollutants Emissions Inventory, available at: https://www.baaqmd.gov/en/about-air-quality/emission-inventory/criteria-air-pollutants
[9] Air District, Toxic Air Contaminants, available at: https://www.baaqmd.gov/en/about-air-quality/emission-inventory/toxic-air-contaminants.
[10] Air District, Climate Forcing Pollutants (Greenhouse Gas) Emissions Inventory, available at: https://www.baaqmd.gov/en/about-air-quality/emission-inventory/climate-forcing-pollutants.
[11] Air District, Ambient Air Monitoring Network Plans, available at: https://www.baaqmd.gov/en/about-air-quality/air-quality-measurement/ambient-air-monitoring-network.

typically below 0.25 ppb, however this progress has slowed in more recent years. For reference, the chronic and 8-hour inhalation Reference Exposure Level (REL) established by OEHHA is 1 ppb. Concentration data of benzene and other measured TACs from long-term air monitoring stations also provide a better understanding of important emissions sources such as wildfires. Figure 4 shows 24-hour average benzene measurements with some wildfire days resulting in concentrations exceeding the chronic and 8-hour REL of benzene.

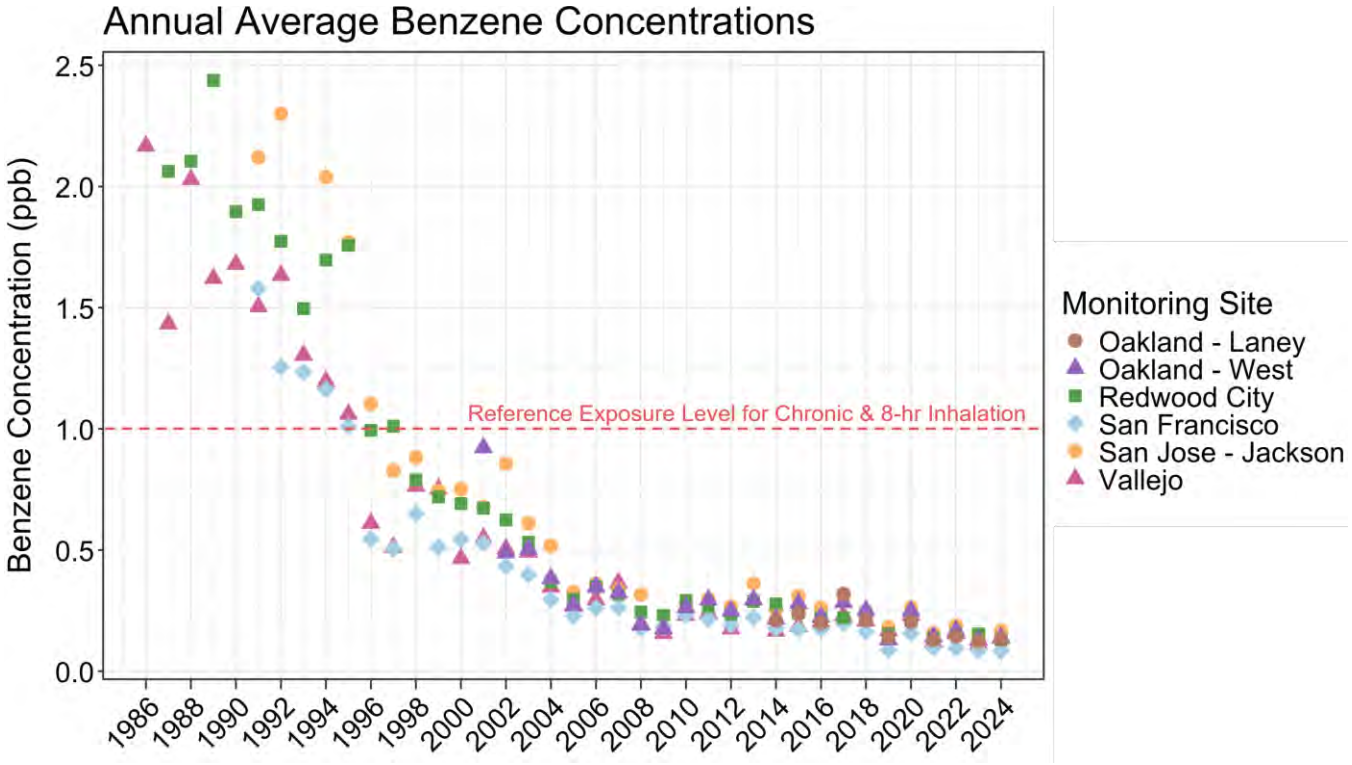


Figure 3. Trends in annual average benzene concentrations at selected Air District monitoring sites. Note that different monitoring sites have different periods of record.

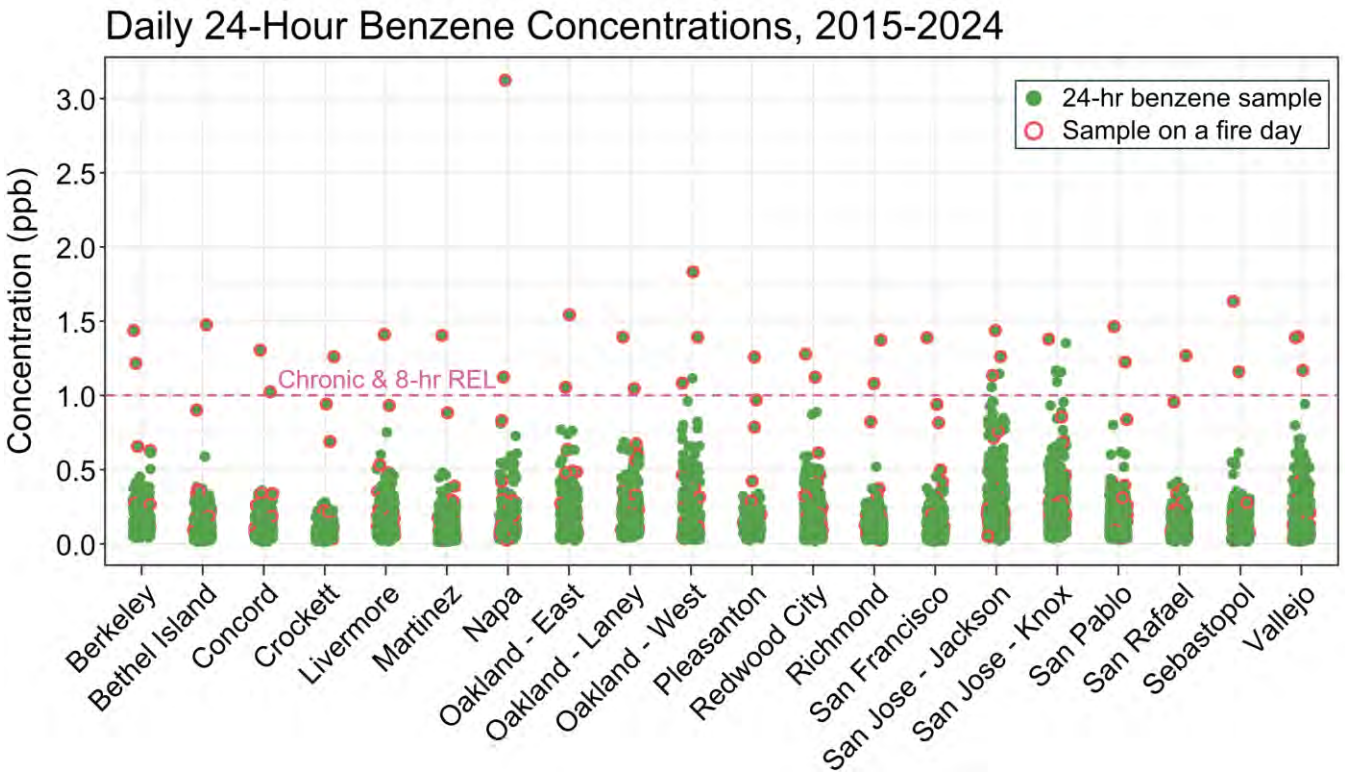


Figure 4. Daily 24-hour average benzene concentrations at current Air District air toxics monitoring sites from 2015 to 2024.

The data for the long-term air toxics ambient air monitoring network are uploaded to EPA's Air Quality System (AQS) database[12].

Refinery Community Air Monitoring Program

The Air District is in the process of expanding the air monitoring of TACs and other pollutants in communities near large stationary sources of air pollution, initially prioritizing refineries as part of the Refinery Community Air Monitoring Program[13]. This monitoring is intended to help better understand near-source impacts that are not well captured by the Air District's long-term air monitoring network. Expanded air monitoring efforts will use methods that make data available in near real-time, and the collected data will provide the public with additional information about air quality conditions near these facilities, supporting analysis of air quality trends and other assessments. Monitoring operations for continuous measurements under this program will begin at the San Pablo monitoring site, near the Chevron Refinery, by the end of 2026. Expanding the Benicia site near Valero to include real-time TAC monitoring, and the design and planning for the other monitoring sites near the Phillips 66, MRC, and Marathon refineries is ongoing.

[12] U.S. Environmental Protection Agency, Outdoor Air Quality Data (Air Quality System), available at: https://www.epa.gov/outdoor-air-quality-data.
[13] Air District, Refinery Community Air Monitoring Plan, available at: https://www.baaqmd.gov/~/media/files/technical-services/community-air-monitoring/01_refinery-camp-v7-mainapp-a-pdf.pdf.

Community Air Quality Investigations

In addition to the air toxics ambient air monitoring at long-term air monitoring stations, the Air District uses a variety of methods to measure the concentrations of air toxics at other locations in the Bay Area for shorter duration studies. These special air monitoring projects[14] may have a variety of objectives for gathering data, such as:

- Identifying and characterizing emissions crossing a facility fenceline,
- Determining the impacts of facility emissions on nearby communities,
- Assessing cumulative impacts of multiple sources of air pollution on overburdened communities, and
- Collecting more information about the local-scale variation in the levels of specific pollutants

The Air District builds out capacity for community and source-oriented monitoring efforts using monitoring approaches, such as shorter-term mobile and stationary monitoring projects, that can provide more targeted data to inform certain air quality issues. Ongoing and upcoming efforts to conduct more localized, source-oriented air monitoring studies of air toxics in the Bay Area include the following:

East Oakland

The Air District, in partnership with Communities for a Better Environment (CBE), is conducting an air monitoring project in East Oakland[15] to collect data to inform the development of effective strategies for reducing air pollution exposure and emissions in the community. The Air District used its air monitoring van to conduct mobile air monitoring of selected VOCs (some of which are TACs) and particulate matter characteristics near key pollution sources of concern and community assets prioritized by the community (see Figure 5). Data analysis is ongoing and air quality issues identified in the mobile monitoring data are being referred to Air District programs for follow-up investigations. This project is expected to be completed by June 2026, and findings will be shared in several formats, including an interactive StoryMap, a technical support document, and a downloadable dataset.

[14] Air District, Special Air Monitoring Projects, available at: https://www.baaqmd.gov/en/about-air-quality/air-quality-measurement/special-air-monitoring-projects.
[15] Air District, Community Air Monitoring In East Oakland, available at: https://www.baaqmd.gov/en/about-air-quality/air-quality-measurement/special-air-monitoring-projects/east-oakland-community-monitoring-project.

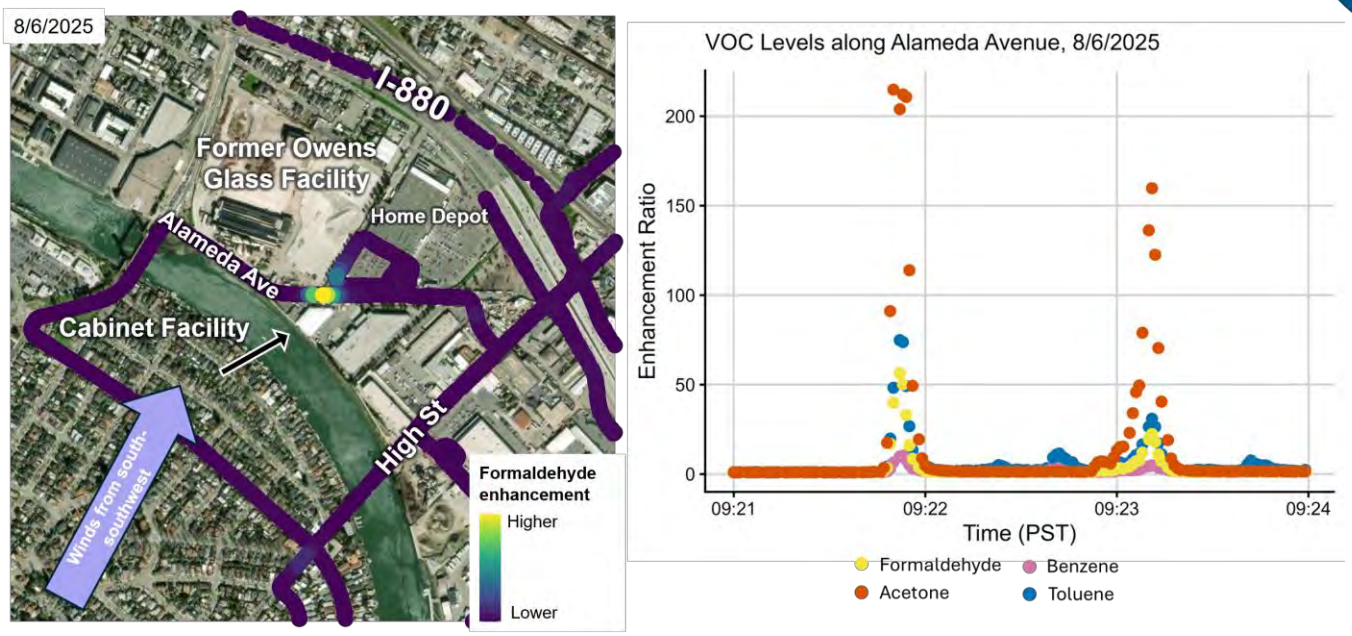


Figure 5. Map showing enhancements in formaldehyde concentrations measured by the Air District's air monitoring van in East Oakland (left). The enhancement ratios of formaldehyde and other TACs from comparing measured concentrations to background levels along the highlighted roadway in the East Oakland map (right).

Bayview-Hunters Point

The Air District is working to directly support the Marie Harrison Community Foundation and their partners in Bayview-Hunters Point to design and implement a community-partnered air monitoring project. The project's objective is to collect informative air quality data on community-identified sources of concern, including a complex mix and high density of sources of air toxics that are directly adjacent to residential areas and other sensitive receptors. The Air District will utilize its air monitoring resources, including the mobile air monitoring van or other air monitoring equipment and expertise, to support the forthcoming air toxics monitoring in Bayview-Hunters Point.

Updating the Air District's Air Toxics Monitoring Program

The Air District is developing a comprehensive plan to update its air toxics monitoring program to help ensure that the air toxics monitoring provides data to meet current and future Air District priorities, including informing concerns in overburdened communities. This work will assess and modernize the Air District's existing region-wide air toxics air monitoring, including the use of high time resolution continuous monitors. The resulting data, along with improved emissions inventories and modeling will improve our estimates of region-wide air toxics exposure and health. .

In addition to this region-wide air toxics evaluation and the upcoming mobile monitoring studies, the Air District is also expanding its multipollutant air monitoring sites near refineries to characterize key air toxics in real-time. These expanded air monitoring stations will allow the Air District to implement and evaluate a new toxics monitoring approach to inform future targeted Bay Area air toxics monitoring studies.

COMMUNITY HEALTH PROTECTION PROGRAMS

The Air District implements several programs that are intended to assess and address health risks in communities with disproportionate air quality impacts. These programs include:

- California AB617 Community Air Protection program
- Air District Grant Programs
- Bay Area Healthy Homes Initiatives

California AB617 Communities in the Bay Area

The Community Health Protection Program is a collaborative initiative between communities, the Air District and other agencies that is focused on reducing emissions, exposures and improving community health in neighborhoods that are most impacted by air pollution. In the Bay Area, four communities have been selected as AB617 communities: West Oakland, Richmond-North Richmond-San Pablo, East Oakland, and Bayview Hunters Point/Southeast San Francisco.

For each of these communities, District staff has worked with CARB to develop emissions inventories of criteria air pollutants and TACs emitted by local stationary and mobile sources. These inventories have also been used to conduct dispersion modeling for each community to quantify PM2.5 exposures, cancer risk, and chronic health index values resulting from local emissions.

Each community has a Community Steering Committee (CSC) that meets regularly to guide and inform the development and/or implementation of the Community Emissions Reduction Plan (CERPs). In West Oakland, East Oakland and Bayview Hunters Point/Southeast San Francisco, there are long-standing community-based organizations (CBOs) that Co-Lead the process with the Air District. These CBOs help guide decision-making related to the CERP, including decisions about effective community outreach and engagement to represent the diversity of the communities and how to further environmental justice goals.

In Richmond-North Richmond-San Pablo, three CSC members serve as Leads.

Additional details on individual AB617 communities are provided below:

- West Oakland – Air District partnered with the West Oakland Environmental Indicators Project (WOEIP) to develop Owning Our Air: The West Oakland Community Action Plan[16] which was adopted in 2019. In 2025, the project was in year 6 of implementation. A 5-Year Progress Report was completed in 2024 to document the implementation of the plan. This report showed that DPM emissions in West Oakland were reduced by 31% between 2017 and 2024 due to a combination of statewide regulations and local actions (e.g., incentivized equipment upgrades).

[16] Air District, West Oakland Community Action Plan, Owning Our Air, available at: https://www.baaqmd.gov/en/community-health/community-health-protection-program/west-oakland-community-action-plan.

- Richmond-North Richmond-San Pablo – On May 1, 2024, the Air District adopted the CERP also known as the Path to Clean Air (PTCA) Plan[17] for this community. The CSC co-researched and co-wrote this Plan through a series of monthly committee meetings, ad hocs and writing and review teams with a focus on centering community voice. The Implementation of the Plan is currently in its second year of implementation, with efforts focused on advancing priority actions identified by the community, Air District and partner agencies.
- East Oakland – East Oakland was selected in 2022 for a CERP, and the CSC formed that same year. The Air District has partnered with Communities for a Better Environment (CBE) as a Co-Lead to establish and convene the East Oakland CSC to guide the development of the CERP[18], including supporting strategy development and community engagement efforts. The CSC approved the draft CERP, and the Board of Directors adopted the Plan on April 1, 2026; the Plan will now be submitted to CARB for final approval.
- Bayview Hunters Point/Southeast San Francisco – Bayview Hunters Point/Southeast San Francisco was selected in 2023 for a CERP. The CSC formed at the start of 2024. The Air District has partnered with Community Co-Leads, Bayview Hunters Point Community Advocates and Marie Harrison Community Foundation, to create a CSC, guide CERP timeline and development, and support community engagement[19]. This CSC is actively working on strategies and actions and the CERP is anticipated to move toward adoption in 2027.

[17] Air District, Richmond-North Richmond-San Pablo, Path to Clean Air, available at: https://www.baaqmd.gov/en/community-health/community-health-protection-program/west-oakland-community-action-plan.
[18] Air District, Draft East Oakland Community Emissions Reduction Plan, available at: https://www.baaqmd.gov/en/community-health/community-health-protection-program/east-oakland-community-emissions-reduction-plan.
[19] Air District, Bayview Hunters Point/Southeast San Francisco Community Emissions Reduction Plan, available at: https://www.baaqmd.gov/en/community-health/community-health-protection-program/bayview-hunters-point-community-emissions-reduction-plan.

Community Health Protection Grants, Incentives and Initiatives

In addition to working with AB617 communities on reducing air pollution emissions in their neighborhoods, the Air District oversees several grant and incentive programs and other initiatives[20] that help reduce public exposure to air toxics. For over three decades, the Air District has implemented grant and incentive programs that work to complement its regulatory efforts in reducing emissions and improving air quality and health. Over time, the number of funding programs and types of grant programs offered have increased. In 2025 the Air District utilized funding from six state and local sources to implement grant programs that are designed to reduce air pollution generated by heavy duty mobile sources, which are responsible for a significant portion of DPM emissions in the region, including:

- Carl Moyer Program
- Mobile Source Incentive Fund
- Community Air Protection Incentives Program
- Funding Agricultural Replacement Measures for Emission Reductions Program
- Transportation Fund for Clean Air
- Volkswagen Environmental Mitigation Trust

Each of these funding sources has their own requirements and may be utilized to implement voluntary incentive grant programs to expedite emissions reductions of criteria air pollutants and TACs, especially in overburdened communities, and support the transition of fleets to zero-emission.

The Air District provides funding from these sources as grant funding to owners of eligible heavy-duty diesel equipment to help expedite the replacement of older, dirty equipment to the cleanest available standards, to reduce emissions of nitrogen (NOx), reactive organic gases (ROG), and particulate matter, primarily DPM which is predominantly small particulates less than 2.5 microns in size (PM2.5). Eligible equipment includes on-road trucks and buses, marine vessels, locomotives, off-road equipment such as cargo handling equipment, agricultural tractors, and other industrial and construction equipment, and refueling infrastructure that supports zero emissions vehicles and equipment.

Funding is made available through these programs on a cyclical basis, with solicitations offering funding for the replacement of heavy-duty equipment and installation of supporting infrastructure that supports the accelerated adoption of heavy-duty zero-emission vehicles and equipment.

Over time the Air District has structured its program requirements to ensure priority is given to projects where emissions reductions benefit priority communities, the Bay Area's communities most impacted by air pollution, including the communities of West Oakland, Richmond-San Pablo, East Oakland, Bayview Hunters Point/Southeast San Francisco. Priority is also given to projects that are in

[20] Air District, Air Pollution and Community Health, available at: https://www.baaqmd.gov/en/community-health/air-pollution-and-community-health.

disadvantaged communities (DACs) and low-income communities (LICs) designated by California Climate Investments.

In 2025, the Air District executed 119 funding agreements totaling approximately $113 million to reduce criteria pollutant emissions and toxic DPM from heavy-duty mobile sources and encourage fleet transition to cleaner technologies. These projects are expected to reduce emissions by over 412 tons of criteria pollutants, including NOx, ROG, and PM, over the project lifespans.

- *Approximately $54 million will help to replace 223 units of older highly polluting diesel equipment, resulting in a lifetime reduction of 15.89 tons of DPM.*
- *Nearly $45 million will help to replace 124 units of older highly polluting diesel equipment, resulting in a lifetime reduction of 7.05 tons of DPM for projects operating in DACs, LICs, and communities of West Oakland, Richmond-San Pablo, East Oakland, Bayview Hunters Point/Southeast San Francisco,*

In alignment with the Air District's Strategic Plan and environmental justice goals, staff continued to administer a reimagined heavy-duty program following community feedback by adjusting eligibility requirements to ensure that funding is invested in projects that maximize benefits to priority communities. As a result, in 2025, over 91% of all funding under the heavy-duty programs was contracted to projects that will operate in, and benefit, these communities. Additionally, most of the funding not allocated to projects in priority communities was awarded to agricultural projects, which are among the most cost-effective and efficient at reducing ozone precursors regionally.

The Air District also continues to support the accelerated adoption of zero-emission and cleanest available technology. In 2025, the Air District invested $96 million to projects that will replace 81 vehicles and equipment with zero-emission and install over 410 electric vehicle and equipment charging stations, primarily within priority communities.

CONCLUSION

The Air District's implementation of the Air Toxics Hot Spots Program, Rule 11-18, and related initiatives during the reporting period reflects continued progress in identifying, assessing, and reducing health risks from toxic air contaminants across the Bay Area. Through emissions tracking, rigorous health risk assessment, targeted permitting requirements, expanded air monitoring, and community-focused programs, the Air District continues to strengthen its approach to protect public health, particularly in overburdened communities.

APPENDIX A – FACILITIES WITH APPROVED HRAs

This appendix provides the lists of facilities for which the Air District has conducted HRAs, and the health risks identified in their HRAs as approved by the Air District and submitted to CARB for inventory year 2024. Table A-1 in Appendix A lists the facilities in descending order by cancer risk and Table A-2 in Appendix A lists the facilities descending order by non-cancer risk.

Table A-1. Facilities with Approved HRAs Ordered by Cancer Risk

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
19597	San Francisco Hall of Justice	San Francisco	2009	10	0.01	NA
12743	MCI, dba Verizon Business	Concord	2001	9.99	NA	NA
13348	Medtronic Vascular	Santa Rosa	2019	9.99	0	NA
13984	City of Santa Rosa Utilities Dept	Santa Rosa	2015	9.99	0	NA
16421	City of San Jose, SBWRP	San Jose	2004	9.99	NA	NA
17460	City of Santa Rosa Utilities Department Station 9	Santa Rosa	2006	9.99	0.01	NA
17898	New San Francisco Federal Building	San Francisco	2006	9.99	0.01	NA
20249	Vallejo Sanitation & Flood Control Dist	Vallejo	2010	9.99	0.01	NA
20574	Digital Realty	Santa Clara	2014	9.99	0.01	NA
21539	Golden State Pet Cremation	Castro Valley	2013	9.99	0.7	0.3
22740	Las Gallinas Valley Sanitary District	San Rafael	2015	9.99	0	NA
22788	East Bay Municipal Utility District	Walnut Creek	2014	9.99	0.01	NA
23068	Alvins Corner at Penny Lane	Campbell	2015	9.99	0	NA
23204	United Natural Foods Inc (UNFI)	Gilroy	2016	9.99	1	NA
23554	Santa Clara Valley Transportation Authority	Milpitas	2016	9.99	1	NA
23612	City Hall - City of San Ramon	San Ramon	2016	9.99	0.99	NA
24059	Phoenix Data Center Leasehold LLC	Sunnyvale	2005	9.99	0.01	NA
24528	Google LLC	Sunnyvale	2001	9.99	NA	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
100340	Costco Wholesale #132	Vallejo	2019	9.99	0.11	NA
200385	SF Police Credit Union	San Bruno	2016	9.99	1	NA
200460	Meadowood Resort	Saint Helena	2016	9.99	1	NA
200909	Partnership Health Plan of California	Fairfield	2018	9.99	1	NA
201183	Alexander Station Apartments	Gilroy	2018	9.99	1	NA
16787	Bayside Area Development, LLC c/ CBRE, Inc	South San Francisco	2005	9.98	NA	NA
22268	Nor-Cal Rock Inc	Hayward	2014	9.98	0.01	NA
17156	City of Milpitas	Milpitas	2010	9.97	0.01	NA
17771	Verizon Wireless (Sunnyvale MSC)	Sunnyvale	2007	9.97	0.01	NA
14149	Contra Costa County	Pittsburg	2002	9.95	NA	NA
13513	AT&T	San Bruno	2002	9.93	NA	NA
16422	City of San Jose, SBWRP	San Jose	2004	9.93	0	NA
13480	Pacific Bell	La Honda	2008	9.92	0.01	NA
22623	Cologix, Inc. SV1	Santa Clara	2016	9.91	0.01	NA
450	Veterans Administration Medical Center	Palo Alto	2011	9.9	0.9	NA
1275	Novato Sanitary District	Novato	2009	9.9	0.9	NA
1753	John Muir Health - Concord Campus	Concord	2012	9.9	0.09	0.03
1785	Children's Hospital, Oakland	Oakland	2012	9.9	0.9	NA
3167	Pacific Gas and Electric Company	Richmond	2021	9.9	0	NA
3711	Sutter Health Eden Medical Center	Castro Valley	2010	9.9	0.9	NA
7420	New Cingular Wireless dba AT&T Mobility	Concord	2016	9.9	0.01	NA
8998	West Valley Community College	Saratoga	2011	9.9	0	NA
10742	John Muir Medical Center	Walnut Creek	2022	9.9	0	NA
13077	NOP 560 Mission LLC	San Francisco	2001	9.9	NA	NA
13410	Pacific Bell Corporation	Walnut Creek	2001	9.9	0	NA
13487	Pacific Bell	Martinez	2004	9.9	0	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
13544	Pacific Bell	Santa Rosa	2008	9.9	0.01	NA
13554	Pacific Bell	Union City	2002	9.9	NA	NA
14039	Contra Costa Water District	Concord	2019	9.9	0.9	NA
14139	Contra Costa County	Martinez	2022	9.9	0	NA
14200	XO Communications Services, LLC	Fremont	2002	9.9	NA	NA
14240	SFPUC Baden Pump Station	South San Francisco	2005	9.9	0.1	0
14433	Pacific Bell	Windsor	2002	9.9	NA	NA
14548	Montara Sanitary District	Montara	2021	9.9	0	NA
14776	Level 3 Communications	Suisun City	2002	9.9	NA	NA
14809	Federal Aviation Administration	Mountain View	2023	9.9	0	NA
14812	City of Vallejo Water Division	Suisun City	2002	9.9	0	NA
14814	Pacific Bell	Mill Valley	2002	9.9	0.01	NA
14924	Chabot Community College	Hayward	2022	9.9	0.09	NA
14944	City of Palo Alto	Palo Alto	2019	9.9	0.9	NA
15101	Redwood City	Redwood City	2012	9.9	NA	NA
15464	Pixar Animation Studios	Emeryville	2009	9.9	0.9	NA
15504	Kaiser Santa Rosa Medical Office, Bldg #4	Santa Rosa	2019	9.9	0.9	NA
15529	City of Sunnyvale - DPS -164-0 & 165-0	Sunnyvale	2019	9.9	0.9	NA
15592	SFPUC Sunol Valley Chloramination Facility & Alameda Portal	Sunol	2010	9.9	0.9	NA
16003	Comcast of California IX, Inc	Concord	2004	9.9	NA	NA
16043	City of Santa Rosa Subregional Utilities	Santa Rosa	2019	9.9	0.9	NA
16345	Vi at Palo Alto	Palo Alto	2004	9.9	NA	NA
17154	City of Milpitas	Milpitas	2016	9.9	0.9	NA
18192	Minaris Regenerative Medicine	Mountain View	2007	9.9	0.01	NA
18239	CoreSite	Milpitas	2007	9.9	0.01	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
18557	John Muir Health	Concord	2007	9.9	0.01	NA
18769	Jay Paul Company	Sunnyvale	2019	9.9	0.9	NA
18959	Verizon Wireless (Bolinas)	Bolinas	2008	9.9	0.01	NA
19285	Campus for Jewish Life	Palo Alto	2008	9.9	0.01	NA
19442	Sequoia Union High School District	Atherton	2018	9.9	0.9	NA
19779	Alameda County Public Works Agency	Hayward	2009	9.9	0.9	NA
19805	SJW Vickery Av Station	Saratoga	2020	9.9	0	NA
19939	Napa Sanitation District	Napa	2021	9.9	0	NA
20208	Coastside County Water District	Half Moon Bay	2010	9.9	0.9	NA
20286	Palo Alto Unified School District	Palo Alto	2016	9.9	0	NA
20324	Judicial Council of California, CC 43-B2	San Jose	2002	9.9	0.9	NA
20356	Digital 365, LLC	San Francisco	2006	9.9	0.01	NA
20536	Lucid USA Inc	Newark	2019	9.9	0.9	NA
20885	Casino M8trix	San Jose	2011	9.9	NA	NA
20968	Guardant Health Inc.	Redwood City	2019	9.9	0.9	NA
21040	City of Santa Rosa	Santa Rosa	2023	9.9	0	NA
21043	City of Santa Rosa	Santa Rosa	2019	9.9	0.9	NA
21436	Ghirardelli Square	San Francisco	2023	9.9	0	NA
21519	Alameda County Water District	Fremont	2012	9.9	NA	NA
21615	City & County of SF (Real Estate Div)	San Francisco	2019	9.9	0.9	NA
22190	California Water Service Company	Los Altos Hills	2014	9.9	0	NA
22350	Gamble Family Vineyards	Yountville	2014	9.9	0.9	NA
22445	City of Pacifica Water Recycling/Wastewater Treat	Pacifica	2019	9.9	0.9	NA
22580	DJONT/CMB SSF LLC(dba Embassy Suites SF Airpt	South San Francisco	2022	9.9	0	NA
22649	Caltrans	Oakland	2017	9.9	0	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
22691	Signature Flight Support	Santa Clara	2015	9.9	0.9	NA
22751	Google LLC	Mountain View	2011	9.9	0.9	NA
23005	Olive Tree Manor LLC	Napa	2015	9.9	0.9	NA
23086	Paraduxx Winery	Napa	2015	9.9	0.9	NA
23190	Healthpeak Properties, Inc. c/o CBRE	South San Francisco	2015	9.9	0	NA
23199	Bergman Residence	Saint Helena	2015	9.9	0.9	NA
23398	Film Werks International	San Francisco	2016	9.9	0	NA
23427	FN Cellars, Inc.	Saint Helena	2023	9.9	0	NA
23444	Silver Springs Networks, Inc	San Jose	2016	9.9	0.9	NA
23515	Google LLC	San Bruno	2020	9.9	0	NA
23528	Brand Winery	Saint Helena	2016	9.9	0	NA
23535	Judicial Council of CA, East County Hall Justice	Dublin	2016	9.9	0.9	NA
23814	PayPal Inc	San Jose	2019	9.9	0.9	NA
24622	San Francisco Bay Area Rapid Transit District	Oakland	2018	9.9	0.9	NA
24787	T-C 55 Second Street LLC	San Francisco	2002	9.9	0	NA
25011	San Mateo County Office of Education	Redwood City	2022	9.9	0.1	NA
25286	Gateway Services Inc	Napa	2025	9.9	0.2	0.2
200240	Costco Gasoline #1267	San Jose	2014	9.9	0.9	NA
200359	O'Farrell Senior Housing Inc	San Francisco	2016	9.9	0	NA
200389	Gateway 80 Owner LP	Fairfield	2016	9.9	0	NA
200394	1450 Franklin Street Owners Association	San Francisco	2016	9.9	0	NA
200431	Seed Testing Real Estate II	Gilroy	2019	9.9	0.9	NA
200471	Frito Lay, Inc.	Alameda	2017	9.9	0.9	NA
200504	350 Bush	San Francisco	2017	9.9	0.01	NA
200527	Mumm Napa	Napa	2024	9.9	0.1	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
200662	Shafer Vineyards	Napa	2020	9.9	0	NA
200678	Jackson Family Wines - Oakville	Oakville	2017	9.9	0.9	NA
200784	FN Cellars, Inc.	Oakville	2019	9.9	0.9	NA
200894	Aloft Hotel	Dublin	2018	9.9	0.1	NA
201021	Groth Vineyards	Napa	2019	9.9	0	NA
201031	Public Safety Complex - Police Services Building	Dublin	2019	9.9	0.9	NA
201247	CADE at 13th Vineyard	Angwin	2020	9.9	0.9	NA
201289	Meyer Corporation	Fairfield	2019	9.9	0.01	NA
201314	Theorem Winery	Calistoga	2018	9.9	0	NA
201316	Hundred Acre Wine Group - St. Helena	Saint Helena	2019	9.9	0	NA
201322	Pink Sunset	Atherton	2021	9.9	0	NA
201503	UC Davis Oakville Station	Napa	2019	9.9	0.01	NA
201588	Four Points by Sheraton San Rafael	San Rafael	2019	9.9	0	NA
201605	Duffy's Napa Valley Rehab	Calistoga	2019	9.9	0.01	NA
201672	One Hope Winery	Napa	2019	9.9	0	NA
201679	Santa Rosa Junior College	Santa Rosa	2019	9.9	0	NA
201688	Stonestown Anchor Acquisition, LP	San Francisco	2019	9.9	0.9	NA
201726	O'Brien Estates	Napa	2019	9.9	0.9	NA
201735	San Rafael Public Safety Center	San Rafael	2019	9.9	0.01	NA
201736	BH 3500 Mountain Blvd. LLC	Oakland	2019	9.9	0.9	NA
201755	Hourglass Winery	Calistoga	2019	9.9	0.9	NA
201767	Outpost Wines	Angwin	2019	9.9	0	NA
201781	Ric Forman Residence	St. Helena	2019	9.9	0.9	NA
201789	Auberge du Soleil	Rutherford	2020	9.9	0	NA
201793	Santa Clara Valley Transportation Authority	San Jose	2019	9.9	0.9	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
201797	M2 Apartments	San Francisco	2020	9.9	0.1	NA
201804	Real Social Good Investments	Menlo Park	2020	9.9	0	NA
201872	CBRE	South San Francisco	2020	9.9	0	NA
201885	SUNRISE VILLA SONOMA	Sonoma	2020	9.9	0.1	NA
201891	Realm Cellars	Napa	2020	9.9	0	NA
201934	Grgich Hills Estate Residence	St. Helena	2022	9.9	0	NA
201937	Rivers Marie Winery	Calistoga	2020	9.9	0.9	NA
201939	Red Hawk Vineyards	Pope Valley	2020	9.9	0.9	NA
201957	Promontory Winery	Napa	2020	9.9	0.1	NA
201972	Hamel Family Wines	Sonoma	2020	9.9	0	NA
201984	Fontanella Family Winery	Napa	2021	9.9	0.1	NA
202016	Facebook, Inc.	Burlingame	2020	9.9	0	NA
202021	BART Berryessa Station	San Jose	2016	9.9	0.9	NA
202156	Align Technology - Bldg. 3	San Jose	2021	9.9	0.1	NA
202162	1020 Atlantic	Alameda	2021	9.9	0	NA
202176	ZENNI OPTICAL	Novato	2021	9.9	0.1	NA
202178	IF - 85th	Oakland	2021	9.9	0	NA
202258	Enovix	Fremont	2021	9.9	0	NA
202375	WWCMC	Glen Ellen	2023	9.9	0	NA
202453	AUXILARY WATER SUPPLY SYSTEM PUMPING STATION #2	San Francisco	2022	9.9	0	NA
202457	Altitude Apartments	South San Francisco	2021	9.9	0	NA
202478	Spirit Rock Meditation Center	Woodacre	2021	9.9	0	NA
202534	47071 Bayside Parkway	Fremont	2022	9.9	0.1	NA
202586	Bonness Ranch	Sonoma	2022	9.9	0	NA
202587	J Ranch	Petaluma	2022	9.9	0	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
202629	Villa del Lago Winery	St. Helena	2022	9.9	0.1	NA
202675	VCA Animal Care Center of Sonoma County	Rohnert Park	2022	9.9	0	NA
202676	Custom Name Goods, LLC	Oakland	2022	9.9	0.1	NA
202755	Duke Realty Fremont Blvd. LP C/O Prologis	Fremont	2022	9.9	0	NA
202756	3440 Hillview Avenue - Bldg 7 & 8	Palo Alto	2022	9.9	0	NA
202818	Costco Gasoline	Newark	2023	9.9	0.08	0.1
202843	999 Baker Way	San Mateo	2023	9.9	0	NA
202919	Zoox Inc	Fremont	2022	9.9	0	NA
202931	Napa Ranch	Sonoma	2023	9.9	0	NA
202941	Crystal Bio Solutions	Pleasanton	2023	9.9	0	NA
203064	Sleepy Hollow Elementary School	Orinda	2023	9.9	0	NA
203114	Cochrane Technology Center	Morgan Hill	2023	9.9	0	NA
203122	31353 Huntwood Avenue	Hayward	2023	9.9	0	NA
203197	RK Logistics	Fremont	2023	9.9	0	NA
203204	380 Blodgett Street, Cotati, CA	Cotati	2024	9.9	0	NA
203252	County of Marin/MERA-Mt. Burdell OTA	Novato	2023	9.9	0.9	NA
203293	Reverie II Winery	St. Helena	2023	9.9	0	NA
203320	County of Marin/MERA-Coyote Peak	Petaluma	2023	9.9	0.9	NA
203344	Oakley Recreation Center	Oakley	2024	9.9	0.9	NA
203352	Black Sears Winery	Angwin	2023	9.9	0.1	NA
203358	Lede Vineyards	Yountville	2024	9.9	0	NA
203377	The Barrel Chai	Napa	2024	9.9	0	NA
203490	Ellman Winery	Napa	2024	9.9	0	NA
212207	PRIDE MOUNTAIN VINEYARDS, LLC	Santa Rosa	2022	9.9	0	NA
212447	Honig Vineyard & Winery	Napa	2023	9.9	0	NA
15465	Kaiser Permanente - Regional Lab Annex	Richmond	2003	9.88	0.01	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
19019	Sonoma Police Department	Sonoma	2010	9.87	0.01	NA
13550	SBC	Sunnyvale	2003	9.86	0.01	NA
21793	Pacific Gas & Electric Company	San Ramon	2013	9.84	0	NA
4618	Keller Canyon Landfill Company	Pittsburg	2006	9.8	0.37	NA
12916	Cisco System	Milpitas	2004	9.8	0.9	0
13467	Pacific Bell	Fairfield	2005	9.8	0.01	NA
15253	Oracle Corporation	Redwood City	2011	9.8	0.9	NA
16234	County of Sonoma Juvenile Justice Center	Santa Rosa	2004	9.8	0.01	NA
16930	San Mateo County Youth Services Center	San Mateo	2005	9.8	0.01	NA
17290	City of Richmond (McDonald Ave S a)	Richmond	2006	9.8	0.01	NA
18801	Xeres Ventures, LP (SC1)	Santa Clara	2016	9.8	0.01	NA
20537	Department of Transportation	Oakland	2010	9.8	0	NA
21298	Flintstone Enterprises DBA Forever My Pet	Gilroy	2012	9.8	0.6	0.1
22375	Amazon Data Services, Inc.	Santa Clara	2015	9.8	0.01	NA
200629	The Austin Owners Association	San Francisco	2017	9.8	0	NA
14000	Lake Berryessa Resort Improvement District	Pope Valley	2005	9.76	0.02	NA
9536	Truck-Rail Handling Inc	Fremont	2022	9.7	0.04	0.13
13160	University of California SF	San Francisco	2012	9.7	0.01	0
13866	City of SSF Water Quality Plant	South San Francisco	2004	9.7	NA	NA
18067	Sanitary District No 2 of Marin County	Corte Madera	2007	9.7	0.01	NA
18169	Woodside Fire Station #19	Woodside	2007	9.7	0.01	NA
20248	SOF-XI WFO Harrison Owner, LLC c/o Cushman Wakefield	Oakland	2016	9.7	0.01	NA
21039	City of Santa Rosa	Santa Rosa	2024	9.7	0	NA
23216	Hudson Skyport Plaza, LLC	San Jose	2003	9.7	0	NA
200691	41 Tehama, LP	San Francisco	2017	9.7	0	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
202380	Jefferson Street Hotel LLC	Oakland	2022	9.7	0	NA
12946	Level 3 Communications Inc	Emeryville	2002	9.6	0.01	NA
13877	Sanitary District No 1, Kentfield Pump Station	Kentfield	2002	9.6	NA	NA
13985	City of Santa Rosa Utilities Dept	Santa Rosa	2015	9.6	0	NA
17347	College of San Mateo	San Mateo	2007	9.6	0.9	NA
20685	Ariba	Sunnyvale	2011	9.6	0	NA
22990	Davis Estates Winery	Calistoga	2015	9.6	0	NA
100563	Costco Gasoline #663	Concord	2019	9.6	0.07	NA
3670	Kaiser Foundation Hospital	Vallejo	2007	9.5	0.9	NA
19330	ARE - East Jamie Court, LLC	South San Francisco	2011	9.5	0.01	NA
20295	Vantage Data Centers Management Co , LLC	Santa Clara	2023	9.5	0.02	0.09
21361	University of the Pacific	San Francisco	2006	9.5	0.01	NA
23476	Boston Properties	San Francisco	2016	9.5	0.01	NA
23683	NGM Biopharmaceuticals, Inc	South San Francisco	2009	9.5	0.01	NA
202583	Ultragenyx Pharmaceuticals, Inc	Novato	2022	9.5	0.01	NA
20586	Digital 720 2nd LLC	Oakland	2007	9.45	0.01	NA
17546	Camino Medical Group-ASC Building	Mountain View	2006	9.4	0.01	NA
200343	California Water Service Co.	San Carlos	2016	9.4	0	NA
200760	Golden Cajun, LLC	Santa Clara	2018	9.4	0.01	NA
18227	City of Gilroy	Gilroy	2007	9.3	0.01	NA
19131	City of Sebastopol	Sebastopol	2009	9.2	0.01	NA
19236	County of Marin	San Rafael	2008	9.2	0.01	NA
20611	EQUINIX-SV8	Palo Alto	2014	9.2	0.01	NA
20924	Juniper Networks	Sunnyvale	2002	9.2	NA	NA
17	Lehigh Southwest Cement Company	Cupertino	2011	9.1	0.12	NA
12626	Valero Refining Company - California	Benicia	1991	9.1	0.02	0

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
16441	City of Hayward Department of Public Works	Hayward	2005	9.1	0.9	NA
21930	San Francisco Public Utilities Commission	San Francisco	2015	9.1	NA	NA
1941	Sonoma Developmental Center	Eldridge	1990	9	0	NA
19403	USPS San Mateo Information Technology and Acct Svc	San Mateo	2010	9	0.01	NA
20214	Soiland Co , Inc	Santa Rosa	2020	9	0	NA
24726	Martinez Refining Company LLC	Martinez	1990	9	0.02	NA
22523	Canyon Ranch Wellness Retreat	Woodside	2009	8.93	0.01	NA
1462	Veterans Administration Medical Center	Menlo Park	2012	8.9	0	NA
14092	Pacific Bell Corporation	Milpitas	2002	8.9	0.01	0
21251	1080 Sutter Owners Association c/o Action Property Mngmt	San Francisco	2012	8.8	0	NA
23565	Lucile Packard Children's Hospital Stanford	Sunnyvale	2007	8.8	0	NA
23812	Lanteris Space LLC	San Jose	2024	8.8	0	0.03
200477	T8 Urban Housing Associates, LLC, c/o Related Companies	San Francisco	2017	8.8	0	NA
21843	CordeValle Resort	San Martin	2013	8.7	0	NA
22420	Restoration Management Company	Hayward	2014	8.7	0.01	NA
201073	Sutter Shared Lab	Livermore	2018	8.65	0	NA
203247	1440 4th Street	Berkeley	2023	8.6	0.01	NA
13711	Pacific Bell Corp dba AT&T CA	Santa Clara	2002	8.5	0.01	0
15999	Frank Family Vineyards	Calistoga	2019	8.5	0	NA
13290	City of San Jose Public Works Fleet Management	San Jose	2006	8.45	0	NA
770	Travis AFB	Travis Afb	2012	8.4	0	NA
18292	Paradise Valley Estates	Fairfield	2007	8.4	0	NA
18971	UCSF/CPFM	San Francisco	2008	8.4	0.9	NA
21359	Phillips 66 Company - San Francisco Refinery	Rodeo	1990	8.4	0.13	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
202372	Amazon.com Services LLC - TCY9	Oakley	2023	8.4	0	NA
20370	1101 Space Park Partners, LLC	Santa Clara	2022	8.33	0.01	0
1430	Nazareth House of San Rafael	San Rafael	2013	8.3	0	NA
18852	Town of Hillsborough	Hillsborough	2008	8.3	NA	NA
20163	Zoetis, Inc.	Union City	2010	8.3	0.01	NA
23544	HCP BTC LLC	South San Francisco	2009	8.3	0.01	NA
201981	Allogene Therapeutics	Newark	2020	8.3	0	NA
202249	SpectraSite Communications, LLC	Oakley	2021	8.3	0	NA
1179	Redwood Landfill Inc	Novato	2010	8.2	0.23	NA
15278	Wareham Development	Emeryville	2012	8.1	0	NA
19325	Swissport Fueling, Inc	Oakland	2011	8.1	0.9	NA
20570	Graton Fire Protection District	Sebastopol	2011	8.1	0	NA
20714	PMI Plaza LLC	Walnut Creek	2007	8.1	0	NA
22566	County of Marin c/o Sares Regis	San Rafael	2013	8.1	NA	NA
22974	Stack Infrastructure	San Jose	2014	8.1	0	NA
10	Chevron Products Company	Richmond	1990	8	0.02	NA
591	East Bay Municipal Utility District	Oakland	1991	8	0.06	NA
617	Palo Alto Regional Water Quality Control Plant	Palo Alto	1989	8	0.42	NA
4020	SFPP, LP	San Jose	1989	8	0	NA
12596	National Park Service	San Francisco	2011	8	0	NA
15982	Google LLC	Mountain View	2012	8	0.9	NA
22835	Golden State Pet Cremation	Livermore	2015	8	0.21	NA
25055	USS-UPI, LLC	Pittsburg	1994	8	0.9	NA
112124	Costco Wholesale # 1061	Hayward	2009	8	0.02	NA
2066	Waste Management of Alameda County	Livermore	2012	7.9	0.11	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
24260	Micron Technology, Inc	San Jose	2009	7.9	0	NA
202012	Marciano Winery	Saint Helena	2020	7.9	0	NA
202217	City of Santa Rosa - Sewer Lift Station #1	Santa Rosa	2021	7.9	0	NA
22546	181 Fremont LLC	San Francisco	2015	7.87	0	NA
12848	David Grant Medical Center	Travis Afb	2012	7.8	0.01	0
13485	AT&T	Livermore	2008	7.8	0.01	NA
17405	One Rincon Hill Association	San Francisco	2006	7.8	0	NA
19966	San Francisco Unified School Dist (SFUSD)	San Francisco	2010	7.8	0.01	NA
200679	Stanford Redwood City Operations	Redwood City	2018	7.8	0	NA
255	Lawrence Livermore National Laboratory	Livermore	1989	7.7	0.04	NA
11764	Bay Area Rapid Transit District	Oakland	2012	7.7	0.01	NA
19268	ARE - San Francisco No. 43 Owner, LLC	San Francisco	2009	7.7	0	NA
19956	Santa Clara County Fire Dept	Los Gatos	2010	7.69	0.01	NA
21057	Sutter Bay Hospitals	Santa Rosa	2012	7.6	NA	NA
23016	Healthpeak Properties, HCP Oyster Point III LLC	South San Francisco	2017	7.5	0	NA
3974	San Francisco General Hospital	San Francisco	2010	7.4	0	NA
19060	Hosting Com	San Francisco	2009	7.4	0.9	NA
200573	Lodgeworks	Napa	2017	7.4	0	NA
24374	China Mobile International Infrastructural (US1)	San Jose	2021	7.37	0.01	NA
20637	Boehringer Ingelheim Fremont Inc	Fremont	2007	7.3	0	NA
475	Santa Clara Valley Health & Hospital System	San Jose	2012	7.2	0	NA
13241	KGO Television ABC Inc	San Francisco	2001	7.2	NA	NA
17769	T5@Silicon Valley, LP	Newark	2010	7.2	0.9	NA
21400	Intelsat Corporation	Napa	2012	7.2	NA	NA
21646	Guide Dogs for the Blind, Inc	San Rafael	2018	7.2	0.02	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
22403	Google LLC	Sunnyvale	2017	7.2	0	NA
23902	EQUINIX INC SV14-SV17	Santa Clara	2015	7.2	0	NA
111724	ARCO AM/PM	San Jose	2022	7.2	0.04	NA
1228	Sonoma County Water Agency	Sonoma	2006	7.1	0.4	NA
2478	UCSF/Parnassus	San Francisco	1992	7.1	0.5	NA
14063	Central Contra Costa Sanitary District	Orinda	2004	7.1	NA	NA
200351	Illumina Inc	Foster City	2016	7.1	0	NA
201462	Biomed Realty Gateway of Pacific	South San Francisco	2018	7.1	0.01	NA
201897	Viamonte Senior Living 1, Inc.	Walnut Creek	2020	7.1	0	NA
1529	Kaiser Permanente Medical Center	Oakland	2011	7	0	NA
14691	Verizon Wireless Pleasanton Switch	Pleasanton	2003	7	0.01	NA
15565	Western Digital Technologies	Fremont	2012	7	0	NA
15935	Comcast of California/Colorado/Texas/Washington	Pleasanton	2023	7	0.01	NA
24072	CBRE	Emeryville	2004	7	0.01	NA
14628	Tesoro Refining & Marketing Company, LLC	Martinez	1995	6.9	0.3	NA
18411	Sutter Health Enterprise Data Center dba Palo Alto Medical Fndn	Sunnyvale	2016	6.9	0	NA
20009	Hayward Point Eden Business Center	Hayward	2010	6.9	0	NA
202897	T-Mobile - BA64168S	Campbell	2023	6.9	0	NA
19670	The Meadows of Napa Valley	Napa	2017	6.8	0	NA
20555	Mercy Housing California	San Francisco	2011	6.8	0	NA
200776	Kodiak Sciences, Inc.	Palo Alto	2017	6.8	0	NA
202111	Circle K - Napa Junction	American Canyon	2021	6.8	0.04	NA
453	Good Samaritan Hospital	San Jose	2005	6.7	0.9	NA
2172	Office of The Sheriff	San Bruno	2006	6.7	0.9	NA
14611	California Water Service Company	Livermore	2018	6.7	0	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
16127	Pacific Bell (dba: AT&T CA)	Pleasanton	2007	6.7	0	NA
21024	EdgeConneX Silicon Valley Holdings, LLC	Santa Clara	2017	6.7	0.01	NA
201560	Related California	San Francisco	2019	6.7	0	NA
8175	The Home Depot Store #0643	El Cerrito	2010	6.6	0.01	NA
15292	IKEA California LLC	East Palo Alto	2003	6.6	0.9	NA
20985	Sunny View Retirement Community	Cupertino	2019	6.6	0	NA
111870	Bayfair Gas & Mart	San Leandro	2025	6.6	0.03	0.62
201620	SJSC Properties LLC	San Jose	2019	6.6	0	NA
13461	Pacific Bell	Cotati	2005	6.5	NA	NA
7519	Pacific Bell	Fairfield	2012	6.4	0	NA
14676	Equinix LLC	San Jose	2024	6.4	0	0
22032	Jamestown Concord Tech Bldg c/o SRP Mgmt, Inc	Concord	2012	6.4	NA	NA
202707	Presidio Bay Ventures	San Carlos	2024	6.4	0	NA
13515	AT&T	San Francisco	2006	6.3	0.9	0
17351	Napa Berryessa Resort Improvement District	Napa	2007	6.3	0	NA
22353	Sheriff's Office, County of San Mateo	Redwood City	2014	6.3	0	NA
202077	GI TC Perry Park LLC	Sunnyvale	2020	6.3	0	NA
3576	Catholic Cremation Services	Hayward	2006	6.2	0.24	0.11
19980	Whipple Road Portfolio, LLC	Union City	2009	6.2	0	NA
19778	Alameda County Public Works Agency	Hayward	2023	6.17	0	NA
20897	Bristol-Myers Squibb	Redwood City	2012	6.15	0	NA
202088	Westport Office Park, LLC	Redwood City	2024	6.1	0	0
202733	Costco Gasoline (Loc. No. 848)	San Jose	2023	6.1	0.08	0.16
203165	Bellara	Hayward	2023	6.1	0	NA
1534	Silicon Valley Clean Water	Redwood City	1989	6	NA	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
2531	St Joseph Health N CA, dba Santa Rosa Mem Hospital	Santa Rosa	1990	6	0	NA
13450	Pacific Bell	Benicia	2003	6	NA	NA
23178	Downtown RWC RES, LLC	Redwood City	2014	6	0	NA
200566	Menlo Gateway Hotel	Menlo Park	2017	6	0	NA
202665	Kaiser Foundation Health Plan - Project Genetics Lab	San Jose	2022	6	0	NA
12728	Waste Management Inc	San Leandro	2022	5.9	0.09	NA
14064	Central Contra Costa Sanitary District - Maltby Pump Station	Martinez	2023	5.9	0	NA
17130	A Memorial Service LLC, dba Animal Memorial Svcs	Gilroy	2024	5.9	0.56	0.05
17742	The Home Depot Store #6677	Gilroy	2023	5.9	0	NA
22634	Madrone Owner's Association	San Francisco	2011	5.9	0	NA
22744	City of Richmond WPC (Ferry Point Lift Station)	Richmond	2024	5.9	0	NA
23664	BCORE Colleman Owner LLC	San Jose	2023	5.9	0	NA
24828	Zayo Group, LLC	Santa Clara	2023	5.9	0.46	NA
202729	207740 - Harbor Bay	Alameda	2022	5.9	0	NA
202863	U-Box Moving & Storage of Concord	Concord	2022	5.9	0	NA
22157	Fortinet, Inc	Sunnyvale	2013	5.89	0	NA
6426	Solano County Transit Operations	Vallejo	2017	5.8	0	NA
17407	Fisher Investments	San Mateo	2005	5.8	0	NA
17976	Byron Bethany Irrigation District	Byron	2008	5.8	0	NA
19716	City of San Jose Fire Station # 2 /Accts Payable	San Jose	2009	5.8	0	NA
203216	American Red Cross	San Leandro	2023	5.8	0	NA
15959	Comcast of San Leandro, Inc	Hayward	2023	5.7	0	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
22105	The Lodge at Morgan Hill c/o Buckingham Property	Morgan Hill	2013	5.7	0	NA
23742	Amazon com Services Inc - OAK5	Newark	2017	5.7	0	NA
100146	Costco Gasoline #482	Richmond	1999	5.7	NA	NA
200650	Station 6 on Oak Grove - Fire Protection District	Menlo Park	2017	5.7	0	NA
202846	Hyatt Centric Hotel - Santa Clara	Santa Clara	2023	5.7	0	NA
13026	Pacific Gas & Electric	Fairfield	2008	5.6	0	NA
19248	Kistler Vineyards	Sebastopol	2008	5.6	0	NA
22201	BXP Mission 535 LLC c/o Boston Properties Limited	San Francisco	2014	5.6	0	NA
23984	4700 Old Ironsides Drive LLC	Santa Clara	2003	5.6	0.9	NA
15330	San Jose Water Co , Batista	San Jose	2003	5.5	0	NA
19580	Peralta Community Colleges District Admin Center	Oakland	2009	5.43	0	NA
21775	Central Concrete Supply Inc	San Francisco	2017	5.43	0.76	0.09
202203	B Cellars Winery	Napa	2022	5.4	0	NA
16725	AT&T Mobility/AT&T Services	Concord	2005	5.36	0	NA
18039	Cisco Systems Inc	San Jose	2008	5.3	0	NA
22746	Fox Television Stations, Inc , on behalf of KTVU	Oakland	2012	5.3	NA	NA
22433	New Cingular Wireless PCS, dba AT&T Mobility	Pleasant Hill	2014	5.2	0	NA
24380	Corteva Agriscience - Pittsburg Operations	Pittsburg	2001	5.2	0.18	NA
200634	AvalonBay Communities, Inc.	Emeryville	2017	5.2	0	NA
1403	Santa Rosa Water - Laguna Treatment Plant	Santa Rosa	2012	5.1	0.02	NA
14536	Santa Clara Valley Water District - PWTP	San Jose	2010	5	0	NA
17326	City of Santa Clara, Park Service Ctr	Santa Clara	2021	5	0	NA
22869	Northland Control System	Fremont	2015	5	0	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
23622	Vision Recycling Benicia	Benicia	2002	5	0.9	NA
15071	Pacific Bell	Sausalito	2005	4.9	NA	NA
15455	Marin Municipal Water District	Novato	2003	4.9	NA	NA
16200	The Gymboree Corporation	San Francisco	2004	4.9	0.9	NA
19472	Northgate Mall	San Rafael	2009	4.9	0	NA
23889	WaveDivision Holdings LLC	San Francisco	2012	4.9	0	NA
202584	City of Alameda - Pump Station #24	Alameda	2022	4.9	0	NA
21421	San Luis & Delta Mendota Water Authority (SLDMWA)	Livermore	2012	4.8	0	NA
21812	City of Santa Rosa	Santa Rosa	2023	4.8	0	NA
24042	Vantage Data Centers Management Co	Santa Clara	2024	4.8	0	0.02
200602	City of Napa - Fire Station No. 5	Napa	2017	4.8	0	NA
2320	Oak View Memorial Park	Antioch	2016	4.7	0.99	0.74
13721	EBMUD, San Pablo Water Treatment Plant	Kensington	2020	4.7	0	NA
19550	Chabot Las Positas CC District	Livermore	2012	4.7	0	NA
202980	Country Manor Lift Station SLS-10	Santa Rosa	2023	4.7	0	NA
15544	Kaiser Permanente	Redwood City	2013	4.6	0	NA
24097	706 Mission Center Association	San Francisco	2018	4.6	0	NA
200783	Prime Now LLC-USF4	Brisbane	2017	4.6	0	NA
568	San Francisco South East Treatment Plant	San Francisco	1990	4.5	0	NA
12197	United Airlines, Inc	San Francisco	2004	4.5	0.9	0
13335	San Jose Water Co-3Mile	San Jose	2012	4.5	0	0
14463	City of Burlingame	Burlingame	2021	4.5	0	NA
200833	The Grad Student Housing	San Jose	2019	4.5	0	NA
203063	Red Top Pump Station (City of Fairfield)	Fairfield	2023	4.5	0	NA
14419	City of Millbrae	Millbrae	2024	4.4	0	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
15561	Comcast Cable Corporation	Fairfield	2003	4.4	0	NA
20792	City of Morgan Hill (Jackson Booster)	Morgan Hill	2024	4.4	0	NA
20794	City of Morgan Hill (C Lift Station)	Morgan Hill	2023	4.4	0	NA
23038	Baxter Healthcare Inc	Hayward	2013	4.4	0	NA
861	San Mateo Water Quality Control Plant	San Mateo	1989	4.3	0	NA
1082	Queen of the Valley Medical Center	Napa	2010	4.3	0.9	NA
2440	Sequoia Hospital / Dignity Health	Redwood City	2011	4.3	0.9	NA
15895	Heritage Estates/Sundt Construction, Inc	Livermore	2004	4.3	0	NA
20527	Oakland Unified School District	Oakland	2025	4.3	0	0.79
200563	Toyota Research Institute	Los Altos	2018	4.3	0	NA
12231	City of American Canyon	American Canyon	2021	4.26	0	NA
23132	1634 Pine Street LLC	San Francisco	2015	4.2	0	NA
24652	Zoetis, Inc	Union City	2024	4.2	0	0
25038	NASH Holland 24th and Waverly Investors LLC	Oakland	2022	4.2	0	NA
200664	MTII LLC	Sunnyvale	2018	4.2	0	NA
202020	META	Sunnyvale	2018	4.2	0	NA
1502	O'Connor Hospital	San Jose	2012	4.1	0	NA
1634	Napa State Hospital	Napa	1990	4.1	NA	NA
13521	Pacific Bell	San Francisco	2006	4.1	0	NA
13598	Comcast	San Jose	2018	4.1	0	NA
18808	Verizon Wireless (Orwood Tract)	Brentwood	2008	4.1	0	NA
19141	SJC Fuel Company, LLC	San Jose	2009	4.1	0	NA
200429	Yotel - SF	San Francisco	2017	4.1	0	NA
1209	Union Sanitary District	Union City	1989	4	0.03	NA
5095	Vasco Road Landfill	Livermore	1991	4	0.44	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
8664	Crockett Cogeneration, LLC	Crockett	1991	4	NA	NA
12765	MCI,dba Verizon Business	Oakland	2000	4	NA	NA
14724	Sewerage Agency of Southern Marin	Mill Valley	2013	4	0	NA
15595	Golden Gate Ferry	Larkspur	2002	4	NA	NA
15789	City of Brentwood	Brentwood	2004	4	NA	NA
20999	Lowe's HIW, Inc	Fairfield	2011	4	0	NA
22626	Thermo Fisher Scientific	Pleasanton	2002	3.91	0	NA
778	San Jose-Santa Clara Regional Wastewater Facility	San Jose	1991	3.9	0	NA
13471	Pacific Bell	Half Moon Bay	2002	3.9	NA	NA
23580	One Rincon Tower 2 Association	San Francisco	2014	3.9	0	NA
111933	Costco Gasoline #1042	Redwood City	2008	3.9	0	NA
202121	Impossible Foods - Pilot Plant	Redwood City	2021	3.9	0	NA
25095	SF South Bay Shoreline Reach 1 & 2/3	San Jose	2022	3.88	0	NA
112497	Mash Gas & Food Orinda	Orinda	2021	3.84	0.03	NA
100369	Chevron Gas Station	Mill Valley	2021	3.83	0.02	NA
653	Central Marin Sanitation Agency	San Rafael	1989	3.8	0	NA
1067	Oro Loma Sanitary District	San Lorenzo	1989	3.8	0.01	NA
3613	UCSF Health St.Mary's Hospital	San Francisco	2012	3.8	0	NA
111081	505 Petroleum INC	Daly City	2021	3.8	0.02	NA
200493	CCSF - OCME	San Francisco	2017	3.8	0	NA
200396	Linkedin Corporation	Mountain View	2019	3.7	0	NA
201049	Boehringer-Ingelheim, Fremont	Fremont	2020	3.7	0	NA
202119	PATC 1810 Embarcadero	Palo Alto	2021	3.7	0	NA
202972	Southline Phase 1 Building 1	South San Francisco	2025	3.7	0	0
203290	Oakmont Lift Station SLS-17	Santa Rosa	2024	3.7	0	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
2087	St Francis Memorial Hospital	San Francisco	2012	3.6	0	NA
9183	Napa-Vallejo Waste Management Authority	Napa	2003	3.6	0.9	NA
14369	Fisica	San Mateo	2005	3.6	0	NA
19465	RNM Properties	Petaluma	2004	3.6	NA	NA
22595	Augustine Bowers LLC c/o The Irvine Company LLC	Santa Clara	2016	3.6	0	NA
25065	Stanford University-Middle Plaza Office	Menlo Park	2022	3.6	0	NA
200406	Coastside County Water District	Half Moon Bay	2016	3.6	0	NA
200407	Coastside County Water District	Half Moon Bay	2017	3.6	0	NA
202071	Westlake Urban Building	San Mateo	2020	3.6	0	NA
202274	Rancho de Calistoga	Calistoga	2022	3.6	0	NA
202641	MedVet Silicon Valley	San Jose	2022	3.6	0	NA
13528	Pacific Bell	San Jose	2012	3.5	0	0
14992	Visa Land Management IV	Foster City	2002	3.5	NA	NA
17183	Novato Fire District	Novato	2005	3.5	0	NA
201378	Four Seasons Resort & Residences Napa Valley	Calistoga	2023	3.5	0	0.72
202382	SJFD TRAINING CENTER	San Jose	2025	3.5	0	NA
202724	San Bruno Recreation & Aquatic Center	San Bruno	2022	3.5	0	NA
51	United Airlines, Inc	San Francisco	1989	3.4	0.11	NA
2932	Cypress Lawn Cemetery Association	Colma	2014	3.4	0.6	0.99
5876	South San Francisco-San Bruno Water Quality Plant	South San Francisco	1989	3.4	0.13	NA
11431	City of Oakland Public Works Agency	Oakland	2006	3.4	0	NA
12517	The Presidio Trust	San Francisco	2012	3.4	0	NA
20023	Sunset Retoria	Benicia	2010	3.4	0.31	0.75
21152	Pleasanton Trucking, Inc	Livermore	2024	3.4	0.05	0.02

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
22683	TSMC North America	San Jose	2014	3.4	0	NA
23706	AXIS HOA	San Jose	2008	3.4	0	NA
201412	Synopsys Pathline Building 1	Sunnyvale	2023	3.4	0	NA
202738	Fire Station 16	Dublin	2022	3.4	0	NA
14825	Federal Aviation Administration	Mill Valley	2008	3.3	0	NA
20428	Kaiser Hospital	San Leandro	2010	3.3	0	NA
21601	San Francisco Marriott Fisherman's Wharf	San Francisco	2024	3.3	0	NA
21612	CCSF - 25VN	San Francisco	2018	3.3	0	NA
25075	Mission Rock Parcel G LLC	San Francisco	2022	3.3	0	0.01
201778	Contra Costa County Administration Building	Martinez	2020	3.3	0	NA
202828	Tasman ASL PropCo LLC	Santa Clara	2023	3.3	0	0.05
2315	Duggan's Mission Chapel	Sonoma	2019	3.2	0.5	0.55
8679	Kaiser Permanente	Richmond	2012	3.2	0	NA
13900	Comcast Communications	Daly City	2004	3.2	0	NA
19025	City of Fremont Development	Fremont	2008	3.2	0	NA
19323	555 YVR, LLC	Walnut Creek	2008	3.2	0	NA
200361	Webster House Health Center	Palo Alto	2016	3.2	0	NA
200439	Mosser Company	San Francisco	2017	3.2	0	NA
200652	The Exchange	San Francisco	2018	3.2	0	NA
201782	Elyse Winery	Napa	2019	3.2	0	NA
202964	Redwood Bay Biotech. LLC	Redwood City	2023	3.2	0	NA
16502	City of Brentwood	Brentwood	2006	3.1	0	NA
17649	Alexandria Real Estate Equities, Inc	South San Francisco	2018	3.1	0	NA
18938	City of Palo Alto-San Francisquito Pump Station	Palo Alto	2008	3.1	0	NA
19088	Avalon Bay	Union City	2008	3.1	0	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
19162	BMR-Pacific Research Center, LP	Newark	2003	3.1	0.9	NA
19170	North Coast County Water District	San Bruno	2008	3.1	0	NA
19880	Bear Gulch Creek Partners LLC	Woodside	2010	3.1	NA	NA
19898	Menlo Park Portfolio c/o Tarlton Properties	Menlo Park	2022	3.1	0	NA
20126	Evocative	Santa Clara	2013	3.1	NA	NA
21193	Comcast Cable	Santa Clara	2020	3.1	0	NA
23344	First Republic Bank	San Francisco	2016	3.1	0	NA
23586	Bay Alarm-Concord	Concord	2016	3.1	0	NA
202290	California Water Service Co. BG Station 7	Portola Valley	2021	3.1	0	NA
13556	Pacific Bell	Vallejo	2003	3	0	NA
14484	Pacific Bell	Danville	2002	3	0.9	0
20905	S E Combined Services of California	Oakland	2017	3	0.98	0.89
22839	Apple, Inc	Santa Clara	2015	3	0.01	0.06
201384	Pure Storage, Inc.	Santa Clara	2018	3	0	NA
201628	Rigetti Computing	Berkeley	2019	3	0	NA
24758	Amazon Data Services, Inc	Santa Clara	2023	2.93	0	0.05
2457	Regional Medical Center of San Jose	San Jose	2011	2.9	0	NA
13332	Level 3 Communications	San Martin	2001	2.9	0	NA
18429	Sonoma County Human Services Building	Santa Rosa	2007	2.9	0	NA
20139	Potrero Hills Energy Producers, LLC	Suisun City	2011	2.9	0.78	0.98
20228	Amazon Data Services, Inc	Hayward	2014	2.9	0.03	NA
21295	California Hotel	Oakland	2012	2.9	0	NA
22442	Azure Apartment Complex	San Francisco	2014	2.9	NA	NA
201511	Bay Area Rapid Transit	Oakland	2018	2.9	0	NA
202327	Longfellow Real Estate Partners	Palo Alto	2023	2.9	0	0.9
202683	1307 66th, LLC	Emeryville	2022	2.9	0	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
203237	Pimentel Place	Hayward	2024	2.9	0	NA
203236	Home2 Suites By Hilton San Jose South	San Jose	2024	2.86	0.01	NA
15291	Comcast Cable Corporation	Sebastopol	2003	2.84	NA	NA
3162	Pacific Gas and Electric Company	Concord	2002	2.8	0	NA
19102	Verizon Wireless-Fairfield MSC	Fairfield	2008	2.8	0	NA
20504	Las Gallinas Valley Sanitary District	San Rafael	2011	2.8	0	NA
22102	Southern Wine And Spirits	Union City	2013	2.8	0	NA
22854	Hillstone Restaurant Group	Saint Helena	2015	2.8	0	NA
109899	Costco Wholesale #423	Sunnyvale	2019	2.8	0	NA
200402	San Jose Water Company	San Jose	2017	2.8	0	NA
201800	City of Palo Alto	Palo Alto	2022	2.8	0	0.01
201806	Amazon USF1 Santa Clara	Santa Clara	2019	2.8	0	NA
202768	Pear Avenue Phase II	Mountain View	2022	2.8	0	NA
112321	APRO, LLC dba United Pacific #5440	Castro Valley	2021	2.77	0.02	NA
25206	Apple Inc	Sunnyvale	2022	2.7	0	0
111713	Costco Gasoline #1004	San Jose	2006	2.7	0.01	NA
201406	Residence Inn Berkeley	Berkeley	2021	2.7	0	NA
202870	SJW Mann Station	Cupertino	2023	2.7	0	NA
203395	S.S. Heritage Inn of Pleasanton, LLC	Pleasanton	2024	2.7	0	NA
18486	San Jose Fire Dept	San Jose	2007	2.6	0	NA
23162	Juniper Hotel Cupertino	Cupertino	2003	2.6	0	NA
24769	Ross Stores	Dublin	2003	2.6	0	NA
100108	Costco Fuel Facility (Loc. 148)	San Jose	2017	2.6	0	NA
200541	Workday	Pleasanton	2017	2.6	0	NA
200756	Hampton Inn San Jose	San Jose	2019	2.6	0	NA
6390	Evergreen Cemetery	Oakland	2008	2.5	0.9	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
13399	KLA Corporation	Milpitas	2012	2.5	0.01	0
13651	Mettler-Toledo Rainin,LLC	Oakland	2002	2.5	NA	NA
18462	Stanford Medicine Outpatient Center	Redwood City	2008	2.5	0	NA
19558	One Kearny LLC	San Francisco	2009	2.5	0	NA
20079	Menlo Park Portfolio II, LLC	Menlo Park	2016	2.5	0	NA
22407	Kistler Winery-Tasting Room	Forestville	2014	2.5	0	NA
23638	Kenwood Fire District	Kenwood	2016	2.5	0	NA
202957	950 Page Mill Road	Palo Alto	2023	2.5	0	NA
3887	San Mateo Medical Center	San Mateo	2007	2.4	0.9	NA
14314	Solano County Facilities	Fairfield	2017	2.4	0	NA
15653	The Home Depot Store #1076	Brentwood	2005	2.4	0.9	NA
17657	Lodi Gas Storage LLC	Suisun City	2008	2.4	0.01	0.03
17986	Joseph Phelps Vineyards, LLC	Freestone	2006	2.4	0	NA
202283	Caymus Suisun Winery	Fairfield	2023	2.4	0	NA
202951	Albany Village Graduate Student Housing	Albany	2023	2.4	0	NA
203097	Rubicon	San Francisco	2023	2.4	0	NA
24535	NTT Global Data Centers Americas, Inc	Santa Clara	2020	2.31	0	NA
13867	City of SSF Water Quality Plant	South San Francisco	2004	2.3	NA	NA
14775	Level 3 Communications	San Francisco	2002	2.3	0	NA
16846	T-Mobile - Santa Clara Satellite	Santa Clara	2022	2.3	0	0.01
200915	Hillsdale Shopping Center- North Block	San Mateo	2018	2.3	0	NA
201578	Inglenook Winery	Rutherford	2019	2.3	0	NA
201851	MILTENYI BIOTEC	San Jose	2020	2.3	0	NA
202104	Azure Acres Recovery Center	Sebastopol	2022	2.3	0	NA
202631	1150 Terra Bella	Mountain View	2022	2.3	0	NA
202812	Fire Station 55	San Rafael	2023	2.3	0	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
202848	Tiffany Court of Walnut Creek	Walnut Creek	2022	2.3	0	NA
202878	1173 Coleman Avenue (B3)	San Jose	2023	2.3	0	NA
202992	Berkeley Commons	Berkeley	2023	2.3	0	NA
203203	Collab Fertility, Inc.	Walnut Creek	2023	2.3	0	NA
13695	Lowe's HIW, Inc	Antioch	2002	2.2	0	NA
14964	Wells Fargo Bank	Fremont	2014	2.2	0	NA
15409	Mattson Technology, Inc	Fremont	2004	2.2	0	NA
16552	Contra Costa Water District	Concord	2005	2.2	NA	NA
18031	Kaiser Permanente	Napa	2012	2.2	0	NA
19931	K2 Pure Solutions Nocal, LP	Pittsburg	2009	2.2	0.03	0.38
21051	City of Santa Rosa	Santa Rosa	2021	2.2	0	NA
22135	S F Bay Area Rapid Transit District	Oakland	2013	2.2	0	NA
201768	Zeiss Innovation Center California	Dublin	2020	2.2	0	NA
202826	Fire Station 54	San Rafael	2022	2.2	0	NA
203158	PG III 250 East Grand, LLC	South San Francisco	2023	2.2	0	NA
203223	Target Store - T0324	San Jose	2025	2.2	0	NA
13923	Pacific Bell Corporation	San Francisco	2003	2.1	0.9	0
17584	Alexandria Real Estate Equities, Inc	South San Francisco	2006	2.1	0	NA
18013	200 Paul Avenue LLC, c/o Digital Realty Trust	San Francisco	2012	2.1	0	NA
19005	Verizon Wireless	Sonoma	2008	2.1	0	NA
19539	CoreSite Real Estate	Santa Clara	2024	2.1	0	NA
20775	SYNNEX Corporation	Fremont	2015	2.1	0	NA
21049	City of Santa Rosa	Santa Rosa	2023	2.1	0	NA
21370	TransitAmerica Services, Inc	San Francisco	2011	2.1	0	NA
109785	Contra Costa County Fire Station #81	Antioch	2024	2.1	0	NA
200623	Stonefire Apartments	Berkeley	2017	2.1	0	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
201165	CoreSite Real Estate 3045 Stender, LP	Santa Clara	2024	2.1	0	NA
202356	Pacific Research Center	Newark	2023	2.1	0	NA
202592	Ascend Clinical LLC	Sunnyvale	2022	2.1	0	NA
202795	Bascom Assisted Living Facility	San Jose	2023	2.1	0	NA
203441	The Lafayette	Santa Clara	2024	2.1	0	NA
203450	Menlo Corporate Center	Menlo Park	2024	2.1	0	NA
20588	CSAA Insurance Group	Walnut Creek	2014	2.09	0	NA
25215	Twelve R&D Facility	Alameda	2023	2.06	0	NA
55	Lockheed Martin Corporation	Sunnyvale	1990	2	0.02	NA
2721	City of Palo Alto Landfill	Palo Alto	1989	2	NA	NA
4134	Irvington Memorial Cemetery	Fremont	2006	2	0.9	NA
16853	Town of Windsor	Windsor	2004	2	NA	NA
20233	488 Almaden Owner LLC	San Jose	2007	2	0	NA
20720	San Francisco Public Utilities Commission	San Francisco	2020	2	0	NA
22380	City of Brentwood	Brentwood	2014	2	0.01	NA
24421	1500 Space Park Drive LLC	Santa Clara	2022	2	0	0.02
202600	30680 Huntwood	Hayward	2022	2	0	NA
202800	City of Alameda	Alameda	2023	2	0	NA
203121	City of Antioch Water Treatment Plant	Antioch	2023	2	0	0
15889	Dublin San Ramon Services District	Dublin	2004	1.96	0	NA
22410	ROMEL 400 SECR, LLC	San Mateo	2013	1.95	0	NA
19470	Westfield Valley Fair	Santa Clara	2018	1.9	0	NA
19953	Santa Clara County Fire Dept	Los Gatos	2022	1.9	0	NA
22001	FedEx Freight, Inc	Hayward	2013	1.9	0	NA
22851	222 Second Street Owner, LP	San Francisco	2015	1.9	0	NA
23276	San Leandro Tech Campus	San Leandro	2017	1.9	0	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
24324	Verb Surgical Inc	Santa Clara	2015	1.9	0	NA
100447	B & C Gas Mini Mart	Livermore	2022	1.9	0.01	NA
203164	Hampton Inn and Suites	San Mateo	2023	1.9	0	NA
12969	Verizon Business - SBEZCA	San Jose	2001	1.8	NA	NA
19924	The Irvine Company	San Jose	2010	1.8	0	NA
23653	939 Ellis Street, LLC	San Francisco	2017	1.8	0	NA
201658	Allogene Therapeutics, Inc.	South San Francisco	2019	1.8	0	NA
201827	Revolution Medicines, Inc.	Redwood City	2019	1.8	0	NA
203422	Courtyard by Marriott	Pittsburg	2024	1.8	0	NA
17306	Sonoma County Water Agency-Sonoma Booster Station	Santa Rosa	2020	1.74	0	NA
13062	Sysco San Francisco, Inc	Fremont	2001	1.7	0.9	0
13226	The Home Depot Store #1017	Hayward	2001	1.7	0	NA
16333	Verizon Wireless - Landess	Milpitas	2004	1.7	NA	NA
20656	City Of Brentwood	Brentwood	2020	1.7	0	NA
21170	Alexandria Real Estate Eq , Inc	South San Francisco	2018	1.7	0	NA
21348	Apple Inc	Sunnyvale	2012	1.7	0	NA
21535	Gap, Inc	San Francisco	2015	1.7	0	NA
21708	Clorox Services Company	Pleasanton	2013	1.7	NA	NA
111956	Poppy Old SF Road	Sunnyvale	2023	1.7	0.01	0.39
201802	Snowflake	Menlo Park	2019	1.7	0	NA
202363	Market Street Development	San Pablo	2021	1.7	0	NA
202364	The Emery (500 Apartments & Retail)	Emeryville	2022	1.7	0	NA
202450	1304 El Camino Real Apartments	Redwood City	2022	1.7	0	NA
202512	The Forum at Rancho San Antonio	Cupertino	2022	1.7	0	NA
202581	GeneFab, LLC	Alameda	2022	1.7	0	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
202671	Rowland Plaza Pump Station	Novato	2022	1.7	0	NA
202963	AT&T - FA10095813 - East Fairfield	Suisun City	2023	1.7	0	NA
21891	Santa Clara County Roads and Airports Department	Livermore	2013	1.6	0	NA
22094	American Tower LLC - 89375- Starr Canyon Site	Morgan Hill	2013	1.6	0	NA
22785	Kilroy Realty Corporation	San Francisco	2014	1.6	0	NA
23616	Central Wolfe LLC	Sunnyvale	2016	1.6	0	NA
24188	Lyten	San Jose	2020	1.6	0.03	0.97
24541	San Francisco Recreation & Park Department	San Francisco	2022	1.6	0.01	0.96
109105	Rotten Robbie #67	San Jose	2024	1.6	0.01	0.51
111822	Mobil SS# 68171	Napa	2023	1.6	0.01	0.84
202171	TBUSA	San Jose	2021	1.6	0	NA
17864	Peralta Community College District	Berkeley	2006	1.59	0	NA
17573	San Francisco Municipal Railway	San Francisco	2006	1.58	0	NA
3273	Pacific Union College	Angwin	2004	1.5	0.9	NA
7189	Delta Diablo Sanitation District	Antioch	2006	1.5	0	NA
9313	St Luke's Hospital A/P,CPMC-STL Campus	San Francisco	2016	1.5	0	NA
21402	Forty Niners Stadium, LLC	Santa Clara	2012	1.5	0	NA
22474	Argent Materials Inc	Oakland	2023	1.5	0.54	0.01
23611	Google, Inc	San Francisco	2016	1.5	0	NA
24514	Bay Club Walnut Creek, LLC	Walnut Creek	2002	1.5	0	NA
200633	Bolb, Inc.	Livermore	2017	1.5	0	NA
201246	Amazon.com Services LLC - SCA3	Richmond	2025	1.5	0	NA
201874	30 Otis	San Francisco	2020	1.5	0	NA
202310	Guardant Health at 3100 Hanover Palo Alto	Palo Alto	2021	1.5	0	NA
202691	Vantage	South San Francisco	2022	1.5	0	0.01

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
202706	Shannon Community Center	Dublin	2022	1.5	0	NA
202867	1620 South Loop Road	Alameda	2023	1.5	0	NA
203042	Silicon Valley Surgery Center	Campbell	2023	1.5	0	NA
203147	6475 Christie Avenue	Emeryville	2023	1.5	0	NA
13289	Los Esteros Critical Energy Facility	San Jose	2001	1.4	0.01	NA
16411	City of Alameda / Public Works Dept	Alameda	2007	1.4	0.9	NA
16724	New Cingular Wireless dba AT&T Mobility	Santa Clara	2024	1.4	0	0
18875	Bay Street Apartments by Windsor	Emeryville	2005	1.4	NA	NA
19381	Blue Line Sterilization Services	Novato	2024	1.4	0	0.07
19673	Verizon Wireless(Jameson Canyon)	Suisun City	2009	1.4	0	NA
19803	San Jose Water Company	San Jose	2015	1.4	NA	NA
24126	Commercial Tree Care	San Jose	2024	1.4	0.02	0.07
24998	City of Santa Rosa	Santa Rosa	2021	1.4	0	NA
25053	Standford Health Care	Castro Valley	2020	1.4	0	NA
107273	Emeryville Chevron	Emeryville	2025	1.4	0.02	0.82
200348	West Bay Sanitary District	Portola Valley	2016	1.4	0	NA
201486	HCP LS Brisbane LLC c/o CBRE	Brisbane	2018	1.4	0	NA
201718	ARE - San Francisco No. 63, LLC	San Carlos	2019	1.4	0	NA
202081	Google, Inc.	Palo Alto	2020	1.4	0	NA
202507	Ritter Center	San Rafael	2022	1.4	0	NA
202591	10X Genomics	Pleasanton	2022	1.4	0	0
202649	Bret Harte Center	San Rafael	2022	1.4	0	NA
203143	Amazon.com Services - DSF8	Richmond	2023	1.4	0	NA
200601	GI ETS Shoreline LLC - 7000 Shoreline Ct	South San Francisco	2017	1.35	0	NA
633	Intel Corporation	Santa Clara	2025	1.3	0.29	0.09
12764	MCI dba Verizon Business	Dublin	2001	1.3	NA	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
14020	Prologis	San Francisco	2024	1.3	0	NA
15949	Fernwood	Mill Valley	2005	1.3	0.04	NA
16185	City of Belmont	Belmont	2004	1.3	0.9	NA
21386	Santa Rosa Jr College Campus (SRJC)	Petaluma	2012	1.3	0	NA
22307	Garre Winery Event Center	Livermore	2014	1.3	0	NA
22379	Preferred Freezer Services	San Leandro	2014	1.3	0	NA
24109	Ponte Gadea California LLC	San Francisco	2022	1.3	0	NA
25257	BMR-Gateway of Pacific III LP	South San Francisco	2021	1.3	0	0.04
112573	Kwik Serv	Walnut Creek	2022	1.3	0.01	NA
202776	Brittan West	San Carlos	2024	1.3	0	0
202780	Nkarta, Inc.	South San Francisco	2022	1.3	0	NA
202802	Livermore Hub	Livermore	2023	1.3	0	NA
203039	Amgen Inc.	South San Francisco	2021	1.3	0	NA
24914	Mainspring Energy, Inc.	Menlo Park	2021	1.21	0.11	0.84
15362	George Roberts	Atherton	2003	1.2	NA	NA
16248	Comcast of California IX Inc	Fremont	2015	1.2	0	NA
16795	Westfield San Francisco Center	San Francisco	2005	1.2	0.9	NA
18517	Verizon Wireless (St Helena)	Calistoga	2007	1.2	0	NA
18658	San Francisco Bay Bridge Toll Plaza	Oakland	2007	1.2	0	NA
18990	Phoenix American Inc	San Rafael	2008	1.2	NA	NA
22624	Golub Real Estate Corporation	San Francisco	2014	1.2	0	NA
22842	Contra Costa County Public Works Department	Martinez	2015	1.2	0	NA
24551	SFF 1650 Street LLC	Emeryville	2005	1.2	NA	NA
111185	Costco Gasoline #778	Fremont	2024	1.2	0.04	0.1
200822	Tech Corners Campus LLC	Sunnyvale	2018	1.2	0	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
201428	Alviso Storm Pump Station	San Jose	2018	1.2	0	NA
202715	Sequence Campus	Fremont	2022	1.2	0	NA
202766	Sonoma Valley Unified School District Office	Sonoma	2022	1.2	0	NA
202975	Piezzi Lift Station SLS-09	Santa Rosa	2023	1.2	0	NA
203436	LH Shoreline Apartments LP - 1170 Spruce St.	Mountain View	2024	1.2	0	NA
85	Western Digital Technologies Inc	San Jose	1989	1.1	0.01	NA
2025	University of San Francisco	San Francisco	2012	1.1	0.9	NA
13491	AT&T	Mountain View	2003	1.1	0	0
17073	T-Mobile - Oakland Switch	Oakland	2023	1.1	0	NA
18753	City of Santa Clara	Santa Clara	2007	1.1	NA	NA
20413	Hawthorne Plaza Assoc LLC	San Francisco	2014	1.1	NA	NA
24089	TransMontaigne Operating LP	Martinez	2006	1.1	0.9	NA
24942	Samaritan Medical Center	San Jose	2021	1.1	0	0
111160	Los Gatos Mobil One	Los Gatos	2024	1.1	0	1.4
200376	Hyatt Place Emeryville	Emeryville	2016	1.1	0	NA
201807	Prime Now LLC-USF2	San Leandro	2019	1.1	0	NA
202304	VA Santa Rosa CBOC	Santa Rosa	2021	1.1	0	NA
202854	Redwood Credit Union - Napa Campus	Napa	2023	1.1	0	NA
203462	Cow Palace Arena & Event Center	Daly City	2025	1.1	0	NA
13518	SBC	San Francisco	2004	1.03	0	NA
11924	California Pacific Medical Center	San Francisco	2012	1	0	NA
12958	Los Gatos Memorial Park	San Jose	2023	1	0.04	0.2
13108	Vallejo Sanitation & Flood Control Dist	Vallejo	2004	1	0	NA
13333	Saratoga Retirement Community	Saratoga	2001	1	0	0
13825	San Jose Water Co , Montevina	Los Gatos	2016	1	0	NA
15284	City of Dublin	Dublin	2022	1	0	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
15458	City of Pinole Fire	Pinole	2003	1	0	NA
17461	City of Redwood City	Redwood City	2012	1	0	NA
19090	San Francisco Public Utilities Commission	San Francisco	2010	1	NA	NA
19405	Fairfield Fire Department - Station 37	Fairfield	2009	1	0	NA
20663	City of Cupertino	Cupertino	2012	1	NA	NA
25035	CelLink Corporation	San Carlos	2022	1	0.06	0.06
106562	Fuel 24:7 @ Miller Ave	Mill Valley	2021	1	0.01	NA
201699	Microsoft Corporation	Mountain View	2019	1	0	NA
201727	SFPUC - Yerba Buena Island	San Francisco	2022	1	0	NA
202626	Page Street Studios	San Jose	2022	1	0	NA
200600	Sewerage Agency of Southern Marin	Mill Valley	2017	0.99	0	NA
17950	City of Hayward Public Works Utilities	Hayward	2006	0.98	0	NA
203393	1776 Laurel St., San Carlos	San Carlos	2024	0.98	0.01	0
200502	Fortinet	Union City	2017	0.97	0	NA
21041	City of Santa Rosa	Santa Rosa	2023	0.96	0	NA
2227	Mills Peninsula Medical Center	Burlingame	2009	0.95	0	NA
21978	Meta Platforms, Inc. - FRE 126	Fremont	2013	0.95	0	NA
20196	CPFB Tenant, LLC/Cavallo Point Lodge	Sausalito	2010	0.94	0	NA
203049	The Surgery Center	Oakland	2023	0.93	0	NA
24972	Genomic Health, Inc	Redwood City	2009	0.91	0	NA
203244	Avalon West Dublin	Dublin	2023	0.91	0	NA
1464	Acme Fill Corporation	Martinez	1991	0.9	0.09	NA
2039	Potrero Hills Landfill, Inc	Suisun City	1991	0.9	0.09	NA
2246	Waste Management of Alameda County	Fremont	1991	0.9	0.09	NA
2266	Browning-Ferris Industries of CA Inc	Half Moon Bay	1991	0.9	0.09	NA
3464	City of Santa Clara	Santa Clara	1991	0.9	0.09	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
5498	Randall-Bold Water Treatment Plant	Oakley	2010	0.9	0	NA
9013	International Disposal Corp of CA	Milpitas	1991	0.9	0.09	NA
11247	Clover Flat Resource & Recovery Park	Calistoga	1991	0.9	0.09	NA
13197	Town of Discovery Bay	Discovery Bay	2001	0.9	NA	NA
14316	Judicial Council of California, JCC 48-A1	Fairfield	2010	0.9	0	NA
19127	Parkmerced Investors LLC	San Francisco	2008	0.9	0	NA
19817	County of Marin, MER, Bolinas	Bolinas	2008	0.9	0	NA
24270	Sutter Bay Hospitals dba Alta Bates Summit Med Ctr	Berkeley	1994	0.9	0.02	NA
200628	City of Union City	Union City	2017	0.9	0	NA
202654	Alexza Pharmaceuticals	Fremont	2022	0.9	0	NA
19187	Walnut Creek Endoscopy & Surgery Center	Walnut Creek	2008	0.88	0	NA
21916	The Maude & Mathilda R&D c/o Kilroy Realty L P	Sunnyvale	2013	0.87	0	NA
23738	Chinatown Community Development Center	San Francisco	2007	0.87	0	NA
202646	Oakland 11	Oakland	2022	0.86	0	NA
202933	2895 Seventh Street	Berkeley	2023	0.86	0	NA
15906	1035 Market Street	San Francisco	2004	0.85	0	NA
24317	Planetary Ventures	Mountain View	2019	0.85	0	NA
18915	City of San Jose Municipal Water	San Jose	2024	0.84	0	NA
20515	Santa Clara Unified School District	Santa Clara	2021	0.84	0	NA
13949	Amazon.com Services LLC - DSJ9	Oakland	2002	0.83	NA	NA
24096	Pacific Oak SOR 353 Sacramento St, LLC	San Francisco	2021	0.83	0	NA
202661	Iron Ox GH1X	Gilroy	2022	0.82	0	NA
202718	Extra Space Storage	Alameda	2022	0.82	0	NA
20461	The Pyramid Center	San Francisco	2017	0.81	0	NA
15507	Point Richmond R & D Associates	Richmond	2007	0.8	0	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
22305	UE-00101CA, LLC	San Jose	2014	0.8	0.01	0
22938	Visual Concepts Entertainment	Novato	2015	0.8	0	NA
24187	Shimmick/Danny's Joint Venture	Mill Valley	2019	0.8	NA	NA
111362	Fast Gas & Mini Mart	San Leandro	2021	0.8	0	NA
4007	Central Contra Costa Sanitary District	Orinda	2021	0.79	0	0
23815	Pacific Park Plaza Homeowner Assoc	Emeryville	2017	0.79	0.01	NA
202660	Peninsula Innovation Point	Burlingame	2022	0.79	0	NA
202784	BTC III San Jose Logistics Center LP	San Jose	2022	0.79	0	NA
202803	GI ETS Hayward LLC	Hayward	2022	0.79	0	NA
203667	Spartan Village on the Paseo	San Jose	2025	0.79	0	NA
21046	City of Santa Rosa	Santa Rosa	2023	0.77	0	NA
200744	Fremont Bank Livermore Operations	Livermore	2021	0.75	0	NA
25149	Google Caribbean	Sunnyvale	2022	0.74	0	0.01
202163	Bionova Scientic Inc.	Fremont	2024	0.74	0	0.37
203048	Target Store - T1426	San Jose	2023	0.74	0	NA
200461	New Cingular Wireless PCS, LLC dba AT&T Mobility	Livermore	2017	0.73	0	NA
203282	1953 Concourse Dr LLC	San Jose	2024	0.73	0	NA
203345	Hummingbird ESS LLC	San Jose	2024	0.73	0	NA
203012	950 Marina Village Parkway	Alameda	2023	0.72	0	NA
23817	Matheson Tri-Gas, Inc	Richmond	2017	0.71	0	NA
202804	STC Venture Block 3RWS, LLC	Sunnyvale	2023	0.71	0	0
203120	Allen Brothers NorCal	Richmond	2023	0.71	0	NA
13589	Pacific Bell	Sonoma	2006	0.7	NA	NA
13742	East Bay Municipal Utility Dist	Richmond	2005	0.7	0	NA
14475	City of Burlingame	Burlingame	2012	0.7	0	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
18136	Russell City Energy Co, LLC	Hayward	2007	0.7	0.01	0.02
22277	Union Investment Real Estate GmbH	San Francisco	2007	0.7	0	NA
200845	IKEA	American Canyon	2018	0.7	0	NA
203149	2460 Embarcadero	Palo Alto	2024	0.7	0	NA
17248	City of Santa Clara - Laurelwood Storm	Santa Clara	2022	0.69	0	0
203485	Vine & Fig	St. Helena	2024	0.68	0	NA
202531	3000 Hanover	Palo Alto	2023	0.67	0	NA
200373	Calico Laboratories	South San Francisco	2016	0.66	0	NA
202495	Genesis Marina	Brisbane	2022	0.65	0	0.01
202620	Sonoma County Indian Health Project, Inc.	Santa Rosa	2022	0.65	0	NA
202896	T-Mobile - BA62012S	Oakland	2023	0.63	0	NA
202506	Logisticenter Fairfield	Fairfield	2023	0.61	0	NA
202678	100 Altair Way	Sunnyvale	2022	0.61	0	NA
7421	Pacific Bell	Fremont	2002	0.6	NA	NA
17428	Quadrus Sand Hill, LLC	Menlo Park	2005	0.6	NA	NA
201704	NFD - Station 64	Novato	2019	0.6	0	NA
21047	City of Santa Rosa	Santa Rosa	2023	0.59	0	NA
23682	Elixir Medical Corporation	Milpitas	2016	0.59	0	NA
111299	Mobile Gas N Car Wash	Walnut Creek	2022	0.59	0.01	NA
201401	AP3-SF3 CT NORTH LLC	South San Francisco	2018	0.59	0	NA
203071	Morningstar DeAnza Memory Care	San Jose	2023	0.59	0	NA
203109	Dumbarton Circle Spec Suite	Fremont	2023	0.59	0	NA
21183	City of Santa Rosa	Santa Rosa	2023	0.58	0	NA
201882	ARE-San Francisco No. 65, LLC	South San Francisco	2020	0.57	0	NA
201964	Terreno Morton LLC	Newark	2024	0.57	0	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
202597	Marina Village Parkway Pump Station - 713 Marina Village Pkwy	Alameda	2023	0.57	0	NA
202807	Harbor Bay Pump Station	Alameda	2022	0.57	0	NA
203493	850 Marina Village Parkway	Alameda	2024	0.57	0	NA
202031	Palmaz Vineyards	Napa	2022	0.56	0	NA
202887	Vine Transit Maintenance Facility	Napa	2023	0.55	0	NA
200693	Amtrak	Oakland	2023	0.54	0	NA
202697	Allston Way - Warm Shell & Core	Berkeley	2022	0.54	0	NA
25115	Foundry 31 LLC	Berkeley	2022	0.53	0	0
202606	Twelve Benefit Corporation	Alameda	2022	0.53	0	NA
14950	Frontier California	Kenwood	2009	0.52	0	NA
23131	Sutter Health-CPMC VNC	San Francisco	2015	0.52	0	NA
202749	Vaxart, Inc.	South San Francisco	2022	0.52	0	NA
202879	CLPF GRP Uptown Menlo Park	Menlo Park	2023	0.52	0	NA
201879	7380 Morton	Newark	2020	0.51	0	NA
2885	Union Sanitary Dist, Newark PS	Newark	2007	0.5	NA	NA
21192	City of Dublin/Public Works	Dublin	2012	0.5	0	NA
23557	New Cingular Wireless PCS dba AT&T Mobility	Pacifica	2016	0.5	NA	NA
202998	1015 Atlantic Ave	Alameda	2023	0.5	0	NA
23274	OnTrac Logistics, Inc	Fremont	2016	0.49	0	NA
202056	FedEx Freight Livermore	Livermore	2020	0.49	0	NA
202930	1700 Dell Avenue	Campbell	2023	0.49	NA	NA
201630	Pacific Commons Owner LP	Fremont	2024	0.48	0	NA
25102	Uptown Broadway LLC	Oakland	2016	0.47	0	NA
25137	921 Howard	San Francisco	2022	0.47	0	NA
202454	Eat Just - Tenant Improvement	Alameda	2022	0.47	0	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
202695	Synthego Holdings, Inc.	Redwood City	2022	0.45	0	NA
201469	OLE Health South Napa Campus	Napa	2018	0.43	0	NA
202817	Amazon.com Services LLC - SCA2	Brisbane	2023	0.41	0	NA
202902	T-Mobile - SF64142S	Campbell	2023	0.41	0	NA
18451	Catholic Cathedral Corporation of the East Bay	Oakland	2007	0.4	0	NA
20838	New Cingular Wireless dba AT&T Mobility	Saint Helena	2015	0.4	0	NA
22058	KRE 1221 Broadway Owners LLC	Oakland	2001	0.4	0	NA
111865	Richmond 1001 Petroleum Inc	Richmond	2025	0.4	0	1
200347	1500 N California Blvd LLC	Walnut Creek	2016	0.4	0	NA
202708	GS MP Portal Owner, LLC.	Menlo Park	2022	0.4	0	NA
202835	220 Park Road	Burlingame	2022	0.39	0	NA
13986	City of Santa Rosa Utilities Dept	Santa Rosa	2023	0.38	0	NA
13987	City of Santa Rosa Utilities Dept	Santa Rosa	2023	0.38	0	NA
203153	San Ramon Property Owner LLC	San Ramon	2023	0.38	0	NA
21868	Chappellet Winery	Saint Helena	2013	0.37	0	NA
202532	1600 Harbor Bay Parkway	Alameda	2022	0.37	0	NA
202965	AT&T - FA10088156 - Hwy 101 - Lincoln	San Rafael	2023	0.37	0	NA
201737	Marcassin Wine	Windsor	2019	0.36	0	NA
202399	490 De Guigne Generator	Sunnyvale	2022	0.35	0	NA
202739	3450 Hillview	Palo Alto	2022	0.34	0	NA
15808	The Home Depot Store #8572	Morgan Hill	2025	0.33	0	0
18807	California Highway Patrol, Cordelia Insp Facility	Fairfield	2014	0.32	0	NA
202551	Amazon.com Services LLC - DFO3	Livermore	2023	0.32	0	NA
202785	PR Clawiter Hayward, LLC	Hayward	2022	0.31	0	NA
907	Central Contra Costa Sanitary District	Martinez	2012	0.3	0	NA

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
10327	Sutter Bay Hospitals dba Mills-Peninsula Health	San Mateo	2010	0.3	0	NA
18587	UC Hastings School of the Law	San Francisco	2019	0.3	NA	NA
22317	Thermo Fisher Scientific	Fremont	2014	0.3	NA	NA
24925	BioSquare Silicon Valley	San Jose	2021	0.3	0	NA
202136	BCDPF Bay Area Commerce Center Lease Management LLC	Livermore	2022	0.3	0	NA
202891	West 10 Warehouse	Redwood City	2023	0.3	0	NA
17710	3E Company/Regulatory Dept c/o Home Depot #6603	East Palo Alto	2023	0.29	0	NA
24447	DW LSP 550 TF, LLC	San Francisco	2023	0.29	0	NA
202900	T-Mobile - BA62062S	Fremont	2023	0.29	0	NA
201796	Prologis 6 Livermore	Livermore	2019	0.28	0	NA
202008	City of Newark	Newark	2020	0.27	0	NA
203015	TI Lot 10, LLC	San Francisco	2023	0.27	0	NA
24297	MCREF Rincon Hill, LLC	San Francisco	2019	0.26	0	NA
24427	EPZ, Inc	Santa Clara	2024	0.26	0.35	0.53
203384	University of CA San Francisco - Peninsula Outpatient Center	Burlingame	2024	0.26	0	0.08
14024	San Ramon Valley Fire District - Station #34	San Ramon	2024	0.25	0	0
20204	City of San Mateo	San Mateo	2022	0.25	0	0
203161	Logisticenter At Enterprise	Hayward	2023	0.25	0	NA
100625	County of San Mateo - Half Moon Bay Airport	Half Moon Bay	2025	0.23	0	NA
4863	Pleasant Hill Cemetery	Sebastopol	2016	0.22	0.02	0.45
203115	BGOGC 2197/2225 Bayshore Owner LLC	Palo Alto	2024	0.21	0	NA
14991	Donald Von Raesfeld Power Plant	Santa Clara	2002	0.2	0.2	0.4
22144	Irvine Company Office Properties	Santa Clara	2013	0.2	0	NA
25211	Rivian Automotive, LLC	Hayward	2024	0.2	0.03	1

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
203017	Fairfield Industrial Center	Fairfield	2023	0.2	0	NA
25092	Photop Technologies, Inc	Santa Rosa	2022	0.19	0	0.08
24068	Pacific Oak SOR II Oakland City Center LLC	Oakland	2023	0.18	0	NA
202914	1951 Shattuck	Berkeley	2023	0.18	0	NA
24596	SKS/ Prado 2130 Third Street, LLC	San Francisco	2020	0.17	0	NA
24876	Eurofins Infinity Laboratory Group, Inc	San Jose	2022	0.17	0	NA
14595	Federal Aviation Administration	San Jose	2024	0.16	0	NA
16319	UCSF/Hunters Point	San Francisco	2024	0.16	0	0
202924	Parr Blvd. & Richmond Parkway Building 1	Richmond	2023	0.16	0	NA
24713	CCSF-TC & FSD	San Francisco	2020	0.15	0	NA
202716	901 Mariners Island Boulevard	San Mateo	2022	0.15	0	0
2634	Carriage Funeral Holdings, Inc.	Lafayette	2018	0.14	0.01	0.27
202775	Nutcracker Therapeutics	Emeryville	2022	0.14	0	NA
202974	24493 Clawiter Road	Hayward	2023	0.14	0	NA
203319	47200 Bayside Parkway	Fremont	2024	0.14	0	NA
202837	300 Kansas Building	San Francisco	2023	0.13	0	NA
202687	Oyster Point Phase 2 Development	South San Francisco	2022	0.12	0	0
13884	Delta Diablo Sanitation District	Pittsburg	2022	0.11	0	NA
203011	Robert Mondavi Winery, Red barn	Napa	2023	0.11	0	NA
203296	Ultragenyx Pharmaceutical Inc.	South San Francisco	2024	0.11	0	NA
16955	City of Santa Rosa Utilities Dept	Santa Rosa	2005	0.1	NA	NA
18177	Sonoma County Sheriff's Office	Petaluma	2007	0.1	0	NA
100768	Silver Oak Cellars	Oakville	2018	0.1	NA	NA
202858	531 Bryant Street	San Francisco	2023	0.09	0	NA
25302	Netrition, Inc.	Santa Rosa	2023	0.08	0.02	0.01
25133	Antora Energy	Sunnyvale	2022	0.06	0.27	0.07

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
201943	Caltrans - Devil's Slide	Pacifica	2020	0.04	0	NA
20432	Ameresco Vasco Road LLC	Livermore	2014	0.03	0.3	0.99
25127	Poplar Avenue Pump Station	San Mateo	2022	0.03	0	0
202730	Napa Regional Center	American Canyon	2022	0.03	0	0.21
24235	MRL San Francisco, LLC	South San Francisco	2019	0.02	0	0.96
10913	HASA Inc	Pittsburg	2023	NA	0.12	0.13
23467	Vander-Bend Manufacturing Inc	San Jose	2025	NA	0	0.13
23492	C and H Enterprises	Fremont	2024	NA	0	0.78
24313	Impact Transportation, LLC	Oakland	2019	NA	0.8	0.7
24752	Advanced IPM	Oakland	2022	NA	0.19	NA

Table A-2. Facilities with Approved HRAs Ordered by Non-Cancer Risk

Facility Number	Facility Name	City	HRA Year	Cancer Risk (Chances in a million)	Chronic HI	Acute HI
23204	United Natural Foods Inc (UNFI)	Gilroy	2016	9.99	1	NA
23554	Santa Clara Valley Transportation Authority	Milpitas	2016	9.99	1	NA
200385	SF Police Credit Union	San Bruno	2016	9.99	1	NA
200460	Meadowood Resort	Saint Helena	2016	9.99	1	NA
200909	Partnership Health Plan of California	Fairfield	2018	9.99	1	NA
201183	Alexander Station Apartments	Gilroy	2018	9.99	1	NA
23612	City Hall - City of San Ramon	San Ramon	2016	9.99	0.99	NA
2320	Oak View Memorial Park	Antioch	2016	4.7	0.99	0.74
20905	S E Combined Services of California	Oakland	2017	3	0.98	0.89
450	Veterans Administration Medical Center	Palo Alto	2011	9.9	0.9	NA
1275	Novato Sanitary District	Novato	2009	9.9	0.9	NA
1785	Children's Hospital, Oakland	Oakland	2012	9.9	0.9	NA
3711	Sutter Health Eden Medical Center	Castro Valley	2010	9.9	0.9	NA
14039	Contra Costa Water District	Concord	2019	9.9	0.9	NA
14944	City of Palo Alto	Palo Alto	2019	9.9	0.9	NA
15464	Pixar Animation Studios	Emeryville	2009	9.9	0.9	NA
15504	Kaiser Santa Rosa Medical Office, Bldg #4	Santa Rosa	2019	9.9	0.9	NA
15529	City of Sunnyvale - DPS -164-0 & 165-0	Sunnyvale	2019	9.9	0.9	NA
15592	SFPUC Sunol Valley Chloramination Facility & Alameda Portal	Sunol	2010	9.9	0.9	NA
16043	City of Santa Rosa Subregional Utilities	Santa Rosa	2019	9.9	0.9	NA
17154	City of Milpitas	Milpitas	2016	9.9	0.9	NA
18769	Jay Paul Company	Sunnyvale	2019	9.9	0.9	NA
19442	Sequoia Union High School District	Atherton	2018	9.9	0.9	NA
19779	Alameda County Public Works Agency	Hayward	2009	9.9	0.9	NA

20208	Coastside County Water District	Half Moon Bay	2010	9.9	0.9	NA
20324	Judicial Council of California, CC 43-B2	San Jose	2002	9.9	0.9	NA
20536	Lucid USA Inc	Newark	2019	9.9	0.9	NA
20968	Guardant Health Inc.	Redwood City	2019	9.9	0.9	NA
21043	City of Santa Rosa	Santa Rosa	2019	9.9	0.9	NA
21615	City & County of SF (Real Estate Div)	San Francisco	2019	9.9	0.9	NA
22350	Gamble Family Vineyards	Yountville	2014	9.9	0.9	NA
22445	City of Pacifica Water Recycling/Wastewater Treat	Pacifica	2019	9.9	0.9	NA
22691	Signature Flight Support	Santa Clara	2015	9.9	0.9	NA
22751	Google LLC	Mountain View	2011	9.9	0.9	NA
23005	Olive Tree Manor LLC	Napa	2015	9.9	0.9	NA
23086	Paraduxx Winery	Napa	2015	9.9	0.9	NA
23199	Bergman Residence	Saint Helena	2015	9.9	0.9	NA
23444	Silver Springs Networks, Inc	San Jose	2016	9.9	0.9	NA
23535	Judicial Council of CA, East County Hall Justice	Dublin	2016	9.9	0.9	NA
23814	PayPal Inc	San Jose	2019	9.9	0.9	NA
24622	San Francisco Bay Area Rapid Transit District	Oakland	2018	9.9	0.9	NA
200240	Costco Gasoline #1267	San Jose	2014	9.9	0.9	NA
200431	Seed Testing Real Estate II	Gilroy	2019	9.9	0.9	NA
200471	Frito Lay, Inc.	Alameda	2017	9.9	0.9	NA
200678	Jackson Family Wines - Oakville	Oakville	2017	9.9	0.9	NA
200784	FN Cellars, Inc.	Oakville	2019	9.9	0.9	NA
201031	Public Safety Complex - Police Services Building	Dublin	2019	9.9	0.9	NA
201247	CADE at 13th Vineyard	Angwin	2020	9.9	0.9	NA
201688	Stonestown Anchor Acquisition, LP	San Francisco	2019	9.9	0.9	NA
201726	O'Brien Estates	Napa	2019	9.9	0.9	NA
201736	BH 3500 Mountain Blvd. LLC	Oakland	2019	9.9	0.9	NA

201755	Hourglass Winery	Calistoga	2019	9.9	0.9	NA
201781	Ric Forman Residence	St. Helena	2019	9.9	0.9	NA
201793	Santa Clara Valley Transportation Authority	San Jose	2019	9.9	0.9	NA
201937	Rivers Marie Winery	Calistoga	2020	9.9	0.9	NA
201939	Red Hawk Vineyards	Pope Valley	2020	9.9	0.9	NA
202021	BART Berryessa Station	San Jose	2016	9.9	0.9	NA
203252	County of Marin/MERA-Mt. Burdell OTA	Novato	2023	9.9	0.9	NA
203320	County of Marin/MERA-Coyote Peak	Petaluma	2023	9.9	0.9	NA
203344	Oakley Recreation Center	Oakley	2024	9.9	0.9	NA
12916	Cisco System	Milpitas	2004	9.8	0.9	0
15253	Oracle Corporation	Redwood City	2011	9.8	0.9	NA
17347	College of San Mateo	San Mateo	2007	9.6	0.9	NA
3670	Kaiser Foundation Hospital	Vallejo	2007	9.5	0.9	NA
16441	City of Hayward Department of Public Works	Hayward	2005	9.1	0.9	NA
18971	UCSF/CPFM	San Francisco	2008	8.4	0.9	NA
19325	Swissport Fueling, Inc	Oakland	2011	8.1	0.9	NA
15982	Google LLC	Mountain View	2012	8	0.9	NA
25055	USS-UPI, LLC	Pittsburg	1994	8	0.9	NA
19060	Hosting Com	San Francisco	2009	7.4	0.9	NA
17769	T5@Silicon Valley, LP	Newark	2010	7.2	0.9	NA
453	Good Samaritan Hospital	San Jose	2005	6.7	0.9	NA
2172	Office of The Sheriff	San Bruno	2006	6.7	0.9	NA
15292	IKEA California LLC	East Palo Alto	2003	6.6	0.9	NA
13515	AT&T	San Francisco	2006	6.3	0.9	0
23984	4700 Old Ironsides Drive LLC	Santa Clara	2003	5.6	0.9	NA
23622	Vision Recycling Benicia	Benicia	2002	5	0.9	NA
16200	The Gymboree Corporation	San Francisco	2004	4.9	0.9	NA
12197	United Airlines, Inc	San Francisco	2004	4.5	0.9	0
1082	Queen of the Valley Medical Center	Napa	2010	4.3	0.9	NA

2440	Sequoia Hospital / Dignity Health	Redwood City	2011	4.3	0.9	NA
9183	Napa-Vallejo Waste Management Authority	Napa	2003	3.6	0.9	NA
19162	BMR-Pacific Research Center, LP	Newark	2003	3.1	0.9	NA
14484	Pacific Bell	Danville	2002	3	0.9	0
6390	Evergreen Cemetery	Oakland	2008	2.5	0.9	NA
3887	San Mateo Medical Center	San Mateo	2007	2.4	0.9	NA
15653	The Home Depot Store #1076	Brentwood	2005	2.4	0.9	NA
13923	Pacific Bell Corporation	San Francisco	2003	2.1	0.9	0
4134	Irvington Memorial Cemetery	Fremont	2006	2	0.9	NA
13062	Sysco San Francisco, Inc	Fremont	2001	1.7	0.9	0
3273	Pacific Union College	Angwin	2004	1.5	0.9	NA
16411	City of Alameda / Public Works Dept	Alameda	2007	1.4	0.9	NA
16185	City of Belmont	Belmont	2004	1.3	0.9	NA
16795	Westfield San Francisco Center	San Francisco	2005	1.2	0.9	NA
2025	University of San Francisco	San Francisco	2012	1.1	0.9	NA
24089	TransMontaigne Operating LP	Martinez	2006	1.1	0.9	NA
24313	Impact Transportation, LLC	Oakland	2019	NA	0.8	0.7
20139	Potrero Hills Energy Producers, LLC	Suisun City	2011	2.9	0.78	0.98
21775	Central Concrete Supply Inc	San Francisco	2017	5.43	0.76	0.09
21539	Golden State Pet Cremation	Castro Valley	2013	9.99	0.7	0.3
21298	Flintstone Enterprises DBA Forever My Pet	Gilroy	2012	9.8	0.6	0.1
2932	Cypress Lawn Cemetery Association	Colma	2014	3.4	0.6	0.99
17130	A Memorial Service LLC, dba Animal Memorial Svcs	Gilroy	2024	5.9	0.56	0.05
22474	Argent Materials Inc	Oakland	2023	1.5	0.54	0.01
2478	UCSF/Parnassus	San Francisco	1992	7.1	0.5	NA
2315	Duggan's Mission Chapel	Sonoma	2019	3.2	0.5	0.55
24828	Zayo Group, LLC	Santa Clara	2023	5.9	0.46	NA
5095	Vasco Road Landfill	Livermore	1991	4	0.44	NA

617	Palo Alto Regional Water Quality Control Plant	Palo Alto	1989	8	0.42	NA
1228	Sonoma County Water Agency	Sonoma	2006	7.1	0.4	NA
4618	Keller Canyon Landfill Company	Pittsburg	2006	9.8	0.37	NA
24427	EPZ, Inc	Santa Clara	2024	0.26	0.35	0.53
20023	Sunset Retoria	Benicia	2010	3.4	0.31	0.75
14628	Tesoro Refining & Marketing Company, LLC	Martinez	1995	6.9	0.3	NA
20432	Ameresco Vasco Road LLC	Livermore	2014	0.03	0.3	0.99
633	Intel Corporation	Santa Clara	2025	1.3	0.29	0.09
25133	Antora Energy	Sunnyvale	2022	0.06	0.27	0.07
3576	Catholic Cremation Services	Hayward	2006	6.2	0.24	0.11
1179	Redwood Landfill Inc	Novato	2010	8.2	0.23	NA
22835	Golden State Pet Cremation	Livermore	2015	8	0.21	NA
25286	Gateway Services Inc	Napa	2025	9.9	0.2	0.2
14991	Donald Von Raesfeld Power Plant	Santa Clara	2002	0.2	0.2	0.4
24752	Advanced IPM	Oakland	2022	NA	0.19	NA
24380	Corteva Agriscience - Pittsburg Operations	Pittsburg	2001	5.2	0.18	NA
21359	Phillips 66 Company - San Francisco Refinery	Rodeo	1990	8.4	0.13	NA
5876	South San Francisco-San Bruno Water Quality Plant	South San Francisco	1989	3.4	0.13	NA
17	Lehigh Southwest Cement Company	Cupertino	2011	9.1	0.12	NA
10913	HASA Inc	Pittsburg	2023	NA	0.12	0.13
100340	Costco Wholesale #132	Vallejo	2019	9.99	0.11	NA
2066	Waste Management of Alameda County	Livermore	2012	7.9	0.11	NA
51	United Airlines, Inc	San Francisco	1989	3.4	0.11	NA
24914	Mainspring Energy, Inc.	Menlo Park	2021	1.21	0.11	0.84
14240	SFPUC Baden Pump Station	South San Francisco	2005	9.9	0.1	0
25011	San Mateo County Office of Education	Redwood City	2022	9.9	0.1	NA
200527	Mumm Napa	Napa	2024	9.9	0.1	NA
200894	Aloft Hotel	Dublin	2018	9.9	0.1	NA

201797	M2 Apartments	San Francisco	2020	9.9	0.1	NA
201885	SUNRISE VILLA SONOMA	Sonoma	2020	9.9	0.1	NA
201957	Promontory Winery	Napa	2020	9.9	0.1	NA
201984	Fontanella Family Winery	Napa	2021	9.9	0.1	NA
202156	Align Technology - Bldg. 3	San Jose	2021	9.9	0.1	NA
202176	ZENNI OPTICAL	Novato	2021	9.9	0.1	NA
202534	47071 Bayside Parkway	Fremont	2022	9.9	0.1	NA
202629	Villa del Lago Winery	St. Helena	2022	9.9	0.1	NA
202676	Custom Name Goods, LLC	Oakland	2022	9.9	0.1	NA
203352	Black Sears Winery	Angwin	2023	9.9	0.1	NA
1753	John Muir Health - Concord Campus	Concord	2012	9.9	0.09	0.03
14924	Chabot Community College	Hayward	2022	9.9	0.09	NA
12728	Waste Management Inc	San Leandro	2022	5.9	0.09	NA
1464	Acme Fill Corporation	Martinez	1991	0.9	0.09	NA
2039	Potrero Hills Landfill, Inc	Suisun City	1991	0.9	0.09	NA
2246	Waste Management of Alameda County	Fremont	1991	0.9	0.09	NA
2266	Browning-Ferris Industries of CA Inc	Half Moon Bay	1991	0.9	0.09	NA
3464	City of Santa Clara	Santa Clara	1991	0.9	0.09	NA
9013	International Disposal Corp of CA	Milpitas	1991	0.9	0.09	NA
11247	Clover Flat Resource & Recovery Park	Calistoga	1991	0.9	0.09	NA
202818	Costco Gasoline	Newark	2023	9.9	0.08	0.1
202733	Costco Gasoline (Loc. No. 848)	San Jose	2023	6.1	0.08	0.16
100563	Costco Gasoline #663	Concord	2019	9.6	0.07	NA
591	East Bay Municipal Utility District	Oakland	1991	8	0.06	NA
25035	CelLink Corporation	San Carlos	2022	1	0.06	0.06
21152	Pleasanton Trucking, Inc	Livermore	2024	3.4	0.05	0.02
9536	Truck-Rail Handling Inc	Fremont	2022	9.7	0.04	0.13
255	Lawrence Livermore National Laboratory	Livermore	1989	7.7	0.04	NA
111724	ARCO AM/PM	San Jose	2022	7.2	0.04	NA

202111	Circle K - Napa Junction	American Canyon	2021	6.8	0.04	NA
15949	Fernwood	Mill Valley	2005	1.3	0.04	NA
111185	Costco Gasoline #778	Fremont	2024	1.2	0.04	0.1
12958	Los Gatos Memorial Park	San Jose	2023	1	0.04	0.2
111870	Bayfair Gas & Mart	San Leandro	2025	6.6	0.03	0.62
1209	Union Sanitary District	Union City	1989	4	0.03	NA
112497	Mash Gas & Food Orinda	Orinda	2021	3.84	0.03	NA
20228	Amazon Data Services, Inc	Hayward	2014	2.9	0.03	NA
19931	K2 Pure Solutions Nocal, LP	Pittsburg	2009	2.2	0.03	0.38
24188	Lyten	San Jose	2020	1.6	0.03	0.97
25211	Rivian Automotive, LLC	Hayward	2024	0.2	0.03	1
14000	Lake Berryessa Resort Improvement District	Pope Valley	2005	9.76	0.02	NA
20295	Vantage Data Centers Management Co , LLC	Santa Clara	2023	9.5	0.02	0.09
12626	Valero Refining Company - California	Benicia	1991	9.1	0.02	0
24726	Martinez Refining Company LLC	Martinez	1990	9	0.02	NA
10	Chevron Products Company	Richmond	1990	8	0.02	NA
112124	Costco Wholesale # 1061	Hayward	2009	8	0.02	NA
21646	Guide Dogs for the Blind, Inc	San Rafael	2018	7.2	0.02	NA
1403	Santa Rosa Water - Laguna Treatment Plant	Santa Rosa	2012	5.1	0.02	NA
100369	Chevron Gas Station	Mill Valley	2021	3.83	0.02	NA
111081	505 Petroleum INC	Daly City	2021	3.8	0.02	NA
112321	APRO, LLC dba United Pacific #5440	Castro Valley	2021	2.77	0.02	NA
55	Lockheed Martin Corporation	Sunnyvale	1990	2	0.02	NA
24126	Commercial Tree Care	San Jose	2024	1.4	0.02	0.07
107273	Emeryville Chevron	Emeryville	2025	1.4	0.02	0.82
24270	Sutter Bay Hospitals dba Alta Bates Summit Med Ctr	Berkeley	1994	0.9	0.02	NA
4863	Pleasant Hill Cemetery	Sebastopol	2016	0.22	0.02	0.45
25302	Netrition, Inc.	Santa Rosa	2023	0.08	0.02	0.01

19597	San Francisco Hall of Justice	San Francisco	2009	10	0.01	NA
17460	City of Santa Rosa Utilities Department Station 9	Santa Rosa	2006	9.99	0.01	NA
17898	New San Francisco Federal Building	San Francisco	2006	9.99	0.01	NA
20249	Vallejo Sanitation & Flood Control Dist	Vallejo	2010	9.99	0.01	NA
20574	Digital Realty	Santa Clara	2014	9.99	0.01	NA
22788	East Bay Municipal Utility District	Walnut Creek	2014	9.99	0.01	NA
24059	Phoenix Data Center Leasehold LLC	Sunnyvale	2005	9.99	0.01	NA
22268	Nor-Cal Rock Inc	Hayward	2014	9.98	0.01	NA
17156	City of Milpitas	Milpitas	2010	9.97	0.01	NA
17771	Verizon Wireless (Sunnyvale MSC)	Sunnyvale	2007	9.97	0.01	NA
13480	Pacific Bell	La Honda	2008	9.92	0.01	NA
22623	Cologix, Inc. SV1	Santa Clara	2016	9.91	0.01	NA
7420	New Cingular Wireless dba AT&T Mobility	Concord	2016	9.9	0.01	NA
13544	Pacific Bell	Santa Rosa	2008	9.9	0.01	NA
14814	Pacific Bell	Mill Valley	2002	9.9	0.01	NA
18192	Minaris Regenerative Medicine	Mountain View	2007	9.9	0.01	NA
18239	CoreSite	Milpitas	2007	9.9	0.01	NA
18557	John Muir Health	Concord	2007	9.9	0.01	NA
18959	Verizon Wireless (Bolinas)	Bolinas	2008	9.9	0.01	NA
19285	Campus for Jewish Life	Palo Alto	2008	9.9	0.01	NA
20356	Digital 365, LLC	San Francisco	2006	9.9	0.01	NA
200504	350 Bush	San Francisco	2017	9.9	0.01	NA
201289	Meyer Corporation	Fairfield	2019	9.9	0.01	NA
201503	UC Davis Oakville Station	Napa	2019	9.9	0.01	NA
201605	Duffy's Napa Valley Rehab	Calistoga	2019	9.9	0.01	NA
201735	San Rafael Public Safety Center	San Rafael	2019	9.9	0.01	NA
15465	Kaiser Permanente - Regional Lab Annex	Richmond	2003	9.88	0.01	NA
19019	Sonoma Police Department	Sonoma	2010	9.87	0.01	NA

13550	SBC	Sunnyvale	2003	9.86	0.01	NA
13467	Pacific Bell	Fairfield	2005	9.8	0.01	NA
16234	County of Sonoma Juvenile Justice Center	Santa Rosa	2004	9.8	0.01	NA
16930	San Mateo County Youth Services Center	San Mateo	2005	9.8	0.01	NA
17290	City of Richmond (McDonald Ave S a)	Richmond	2006	9.8	0.01	NA
18801	Xeres Ventures, LP (SC1)	Santa Clara	2016	9.8	0.01	NA
22375	Amazon Data Services, Inc.	Santa Clara	2015	9.8	0.01	NA
13160	University of California SF	San Francisco	2012	9.7	0.01	0
18067	Sanitary District No 2 of Marin County	Corte Madera	2007	9.7	0.01	NA
18169	Woodside Fire Station #19	Woodside	2007	9.7	0.01	NA
20248	SOF-XI WFO Harrison Owner, LLC c/o Cushman Wakefield	Oakland	2016	9.7	0.01	NA
12946	Level 3 Communications Inc	Emeryville	2002	9.6	0.01	NA
19330	ARE - East Jamie Court, LLC	South San Francisco	2011	9.5	0.01	NA
21361	University of the Pacific	San Francisco	2006	9.5	0.01	NA
23476	Boston Properties	San Francisco	2016	9.5	0.01	NA
23683	NGM Biopharmaceuticals, Inc	South San Francisco	2009	9.5	0.01	NA
202583	Ultragenyx Pharmaceuticals, Inc	Novato	2022	9.5	0.01	NA
20586	Digital 720 2nd LLC	Oakland	2007	9.45	0.01	NA
17546	Camino Medical Group-ASC Building	Mountain View	2006	9.4	0.01	NA
200760	Golden Cajun, LLC	Santa Clara	2018	9.4	0.01	NA
18227	City of Gilroy	Gilroy	2007	9.3	0.01	NA
19131	City of Sebastopol	Sebastopol	2009	9.2	0.01	NA
19236	County of Marin	San Rafael	2008	9.2	0.01	NA
20611	EQUINIX-SV8	Palo Alto	2014	9.2	0.01	NA
19403	USPS San Mateo Information Technology and Acct Svc	San Mateo	2010	9	0.01	NA
22523	Canyon Ranch Wellness Retreat	Woodside	2009	8.93	0.01	NA
14092	Pacific Bell Corporation	Milpitas	2002	8.9	0.01	0
22420	Restoration Management Company	Hayward	2014	8.7	0.01	NA

203247	1440 4th Street	Berkeley	2023	8.6	0.01	NA
13711	Pacific Bell Corp dba AT&T CA	Santa Clara	2002	8.5	0.01	0
20370	1101 Space Park Partners, LLC	Santa Clara	2022	8.33	0.01	0
20163	Zoetis, Inc.	Union City	2010	8.3	0.01	NA
23544	HCP BTC LLC	South San Francisco	2009	8.3	0.01	NA
12848	David Grant Medical Center	Travis Afb	2012	7.8	0.01	0
13485	AT&T	Livermore	2008	7.8	0.01	NA
19966	San Francisco Unified School Dist (SFUSD)	San Francisco	2010	7.8	0.01	NA
11764	Bay Area Rapid Transit District	Oakland	2012	7.7	0.01	NA
19956	Santa Clara County Fire Dept	Los Gatos	2010	7.69	0.01	NA
24374	China Mobile International Infrastructural (US1)	San Jose	2021	7.37	0.01	NA
201462	Biomed Realty Gateway of Pacific	South San Francisco	2018	7.1	0.01	NA
14691	Verizon Wireless Pleasanton Switch	Pleasanton	2003	7	0.01	NA
15935	Comcast of California/Colorado/Texas/Washington	Pleasanton	2023	7	0.01	NA
24072	CBRE	Emeryville	2004	7	0.01	NA
21024	EdgeConneX Silicon Valley Holdings, LLC	Santa Clara	2017	6.7	0.01	NA
8175	The Home Depot Store #0643	El Cerrito	2010	6.6	0.01	NA
1067	Oro Loma Sanitary District	San Lorenzo	1989	3.8	0.01	NA
22839	Apple, Inc	Santa Clara	2015	3	0.01	0.06
203236	Home2 Suites By Hilton San Jose South	San Jose	2024	2.86	0.01	NA
111713	Costco Gasoline #1004	San Jose	2006	2.7	0.01	NA
13399	KLA Corporation	Milpitas	2012	2.5	0.01	0
17657	Lodi Gas Storage LLC	Suisun City	2008	2.4	0.01	0.03
22380	City of Brentwood	Brentwood	2014	2	0.01	NA
100447	B & C Gas Mini Mart	Livermore	2022	1.9	0.01	NA
111956	Poppy Old SF Road	Sunnyvale	2023	1.7	0.01	0.39
24541	San Francisco Recreation & Park Department	San Francisco	2022	1.6	0.01	0.96
109105	Rotten Robbie #67	San Jose	2024	1.6	0.01	0.51

111822	Mobil SS# 68171	Napa	2023	1.6	0.01	0.84
13289	Los Esteros Critical Energy Facility	San Jose	2001	1.4	0.01	NA
112573	Kwik Serv	Walnut Creek	2022	1.3	0.01	NA
85	Western Digital Technologies Inc	San Jose	1989	1.1	0.01	NA
106562	Fuel 24:7 @ Miller Ave	Mill Valley	2021	1	0.01	NA
203393	1776 Laurel St., San Carlos	San Carlos	2024	0.98	0.01	0
22305	UE-00101CA, LLC	San Jose	2014	0.8	0.01	0
23815	Pacific Park Plaza Homeowner Assoc	Emeryville	2017	0.79	0.01	NA
18136	Russell City Energy Co, LLC	Hayward	2007	0.7	0.01	0.02
111299	Mobile Gas N Car Wash	Walnut Creek	2022	0.59	0.01	NA
2634	Carriage Funeral Holdings, Inc.	Lafayette	2018	0.14	0.01	0.27
13348	Medtronic Vascular	Santa Rosa	2019	9.99	0	NA
13984	City of Santa Rosa Utilities Dept	Santa Rosa	2015	9.99	0	NA
22740	Las Gallinas Valley Sanitary District	San Rafael	2015	9.99	0	NA
23068	Alvins Corner at Penny Lane	Campbell	2015	9.99	0	NA
16422	City of San Jose, SBWRP	San Jose	2004	9.93	0	NA
3167	Pacific Gas and Electric Company	Richmond	2021	9.9	0	NA
8998	West Valley Community College	Saratoga	2011	9.9	0	NA
10742	John Muir Medical Center	Walnut Creek	2022	9.9	0	NA
13410	Pacific Bell Corporation	Walnut Creek	2001	9.9	0	NA
13487	Pacific Bell	Martinez	2004	9.9	0	NA
14139	Contra Costa County	Martinez	2022	9.9	0	NA
14548	Montara Sanitary District	Montara	2021	9.9	0	NA
14809	Federal Aviation Administration	Mountain View	2023	9.9	0	NA
14812	City of Vallejo Water Division	Suisun City	2002	9.9	0	NA
19805	SJW Vickery Av Station	Saratoga	2020	9.9	0	NA
19939	Napa Sanitation District	Napa	2021	9.9	0	NA
20286	Palo Alto Unified School Distric	Palo Alto	2016	9.9	0	NA
21040	City of Santa Rosa	Santa Rosa	2023	9.9	0	NA

21436	Ghirardelli Square	San Francisco	2023	9.9	0	NA
22190	California Water Service Company	Los Altos Hills	2014	9.9	0	NA
22580	DJONT/CMB SSF LLC(dba Embassy Suites SF Airpt	South San Francisco	2022	9.9	0	NA
22649	Caltrans	Oakland	2017	9.9	0	NA
23190	Healthpeak Properties, Inc. c/o CBRE	South San Francisco	2015	9.9	0	NA
23398	Film Werks International	San Francisco	2016	9.9	0	NA
23427	FN Cellars, Inc.	Saint Helena	2023	9.9	0	NA
23515	Google LLC	San Bruno	2020	9.9	0	NA
23528	Brand Winery	Saint Helena	2016	9.9	0	NA
24787	T-C 55 Second Street LLC	San Francisco	2002	9.9	0	NA
200359	O'Farrell Senior Housing Inc	San Francisco	2016	9.9	0	NA
200389	Gateway 80 Owner LP	Fairfield	2016	9.9	0	NA
200394	1450 Franklin Street Owners Association	San Francisco	2016	9.9	0	NA
200662	Shafer Vineyards	Napa	2020	9.9	0	NA
201021	Groth Vineyards	Napa	2019	9.9	0	NA
201314	Theorem Winery	Calistoga	2018	9.9	0	NA
201316	Hundred Acre Wine Group - St. Helena	Saint Helena	2019	9.9	0	NA
201322	Pink Sunset	Atherton	2021	9.9	0	NA
201588	Four Points by Sheraton San Rafael	San Rafael	2019	9.9	0	NA
201672	One Hope Winery	Napa	2019	9.9	0	NA
201679	Santa Rosa Junior College	Santa Rosa	2019	9.9	0	NA
201767	Outpost Wines	Angwin	2019	9.9	0	NA
201789	Auberge du Soleil	Rutherford	2020	9.9	0	NA
201804	Real Social Good Investments	Menlo Park	2020	9.9	0	NA
201872	CBRE	South San Francisco	2020	9.9	0	NA
201891	Realm Cellars	Napa	2020	9.9	0	NA
201934	Grgich Hills Estate Residence	St. Helena	2022	9.9	0	NA
201972	Hamel Family Wines	Sonoma	2020	9.9	0	NA

202016	Facebook, Inc.	Burlingame	2020	9.9	0	NA
202162	1020 Atlantic	Alameda	2021	9.9	0	NA
202178	IF - 85th	Oakland	2021	9.9	0	NA
202258	Enovix	Fremont	2021	9.9	0	NA
202375	WWCMC	Glen Ellen	2023	9.9	0	NA
202453	AUXILARY WATER SUPPLY SYSTEM PUMPING STATION #2	San Francisco	2022	9.9	0	NA
202457	Altitude Apartments	South San Francisco	2021	9.9	0	NA
202478	Spirit Rock Meditation Center	Woodacre	2021	9.9	0	NA
202586	Bonness Ranch	Sonoma	2022	9.9	0	NA
202587	J Ranch	Petaluma	2022	9.9	0	NA
202675	VCA Animal Care Center of Sonoma County	Rohnert Park	2022	9.9	0	NA
202755	Duke Realty Fremont Blvd. LP C/O Prologis	Fremont	2022	9.9	0	NA
202756	3440 Hillview Avenue - Bldg 7 & 8	Palo Alto	2022	9.9	0	NA
202843	999 Baker Way	San Mateo	2023	9.9	0	NA
202919	Zoox Inc	Fremont	2022	9.9	0	NA
202931	Napa Ranch	Sonoma	2023	9.9	0	NA
202941	Crystal Bio Solutions	Pleasanton	2023	9.9	0	NA
203064	Sleepy Hollow Elementary School	Orinda	2023	9.9	0	NA
203114	Cochrane Technology Center	Morgan Hill	2023	9.9	0	NA
203122	31353 Huntwood Avenue	Hayward	2023	9.9	0	NA
203197	RK Logistics	Fremont	2023	9.9	0	NA
203204	380 Blodgett Street, Cotati, CA	Cotati	2024	9.9	0	NA
203293	Reverie II Winery	St. Helena	2023	9.9	0	NA
203358	Lede Vineyards	Yountville	2024	9.9	0	NA
203377	The Barrel Chai	Napa	2024	9.9	0	NA
203490	Ellman Winery	Napa	2024	9.9	0	NA
212207	PRIDE MOUNTAIN VINEYARDS, LLC	Santa Rosa	2022	9.9	0	NA
212447	Honig Vineyard & Winery	Napa	2023	9.9	0	NA

21793	Pacific Gas & Electric Company	San Ramon	2013	9.84	0	NA
20537	Department of Transportation	Oakland	2010	9.8	0	NA
200629	The Austin Owners Association	San Francisco	2017	9.8	0	NA
21039	City of Santa Rosa	Santa Rosa	2024	9.7	0	NA
23216	Hudson Skyport Plaza, LLC	San Jose	2003	9.7	0	NA
200691	41 Tehama, LP	San Francisco	2017	9.7	0	NA
202380	Jefferson Street Hotel LLC	Oakland	2022	9.7	0	NA
13985	City of Santa Rosa Utilities Dept	Santa Rosa	2015	9.6	0	NA
20685	Ariba	Sunnyvale	2011	9.6	0	NA
22990	Davis Estates Winery	Calistoga	2015	9.6	0	NA
200343	California Water Service Co.	San Carlos	2016	9.4	0	NA
1941	Sonoma Developmental Center	Eldridge	1990	9	0	NA
20214	Soiland Co , Inc	Santa Rosa	2020	9	0	NA
1462	Veterans Administration Medical Center	Menlo Park	2012	8.9	0	NA
21251	1080 Sutter Owners Association c/o Action Property Mngmt	San Francisco	2012	8.8	0	NA
23565	Lucile Packard Children's Hospital Stanford	Sunnyvale	2007	8.8	0	NA
23812	Lanteris Space LLC	San Jose	2024	8.8	0	0.03
200477	T8 Urban Housing Associates, LLC, c/o Related Companies	San Francisco	2017	8.8	0	NA
21843	CordeValle Resort	San Martin	2013	8.7	0	NA
201073	Sutter Shared Lab	Livermore	2018	8.65	0	NA
15999	Frank Family Vineyards	Calistoga	2019	8.5	0	NA
13290	City of San Jose Public Works Fleet Management	San Jose	2006	8.45	0	NA
770	Travis AFB	Travis Afb	2012	8.4	0	NA
18292	Paradise Valley Estates	Fairfield	2007	8.4	0	NA
202372	Amazon.com Services LLC - TCY9	Oakley	2023	8.4	0	NA
1430	Nazareth House of San Rafael	San Rafael	2013	8.3	0	NA
201981	Allogene Therapeutics	Newark	2020	8.3	0	NA

202249	SpectraSite Communications, LLC	Oakley	2021	8.3	0	NA
15278	Wareham Development	Emeryville	2012	8.1	0	NA
20570	Graton Fire Protection District	Sebastopol	2011	8.1	0	NA
20714	PMI Plaza LLC	Walnut Creek	2007	8.1	0	NA
22974	Stack Infrastructure	San Jose	2014	8.1	0	NA
4020	SFPP, LP	San Jose	1989	8	0	NA
12596	National Park Service	San Francisco	2011	8	0	NA
24260	Micron Technology, Inc	San Jose	2009	7.9	0	NA
202012	Marciano Winery	Saint Helena	2020	7.9	0	NA
202217	City of Santa Rosa - Sewer Lift Station #1	Santa Rosa	2021	7.9	0	NA
22546	181 Fremont LLC	San Francisco	2015	7.87	0	NA
17405	One Rincon Hill Association	San Francisco	2006	7.8	0	NA
200679	Stanford Redwood City Operations	Redwood City	2018	7.8	0	NA
19268	ARE - San Francisco No. 43 Owner, LLC	San Francisco	2009	7.7	0	NA
23016	Healthpeak Properties, HCP Oyster Point III LLC	South San Francisco	2017	7.5	0	NA
3974	San Francisco General Hospital	San Francisco	2010	7.4	0	NA
200573	Lodgeworks	Napa	2017	7.4	0	NA
20637	Boehringer Ingelheim Fremont Inc	Fremont	2007	7.3	0	NA
475	Santa Clara Valley Health & Hospital System	San Jose	2012	7.2	0	NA
22403	Google LLC	Sunnyvale	2017	7.2	0	NA
23902	EQUINIX INC SV14-SV17	Santa Clara	2015	7.2	0	NA
200351	Illumina Inc	Foster City	2016	7.1	0	NA
201897	Viamonte Senior Living 1, Inc.	Walnut Creek	2020	7.1	0	NA
1529	Kaiser Permanente Medical Center	Oakland	2011	7	0	NA
15565	Western Digital Technologies	Fremont	2012	7	0	NA
18411	Sutter Health Enterprise Data Center dba Palo Alto Medical Fndn	Sunnyvale	2016	6.9	0	NA
20009	Hayward Point Eden Business Center	Hayward	2010	6.9	0	NA
202897	T-Mobile - BA64168S	Campbell	2023	6.9	0	NA

19670	The Meadows of Napa Valley	Napa	2017	6.8	0	NA
20555	Mercy Housing California	San Francisco	2011	6.8	0	NA
200776	Kodiak Sciences, Inc.	Palo Alto	2017	6.8	0	NA
14611	California Water Service Company	Livermore	2018	6.7	0	NA
16127	Pacific Bell (dba: AT&T CA)	Pleasanton	2007	6.7	0	NA
201560	Related California	San Francisco	2019	6.7	0	NA
20985	Sunny View Retirement Community	Cupertino	2019	6.6	0	NA
201620	SJSC Properties LLC	San Jose	2019	6.6	0	NA
7519	Pacific Bell	Fairfield	2012	6.4	0	NA
14676	Equinix LLC	San Jose	2024	6.4	0	0
202707	Presidio Bay Ventures	San Carlos	2024	6.4	0	NA
17351	Napa Berryessa Resort Improvement District	Napa	2007	6.3	0	NA
22353	Sheriff's Office, County of San Mateo	Redwood City	2014	6.3	0	NA
202077	GI TC Perry Park LLC	Sunnyvale	2020	6.3	0	NA
19980	Whipple Road Portfolio, LLC	Union City	2009	6.2	0	NA
19778	Alameda County Public Works Agency	Hayward	2023	6.17	0	NA
20897	Bristol-Myers Squibb	Redwood City	2012	6.15	0	NA
202088	Westport Office Park, LLC	Redwood City	2024	6.1	0	0
203165	Bellara	Hayward	2023	6.1	0	NA
2531	St Joseph Health N CA, dba Santa Rosa Mem Hospital	Santa Rosa	1990	6	0	NA
23178	Downtown RWC RES, LLC	Redwood City	2014	6	0	NA
200566	Menlo Gateway Hotel	Menlo Park	2017	6	0	NA
202665	Kaiser Foundation Health Plan - Project Genetics Lab	San Jose	2022	6	0	NA
14064	Central Contra Costa Sanitary District - Maltby Pump Station	Martinez	2023	5.9	0	NA
17742	The Home Depot Store #6677	Gilroy	2023	5.9	0	NA
22634	Madrone Owner's Association	San Francisco	2011	5.9	0	NA
22744	City of Richmond WPC (Ferry Point Lift Station)	Richmond	2024	5.9	0	NA

23664	BCORE Colleman Owner LLC	San Jose	2023	5.9	0	NA
202729	207740 - Harbor Bay	Alameda	2022	5.9	0	NA
202863	U-Box Moving & Storage of Concord	Concord	2022	5.9	0	NA
22157	Fortinet, Inc	Sunnyvale	2013	5.89	0	NA
6426	Solano County Transit Operations	Vallejo	2017	5.8	0	NA
17407	Fisher Investments	San Mateo	2005	5.8	0	NA
17976	Byron Bethany Irrigation District	Byron	2008	5.8	0	NA
19716	City of San Jose Fire Station # 2 /Accts Payable	San Jose	2009	5.8	0	NA
203216	American Red Cross	San Leandro	2023	5.8	0	NA
15959	Comcast of San Leandro, Inc	Hayward	2023	5.7	0	NA
22105	The Lodge at Morgan Hill c/o Buckingham Property	Morgan Hill	2013	5.7	0	NA
23742	Amazon com Services Inc - OAK5	Newark	2017	5.7	0	NA
200650	Station 6 on Oak Grove - Fire Protection District	Menlo Park	2017	5.7	0	NA
202846	Hyatt Centric Hotel - Santa Clara	Santa Clara	2023	5.7	0	NA
13026	Pacific Gas & Electric	Fairfield	2008	5.6	0	NA
19248	Kistler Vineyards	Sebastopol	2008	5.6	0	NA
22201	BXP Mission 535 LLC c/o Boston Properties Limited	San Francisco	2014	5.6	0	NA
15330	San Jose Water Co , Batista	San Jose	2003	5.5	0	NA
19580	Peralta Community Colleges District Admin Center	Oakland	2009	5.43	0	NA
202203	B Cellars Winery	Napa	2022	5.4	0	NA
16725	AT&T Mobility/AT&T Services	Concord	2005	5.36	0	NA
18039	Cisco Systems Inc	San Jose	2008	5.3	0	NA
22433	New Cingular Wireless PCS, dba AT&T Mobility	Pleasant Hill	2014	5.2	0	NA
200634	AvalonBay Communities, Inc.	Emeryville	2017	5.2	0	NA
14536	Santa Clara Valley Water District - PWTP	San Jose	2010	5	0	NA
17326	City of Santa Clara, Park Service Ctr	Santa Clara	2021	5	0	NA

22869	Northland Control System	Fremont	2015	5	0	NA
19472	Northgate Mall	San Rafael	2009	4.9	0	NA
23889	WaveDivision Holdings LLC	San Francisco	2012	4.9	0	NA
202584	City of Alameda - Pump Station #24	Alameda	2022	4.9	0	NA
21421	San Luis & Delta Mendota Water Authority (SLDMWA)	Livermore	2012	4.8	0	NA
21812	City of Santa Rosa	Santa Rosa	2023	4.8	0	NA
24042	Vantage Data Centers Management Co	Santa Clara	2024	4.8	0	0.02
200602	City of Napa - Fire Station No. 5	Napa	2017	4.8	0	NA
13721	EBMUD, San Pablo Water Treatment Plant	Kensington	2020	4.7	0	NA
19550	Chabot Las Positas CC District	Livermore	2012	4.7	0	NA
202980	Country Manor Lift Station SLS-10	Santa Rosa	2023	4.7	0	NA
15544	Kaiser Permanente	Redwood City	2013	4.6	0	NA
24097	706 Mission Center Association	San Francisco	2018	4.6	0	NA
200783	Prime Now LLC-USF4	Brisbane	2017	4.6	0	NA
568	San Francisco South East Treatment Plant	San Francisco	1990	4.5	0	NA
13335	San Jose Water Co-3Mile	San Jose	2012	4.5	0	0
14463	City of Burlingame	Burlingame	2021	4.5	0	NA
200833	The Grad Student Housing	San Jose	2019	4.5	0	NA
203063	Red Top Pump Station (City of Fairfield)	Fairfield	2023	4.5	0	NA
14419	City of Millbrae	Millbrae	2024	4.4	0	NA
15561	Comcast Cable Corporation	Fairfield	2003	4.4	0	NA
20792	City of Morgan Hill (Jackson Booster)	Morgan Hill	2024	4.4	0	NA
20794	City of Morgan Hill (C Lift Station)	Morgan Hill	2023	4.4	0	NA
23038	Baxter Healthcare Inc	Hayward	2013	4.4	0	NA
861	San Mateo Water Quality Control Plant	San Mateo	1989	4.3	0	NA
15895	Heritage Estates/Sundt Construction, Inc	Livermore	2004	4.3	0	NA
20527	Oakland Unified School District	Oakland	2025	4.3	0	0.79
200563	Toyota Research Institute	Los Altos	2018	4.3	0	NA

12231	City of American Canyon	American Canyon	2021	4.26	0	NA
23132	1634 Pine Street LLC	San Francisco	2015	4.2	0	NA
24652	Zoetis, Inc	Union City	2024	4.2	0	0
25038	NASH Holland 24th and Waverly Investors LLC	Oakland	2022	4.2	0	NA
200664	MTII LLC	Sunnyvale	2018	4.2	0	NA
202020	META	Sunnyvale	2018	4.2	0	NA
1502	O'Connor Hospital	San Jose	2012	4.1	0	NA
13521	Pacific Bell	San Francisco	2006	4.1	0	NA
13598	Comcast	San Jose	2018	4.1	0	NA
18808	Verizon Wireless (Orwood Tract)	Brentwood	2008	4.1	0	NA
19141	SJC Fuel Company, LLC	San Jose	2009	4.1	0	NA
200429	Yotel - SF	San Francisco	2017	4.1	0	NA
14724	Sewerage Agency of Southern Marin	Mill Valley	2013	4	0	NA
20999	Lowe's HIW, Inc	Fairfield	2011	4	0	NA
22626	Thermo Fisher Scientific	Pleasanton	2002	3.91	0	NA
778	San Jose-Santa Clara Regional Wastewater Facility	San Jose	1991	3.9	0	NA
23580	One Rincon Tower 2 Association	San Francisco	2014	3.9	0	NA
111933	Costco Gasoline #1042	Redwood City	2008	3.9	0	NA
202121	Impossible Foods - Pilot Plant	Redwood City	2021	3.9	0	NA
25095	SF South Bay Shoreline Reach 1 & 2/3	San Jose	2022	3.88	0	NA
653	Central Marin Sanitation Agency	San Rafael	1989	3.8	0	NA
3613	UCSF Health St.Mary's Hospital	San Francisco	2012	3.8	0	NA
200493	CCSF - OCME	San Francisco	2017	3.8	0	NA
200396	Linkedin Corporation	Mountain View	2019	3.7	0	NA
201049	Boehringer-Ingelheim, Fremont	Fremont	2020	3.7	0	NA
202119	PATC 1810 Embarcadero	Palo Alto	2021	3.7	0	NA
202972	Southline Phase 1 Building 1	South San Francisco	2025	3.7	0	0
203290	Oakmont Lift Station SLS-17	Santa Rosa	2024	3.7	0	NA

2087	St Francis Memorial Hospital	San Francisco	2012	3.6	0	NA
14369	Fisica	San Mateo	2005	3.6	0	NA
22595	Augustine Bowers LLC c/o The Irvine Company LLC	Santa Clara	2016	3.6	0	NA
25065	Stanford University-Middle Plaza Office	Menlo Park	2022	3.6	0	NA
200406	Coastside County Water District	Half Moon Bay	2016	3.6	0	NA
200407	Coastside County Water District	Half Moon Bay	2017	3.6	0	NA
202071	Westlake Urban Building	San Mateo	2020	3.6	0	NA
202274	Rancho de Calistoga	Calistoga	2022	3.6	0	NA
202641	MedVet Silicon Valley	San Jose	2022	3.6	0	NA
13528	Pacific Bell	San Jose	2012	3.5	0	0
17183	Novato Fire District	Novato	2005	3.5	0	NA
201378	Four Seasons Resort & Residences Napa Valley	Calistoga	2023	3.5	0	0.72
202382	SJFD TRAINING CENTER	San Jose	2025	3.5	0	NA
202724	San Bruno Recreation & Aquatic Center	San Bruno	2022	3.5	0	NA
11431	City of Oakland Public Works Agency	Oakland	2006	3.4	0	NA
12517	The Presidio Trust	San Francisco	2012	3.4	0	NA
22683	TSMC North America	San Jose	2014	3.4	0	NA
23706	AXIS HOA	San Jose	2008	3.4	0	NA
201412	Synopsys Pathline Building 1	Sunnyvale	2023	3.4	0	NA
202738	Fire Station 16	Dublin	2022	3.4	0	NA
14825	Federal Aviation Administration	Mill Valley	2008	3.3	0	NA
20428	Kaiser Hospital	San Leandro	2010	3.3	0	NA
21601	San Francisco Marriott Fisherman's Wharf	San Francisco	2024	3.3	0	NA
21612	CCSF - 25VN	San Francisco	2018	3.3	0	NA
25075	Mission Rock Parcel G LLC	San Francisco	2022	3.3	0	0.01
201778	Contra Costa County Administration Building	Martinez	2020	3.3	0	NA
202828	Tasman ASL PropCo LLC	Santa Clara	2023	3.3	0	0.05
8679	Kaiser Permanente	Richmond	2012	3.2	0	NA

13900	Comcast Communications	Daly City	2004	3.2	0	NA
19025	City of Fremont Development	Fremont	2008	3.2	0	NA
19323	555 YVR, LLC	Walnut Creek	2008	3.2	0	NA
200361	Webster House Health Center	Palo Alto	2016	3.2	0	NA
200439	Mosser Company	San Francisco	2017	3.2	0	NA
200652	The Exchange	San Francisco	2018	3.2	0	NA
201782	Elyse Winery	Napa	2019	3.2	0	NA
202964	Redwood Bay Biotech. LLC	Redwood City	2023	3.2	0	NA
16502	City of Brentwood	Brentwood	2006	3.1	0	NA
17649	Alexandria Real Estate Equities, Inc	South San Francisco	2018	3.1	0	NA
18938	City of Palo Alto-San Francisquito Pump Station	Palo Alto	2008	3.1	0	NA
19088	Avalon Bay	Union City	2008	3.1	0	NA
19170	North Coast County Water District	San Bruno	2008	3.1	0	NA
19898	Menlo Park Portfolio c/o Tarlton Properties	Menlo Park	2022	3.1	0	NA
21193	Comcast Cable	Santa Clara	2020	3.1	0	NA
23344	First Republic Bank	San Francisco	2016	3.1	0	NA
23586	Bay Alarm-Concord	Concord	2016	3.1	0	NA
202290	California Water Service Co. BG Station 7	Portola Valley	2021	3.1	0	NA
13556	Pacific Bell	Vallejo	2003	3	0	NA
201384	Pure Storage, Inc.	Santa Clara	2018	3	0	NA
201628	Rigetti Computing	Berkeley	2019	3	0	NA
24758	Amazon Data Services, Inc	Santa Clara	2023	2.93	0	0.05
2457	Regional Medical Center of San Jose	San Jose	2011	2.9	0	NA
13332	Level 3 Communications	San Martin	2001	2.9	0	NA
18429	Sonoma County Human Services Building	Santa Rosa	2007	2.9	0	NA
21295	California Hotel	Oakland	2012	2.9	0	NA
201511	Bay Area Rapid Transit	Oakland	2018	2.9	0	NA
202327	Longfellow Real Estate Partners	Palo Alto	2023	2.9	0	0.9

202683	1307 66th, LLC	Emeryville	2022	2.9	0	NA
203237	Pimentel Place	Hayward	2024	2.9	0	NA
3162	Pacific Gas and Electric Company	Concord	2002	2.8	0	NA
19102	Verizon Wireless-Fairfield MSC	Fairfield	2008	2.8	0	NA
20504	Las Gallinas Valley Sanitary District	San Rafael	2011	2.8	0	NA
22102	Southern Wine And Spirits	Union City	2013	2.8	0	NA
22854	Hillstone Restaurant Group	Saint Helena	2015	2.8	0	NA
109899	Costco Wholesale #423	Sunnyvale	2019	2.8	0	NA
200402	San Jose Water Company	San Jose	2017	2.8	0	NA
201800	City of Palo Alto	Palo Alto	2022	2.8	0	0.01
201806	Amazon USF1 Santa Clara	Santa Clara	2019	2.8	0	NA
202768	Pear Avenue Phase II	Mountain View	2022	2.8	0	NA
25206	Apple Inc	Sunnyvale	2022	2.7	0	0
201406	Residence Inn Berkeley	Berkeley	2021	2.7	0	NA
202870	SJW Mann Station	Cupertino	2023	2.7	0	NA
203395	S.S. Heritage Inn of Pleasanton, LLC	Pleasanton	2024	2.7	0	NA
18486	San Jose Fire Dept	San Jose	2007	2.6	0	NA
23162	Juniper Hotel Cupertino	Cupertino	2003	2.6	0	NA
24769	Ross Stores	Dublin	2003	2.6	0	NA
100108	Costco Fuel Facility (Loc. 148)	San Jose	2017	2.6	0	NA
200541	Workday	Pleasanton	2017	2.6	0	NA
200756	Hampton Inn San Jose	San Jose	2019	2.6	0	NA
18462	Stanford Medicine Outpatient Center	Redwood City	2008	2.5	0	NA
19558	One Kearny LLC	San Francisco	2009	2.5	0	NA
20079	Menlo Park Portfolio II, LLC	Menlo Park	2016	2.5	0	NA
22407	Kistler Winery-Tasting Room	Forestville	2014	2.5	0	NA
23638	Kenwood Fire District	Kenwood	2016	2.5	0	NA
202957	950 Page Mill Road	Palo Alto	2023	2.5	0	NA
14314	Solano County Facilities	Fairfield	2017	2.4	0	NA

17986	Joseph Phelps Vineyards, LLC	Freestone	2006	2.4	0	NA
202283	Caymus Suisun Winery	Fairfield	2023	2.4	0	NA
202951	Albany Village Graduate Student Housing	Albany	2023	2.4	0	NA
203097	Rubicon	San Francisco	2023	2.4	0	NA
24535	NTT Global Data Centers Americas, Inc	Santa Clara	2020	2.31	0	NA
14775	Level 3 Communications	San Francisco	2002	2.3	0	NA
16846	T-Mobile - Santa Clara Satellite	Santa Clara	2022	2.3	0	0.01
200915	Hillsdale Shopping Center- North Block	San Mateo	2018	2.3	0	NA
201578	Inglenook Winery	Rutherford	2019	2.3	0	NA
201851	MILTENYI BIOTEC	San Jose	2020	2.3	0	NA
202104	Azure Acres Recovery Center	Sebastopol	2022	2.3	0	NA
202631	1150 Terra Bella	Mountain View	2022	2.3	0	NA
202812	Fire Station 55	San Rafael	2023	2.3	0	NA
202848	Tiffany Court of Walnut Creek	Walnut Creek	2022	2.3	0	NA
202878	1173 Coleman Avenue (B3)	San Jose	2023	2.3	0	NA
202992	Berkeley Commons	Berkeley	2023	2.3	0	NA
203203	Collab Fertility, Inc.	Walnut Creek	2023	2.3	0	NA
13695	Lowe's HIW, Inc	Antioch	2002	2.2	0	NA
14964	Wells Fargo Bank	Fremont	2014	2.2	0	NA
15409	Mattson Technology, Inc	Fremont	2004	2.2	0	NA
18031	Kaiser Permanente	Napa	2012	2.2	0	NA
21051	City of Santa Rosa	Santa Rosa	2021	2.2	0	NA
22135	S F Bay Area Rapid Transit District	Oakland	2013	2.2	0	NA
201768	Zeiss Innovation Center California	Dublin	2020	2.2	0	NA
202826	Fire Station 54	San Rafael	2022	2.2	0	NA
203158	PG III 250 East Grand, LLC	South San Francisco	2023	2.2	0	NA
203223	Target Store - T0324	San Jose	2025	2.2	0	NA
17584	Alexandria Real Estate Equities, Inc	South San Francisco	2006	2.1	0	NA
18013	200 Paul Avenue LLC, c/o Digital Realty Trust	San Francisco	2012	2.1	0	NA

19005	Verizon Wireless	Sonoma	2008	2.1	0	NA
19539	CoreSite Real Estate	Santa Clara	2024	2.1	0	NA
20775	SYNNEX Corporation	Fremont	2015	2.1	0	NA
21049	City of Santa Rosa	Santa Rosa	2023	2.1	0	NA
21370	TransitAmerica Services, Inc	San Francisco	2011	2.1	0	NA
109785	Contra Costa County Fire Station #81	Antioch	2024	2.1	0	NA
200623	Stonefire Apartments	Berkeley	2017	2.1	0	NA
201165	CoreSite Real Estate 3045 Stender, LP	Santa Clara	2024	2.1	0	NA
202356	Pacific Research Center	Newark	2023	2.1	0	NA
202592	Ascend Clinical LLC	Sunnyvale	2022	2.1	0	NA
202795	Bascom Assisted Living Facility	San Jose	2023	2.1	0	NA
203441	The Lafayette	Santa Clara	2024	2.1	0	NA
203450	Menlo Corporate Center	Menlo Park	2024	2.1	0	NA
20588	CSAA Insurance Group	Walnut Creek	2014	2.09	0	NA
25215	Twelve R&D Facility	Alameda	2023	2.06	0	NA
20233	488 Almaden Owner LLC	San Jose	2007	2	0	NA
20720	San Francisco Public Utilities Commission	San Francisco	2020	2	0	NA
24421	1500 Space Park Drive LLC	Santa Clara	2022	2	0	0.02
202600	30680 Huntwood	Hayward	2022	2	0	NA
202800	City of Alameda	Alameda	2023	2	0	NA
203121	City of Antioch Water Treatment Plant	Antioch	2023	2	0	0
15889	Dublin San Ramon Services District	Dublin	2004	1.96	0	NA
22410	ROMEL 400 SECR, LLC	San Mateo	2013	1.95	0	NA
19470	Westfield Valley Fair	Santa Clara	2018	1.9	0	NA
19953	Santa Clara County Fire Dept	Los Gatos	2022	1.9	0	NA
22001	FedEx Freight, Inc	Hayward	2013	1.9	0	NA
22851	222 Second Street Owner, LP	San Francisco	2015	1.9	0	NA
23276	San Leandro Tech Campus	San Leandro	2017	1.9	0	NA
24324	Verb Surgical Inc	Santa Clara	2015	1.9	0	NA

203164	Hampton Inn and Suites	San Mateo	2023	1.9	0	NA
19924	The Irvine Company	San Jose	2010	1.8	0	NA
23653	939 Ellis Street, LLC	San Francisco	2017	1.8	0	NA
201658	Allogene Therapeutics, Inc.	South San Francisco	2019	1.8	0	NA
201827	Revolution Medicines, Inc.	Redwood City	2019	1.8	0	NA
203422	Courtyard by Marriott	Pittsburg	2024	1.8	0	NA
17306	Sonoma County Water Agency-Sonoma Booster Station	Santa Rosa	2020	1.74	0	NA
13226	The Home Depot Store #1017	Hayward	2001	1.7	0	NA
20656	City Of Brentwood	Brentwood	2020	1.7	0	NA
21170	Alexandria Real Estate Eq , Inc	South San Francisco	2018	1.7	0	NA
21348	Apple Inc	Sunnyvale	2012	1.7	0	NA
21535	Gap, Inc	San Francisco	2015	1.7	0	NA
201802	Snowflake	Menlo Park	2019	1.7	0	NA
202363	Market Street Development	San Pablo	2021	1.7	0	NA
202364	The Emery (500 Apartments & Retail)	Emeryville	2022	1.7	0	NA
202450	1304 El Camino Real Apartments	Redwood City	2022	1.7	0	NA
202512	The Forum at Rancho San Antonio	Cupertino	2022	1.7	0	NA
202581	GeneFab, LLC	Alameda	2022	1.7	0	NA
202671	Rowland Plaza Pump Station	Novato	2022	1.7	0	NA
202963	AT&T - FA10095813 - East Fairfield	Suisun City	2023	1.7	0	NA
21891	Santa Clara County Roads and Airports Department	Livermore	2013	1.6	0	NA
22094	American Tower LLC - 89375- Starr Canyon Site	Morgan Hill	2013	1.6	0	NA
22785	Kilroy Realty Corporation	San Francisco	2014	1.6	0	NA
23616	Central Wolfe LLC	Sunnyvale	2016	1.6	0	NA
202171	TBUSA	San Jose	2021	1.6	0	NA
17864	Peralta Community College District	Berkeley	2006	1.59	0	NA
17573	San Francisco Municipal Railway	San Francisco	2006	1.58	0	NA

7189	Delta Diablo Sanitation District	Antioch	2006	1.5	0	NA
9313	St Luke's Hospital A/P,CPMC-STL Campus	San Francisco	2016	1.5	0	NA
21402	Forty Niners Stadium, LLC	Santa Clara	2012	1.5	0	NA
23611	Google, Inc	San Francisco	2016	1.5	0	NA
24514	Bay Club Walnut Creek, LLC	Walnut Creek	2002	1.5	0	NA
200633	Bolb, Inc.	Livermore	2017	1.5	0	NA
201246	Amazon.com Services LLC - SCA3	Richmond	2025	1.5	0	NA
201874	30 Otis	San Francisco	2020	1.5	0	NA
202310	Guardant Health at 3100 Hanover Palo Alto	Palo Alto	2021	1.5	0	NA
202691	Vantage	South San Francisco	2022	1.5	0	0.01
202706	Shannon Community Center	Dublin	2022	1.5	0	NA
202867	1620 South Loop Road	Alameda	2023	1.5	0	NA
203042	Silicon Valley Surgery Center	Campbell	2023	1.5	0	NA
203147	6475 Christie Avenue	Emeryville	2023	1.5	0	NA
16724	New Cingular Wireless dba AT&T Mobility	Santa Clara	2024	1.4	0	0
19381	Blue Line Sterilization Services	Novato	2024	1.4	0	0.07
19673	Verizon Wireless(Jameson Canyon)	Suisun City	2009	1.4	0	NA
24998	City of Santa Rosa	Santa Rosa	2021	1.4	0	NA
25053	Standford Health Care	Castro Valley	2020	1.4	0	NA
200348	West Bay Sanitary District	Portola Valley	2016	1.4	0	NA
201486	HCP LS Brisbane LLC c/o CBRE	Brisbane	2018	1.4	0	NA
201718	ARE - San Francisco No. 63, LLC	San Carlos	2019	1.4	0	NA
202081	Google, Inc.	Palo Alto	2020	1.4	0	NA
202507	Ritter Center	San Rafael	2022	1.4	0	NA
202591	10X Genomics	Pleasanton	2022	1.4	0	0
202649	Bret Harte Center	San Rafael	2022	1.4	0	NA
203143	Amazon.com Services - DSF8	Richmond	2023	1.4	0	NA
200601	GI ETS Shoreline LLC - 7000 Shoreline Ct	South San Francisco	2017	1.35	0	NA
14020	Prologis	San Francisco	2024	1.3	0	NA

21386	Santa Rosa Jr College Campus (SRJC)	Petaluma	2012	1.3	0	NA
22307	Garre Winery Event Center	Livermore	2014	1.3	0	NA
22379	Preferred Freezer Services	San Leandro	2014	1.3	0	NA
24109	Ponte Gadea California LLC	San Francisco	2022	1.3	0	NA
25257	BMR-Gateway of Pacific III LP	South San Francisco	2021	1.3	0	0.04
202776	Brittan West	San Carlos	2024	1.3	0	0
202780	Nkarta, Inc.	South San Francisco	2022	1.3	0	NA
202802	Livermore Hub	Livermore	2023	1.3	0	NA
203039	Amgen Inc.	South San Francisco	2021	1.3	0	NA
16248	Comcast of California IX Inc	Fremont	2015	1.2	0	NA
18517	Verizon Wireless (St Helena)	Calistoga	2007	1.2	0	NA
18658	San Francisco Bay Bridge Toll Plaza	Oakland	2007	1.2	0	NA
22624	Golub Real Estate Corporation	San Francisco	2014	1.2	0	NA
22842	Contra Costa County Public Works Department	Martinez	2015	1.2	0	NA
200822	Tech Corners Campus LLC	Sunnyvale	2018	1.2	0	NA
201428	Alviso Storm Pump Station	San Jose	2018	1.2	0	NA
202715	Sequence Campus	Fremont	2022	1.2	0	NA
202766	Sonoma Valley Unified School District Office	Sonoma	2022	1.2	0	NA
202975	Piezzi Lift Station SLS-09	Santa Rosa	2023	1.2	0	NA
203436	LH Shoreline Apartments LP - 1170 Spruce St.	Mountain View	2024	1.2	0	NA
13491	AT&T	Mountain View	2003	1.1	0	0
17073	T-Mobile - Oakland Switch	Oakland	2023	1.1	0	NA
24942	Samaritan Medical Center	San Jose	2021	1.1	0	0
111160	Los Gatos Mobil One	Los Gatos	2024	1.1	0	1.4
200376	Hyatt Place Emeryville	Emeryville	2016	1.1	0	NA
201807	Prime Now LLC-USF2	San Leandro	2019	1.1	0	NA
202304	VA Santa Rosa CBOC	Santa Rosa	2021	1.1	0	NA
202854	Redwood Credit Union - Napa Campus	Napa	2023	1.1	0	NA

203462	Cow Palace Arena & Event Center	Daly City	2025	1.1	0	NA
13518	SBC	San Francisco	2004	1.03	0	NA
11924	California Pacific Medical Center	San Francisco	2012	1	0	NA
13108	Vallejo Sanitation & Flood Control Dist	Vallejo	2004	1	0	NA
13333	Saratoga Retirement Community	Saratoga	2001	1	0	0
13825	San Jose Water Co , Montevina	Los Gatos	2016	1	0	NA
15284	City of Dublin	Dublin	2022	1	0	NA
15458	City of Pinole Fire	Pinole	2003	1	0	NA
17461	City of Redwood City	Redwood City	2012	1	0	NA
19405	Fairfield Fire Department - Station 37	Fairfield	2009	1	0	NA
201699	Microsoft Corporation	Mountain View	2019	1	0	NA
201727	SFPUC - Yerba Buena Island	San Francisco	2022	1	0	NA
202626	Page Street Studios	San Jose	2022	1	0	NA
200600	Sewerage Agency of Southern Marin	Mill Valley	2017	0.99	0	NA
17950	City of Hayward Public Works Utilities	Hayward	2006	0.98	0	NA
200502	Fortinet	Union City	2017	0.97	0	NA
21041	City of Santa Rosa	Santa Rosa	2023	0.96	0	NA
2227	Mills Peninsula Medical Center	Burlingame	2009	0.95	0	NA
21978	Meta Platforms, Inc. - FRE 126	Fremont	2013	0.95	0	NA
20196	CPFB Tenant, LLC/Cavallo Point Lodge	Sausalito	2010	0.94	0	NA
203049	The Surgery Center	Oakland	2023	0.93	0	NA
24972	Genomic Health, Inc	Redwood City	2009	0.91	0	NA
203244	Avalon West Dublin	Dublin	2023	0.91	0	NA
5498	Randall-Bold Water Treatment Plant	Oakley	2010	0.9	0	NA
14316	Judicial Council of California, JCC 48-A1	Fairfield	2010	0.9	0	NA
19127	Parkmerced Investors LLC	San Francisco	2008	0.9	0	NA
19817	County of Marin, MER, Bolinas	Bolinas	2008	0.9	0	NA
200628	City of Union City	Union City	2017	0.9	0	NA
202654	Alexza Pharmaceuticals	Fremont	2022	0.9	0	NA

19187	Walnut Creek Endoscopy & Surgery Center	Walnut Creek	2008	0.88	0	NA
21916	The Maude & Mathilda R&D c/o Kilroy Realty L P	Sunnyvale	2013	0.87	0	NA
23738	Chinatown Community Development Center	San Francisco	2007	0.87	0	NA
202646	Oakland 11	Oakland	2022	0.86	0	NA
202933	2895 Seventh Street	Berkeley	2023	0.86	0	NA
15906	1035 Market Street	San Francisco	2004	0.85	0	NA
24317	Planetary Ventures	Mountain View	2019	0.85	0	NA
18915	City of San Jose Municipal Water	San Jose	2024	0.84	0	NA
20515	Santa Clara Unified School District	Santa Clara	2021	0.84	0	NA
24096	Pacific Oak SOR 353 Sacramento St, LLC	San Francisco	2021	0.83	0	NA
202661	Iron Ox GH1X	Gilroy	2022	0.82	0	NA
202718	Extra Space Storage	Alameda	2022	0.82	0	NA
20461	The Pyramid Center	San Francisco	2017	0.81	0	NA
15507	Point Richmond R & D Associates	Richmond	2007	0.8	0	NA
22938	Visual Concepts Entertainment	Novato	2015	0.8	0	NA
111362	Fast Gas & Mini Mart	San Leandro	2021	0.8	0	NA
4007	Central Contra Costa Sanitary District	Orinda	2021	0.79	0	0
202660	Peninsula Innovation Point	Burlingame	2022	0.79	0	NA
202784	BTC III San Jose Logistics Center LP	San Jose	2022	0.79	0	NA
202803	GI ETS Hayward LLC	Hayward	2022	0.79	0	NA
203667	Spartan Village on the Paseo	San Jose	2025	0.79	0	NA
21046	City of Santa Rosa	Santa Rosa	2023	0.77	0	NA
200744	Fremont Bank Livermore Operations	Livermore	2021	0.75	0	NA
25149	Google Caribbean	Sunnyvale	2022	0.74	0	0.01
202163	Bionova Scientic Inc.	Fremont	2024	0.74	0	0.37
203048	Target Store - T1426	San Jose	2023	0.74	0	NA
200461	New Cingular Wireless PCS, LLC dba AT&T Mobility	Livermore	2017	0.73	0	NA
203282	1953 Concourse Dr LLC	San Jose	2024	0.73	0	NA

203345	Hummingbird ESS LLC	San Jose	2024	0.73	0	NA
203012	950 Marina Village Parkway	Alameda	2023	0.72	0	NA
23817	Matheson Tri-Gas, Inc	Richmond	2017	0.71	0	NA
202804	STC Venture Block 3RWS, LLC	Sunnyvale	2023	0.71	0	0
203120	Allen Brothers NorCal	Richmond	2023	0.71	0	NA
13742	East Bay Municipal Utility Dist	Richmond	2005	0.7	0	NA
14475	City of Burlingame	Burlingame	2012	0.7	0	NA
22277	Union Investment Real Estate GmbH	San Francisco	2007	0.7	0	NA
200845	IKEA	American Canyon	2018	0.7	0	NA
203149	2460 Embarcadero	Palo Alto	2024	0.7	0	NA
17248	City of Santa Clara - Laurelwood Storm	Santa Clara	2022	0.69	0	0
203485	Vine & Fig	St. Helena	2024	0.68	0	NA
202531	3000 Hanover	Palo Alto	2023	0.67	0	NA
200373	Calico Laboratories	South San Francisco	2016	0.66	0	NA
202495	Genesis Marina	Brisbane	2022	0.65	0	0.01
202620	Sonoma County Indian Health Project, Inc.	Santa Rosa	2022	0.65	0	NA
202896	T-Mobile - BA62012S	Oakland	2023	0.63	0	NA
202506	Logisticenter Fairfield	Fairfield	2023	0.61	0	NA
202678	100 Altair Way	Sunnyvale	2022	0.61	0	NA
201704	NFD - Station 64	Novato	2019	0.6	0	NA
21047	City of Santa Rosa	Santa Rosa	2023	0.59	0	NA
23682	Elixir Medical Corporation	Milpitas	2016	0.59	0	NA
201401	AP3-SF3 CT NORTH LLC	South San Francisco	2018	0.59	0	NA
203071	Morningstar DeAnza Memory Care	San Jose	2023	0.59	0	NA
203109	Dumbarton Circle Spec Suite	Fremont	2023	0.59	0	NA
21183	City of Santa Rosa	Santa Rosa	2023	0.58	0	NA
201882	ARE-San Francisco No. 65, LLC	South San Francisco	2020	0.57	0	NA
201964	Terreno Morton LLC	Newark	2024	0.57	0	NA

202597	Marina Village Parkway Pump Station - 713 Marina Village Pkwy	Alameda	2023	0.57	0	NA
202807	Harbor Bay Pump Station	Alameda	2022	0.57	0	NA
203493	850 Marina Village Parkway	Alameda	2024	0.57	0	NA
202031	Palmaz Vineyards	Napa	2022	0.56	0	NA
202887	Vine Transit Maintenance Facility	Napa	2023	0.55	0	NA
200693	Amtrak	Oakland	2023	0.54	0	NA
202697	Allston Way - Warm Shell & Core	Berkeley	2022	0.54	0	NA
25115	Foundry 31 LLC	Berkeley	2022	0.53	0	0
202606	Twelve Benefit Corporation	Alameda	2022	0.53	0	NA
14950	Frontier California	Kenwood	2009	0.52	0	NA
23131	Sutter Health-CPMC VNC	San Francisco	2015	0.52	0	NA
202749	Vaxart, Inc.	South San Francisco	2022	0.52	0	NA
202879	CLPF GRP Uptown Menlo Park	Menlo Park	2023	0.52	0	NA
201879	7380 Morton	Newark	2020	0.51	0	NA
21192	City of Dublin/Public Works	Dublin	2012	0.5	0	NA
202998	1015 Atlantic Ave	Alameda	2023	0.5	0	NA
23274	OnTrac Logistics, Inc	Fremont	2016	0.49	0	NA
202056	FedEx Freight Livermore	Livermore	2020	0.49	0	NA
201630	Pacific Commons Owner LP	Fremont	2024	0.48	0	NA
25102	Uptown Broadway LLC	Oakland	2016	0.47	0	NA
25137	921 Howard	San Francisco	2022	0.47	0	NA
202454	Eat Just - Tenant Improvement	Alameda	2022	0.47	0	NA
202695	Synthego Holdings, Inc.	Redwood City	2022	0.45	0	NA
201469	OLE Health South Napa Campus	Napa	2018	0.43	0	NA
202817	Amazon.com Services LLC - SCA2	Brisbane	2023	0.41	0	NA
202902	T-Mobile - SF64142S	Campbell	2023	0.41	0	NA
18451	Catholic Cathedral Corporation of the East Bay	Oakland	2007	0.4	0	NA
20838	New Cingular Wireless dba AT&T Mobility	Saint Helena	2015	0.4	0	NA

22058	KRE 1221 Broadway Owners LLC	Oakland	2001	0.4	0	NA
111865	Richmond 1001 Petroleum Inc	Richmond	2025	0.4	0	1
200347	1500 N California Blvd LLC	Walnut Creek	2016	0.4	0	NA
202708	GS MP Portal Owner, LLC.	Menlo Park	2022	0.4	0	NA
202835	220 Park Road	Burlingame	2022	0.39	0	NA
13986	City of Santa Rosa Utilities Dept	Santa Rosa	2023	0.38	0	NA
13987	City of Santa Rosa Utilities Dept	Santa Rosa	2023	0.38	0	NA
203153	San Ramon Property Owner LLC	San Ramon	2023	0.38	0	NA
21868	Chappellet Winery	Saint Helena	2013	0.37	0	NA
202532	1600 Harbor Bay Parkway	Alameda	2022	0.37	0	NA
202965	AT&T - FA10088156 - Hwy 101 - Lincoln	San Rafael	2023	0.37	0	NA
201737	Marcassin Wine	Windsor	2019	0.36	0	NA
202399	490 De Guigne Generator	Sunnyvale	2022	0.35	0	NA
202739	3450 Hillview	Palo Alto	2022	0.34	0	NA
15808	The Home Depot Store #8572	Morgan Hill	2025	0.33	0	0
18807	California Highway Patrol, Cordelia Insp Facility	Fairfield	2014	0.32	0	NA
202551	Amazon.com Services LLC - DFO3	Livermore	2023	0.32	0	NA
202785	PR Clawiter Hayward, LLC	Hayward	2022	0.31	0	NA
907	Central Contra Costa Sanitary District	Martinez	2012	0.3	0	NA
10327	Sutter Bay Hospitals dba Mills-Peninsula Health	San Mateo	2010	0.3	0	NA
24925	BioSquare Silicon Valley	San Jose	2021	0.3	0	NA
202136	BCDPF Bay Area Commerce Center Lease Management LLC	Livermore	2022	0.3	0	NA
202891	West 10 Warehouse	Redwood City	2023	0.3	0	NA
17710	3E Company/Regulatory Dept c/o Home Depot #6603	East Palo Alto	2023	0.29	0	NA
24447	DW LSP 550 TF, LLC	San Francisco	2023	0.29	0	NA
202900	T-Mobile - BA62062S	Fremont	2023	0.29	0	NA
201796	Prologis 6 Livermore	Livermore	2019	0.28	0	NA

202008	City of Newark	Newark	2020	0.27	0	NA
203015	TI Lot 10, LLC	San Francisco	2023	0.27	0	NA
24297	MCREF Rincon Hill, LLC	San Francisco	2019	0.26	0	NA
203384	University of CA San Francisco - Peninsula Outpatient Center	Burlingame	2024	0.26	0	0.08
14024	San Ramon Valley Fire District - Station #34	San Ramon	2024	0.25	0	0
20204	City of San Mateo	San Mateo	2022	0.25	0	0
203161	Logisticenter At Enterprise	Hayward	2023	0.25	0	NA
100625	County of San Mateo - Half Moon Bay Airport	Half Moon Bay	2025	0.23	0	NA
203115	BGOGC 2197/2225 Bayshore Owner LLC	Palo Alto	2024	0.21	0	NA
22144	Irvine Company Office Properties	Santa Clara	2013	0.2	0	NA
203017	Fairfield Industrial Center	Fairfield	2023	0.2	0	NA
25092	Photop Technologies, Inc	Santa Rosa	2022	0.19	0	0.08
24068	Pacific Oak SOR II Oakland City Center LLC	Oakland	2023	0.18	0	NA
202914	1951 Shattuck	Berkeley	2023	0.18	0	NA
24596	SKS/ Prado 2130 Third Street, LLC	San Francisco	2020	0.17	0	NA
24876	Eurofins Infinity Laboratory Group, Inc	San Jose	2022	0.17	0	NA
14595	Federal Aviation Administration	San Jose	2024	0.16	0	NA
16319	UCSF/Hunters Point	San Francisco	2024	0.16	0	0
202924	Parr Blvd. & Richmond Parkway Building 1	Richmond	2023	0.16	0	NA
24713	CCSF-TC & FSD	San Francisco	2020	0.15	0	NA
202716	901 Mariners Island Boulevard	San Mateo	2022	0.15	0	0
202775	Nutcracker Therapeutics	Emeryville	2022	0.14	0	NA
202974	24493 Clawiter Road	Hayward	2023	0.14	0	NA
203319	47200 Bayside Parkway	Fremont	2024	0.14	0	NA
202837	300 Kansas Building	San Francisco	2023	0.13	0	NA
202687	Oyster Point Phase 2 Development	South San Francisco	2022	0.12	0	0
13884	Delta Diablo Sanitation District	Pittsburg	2022	0.11	0	NA
203011	Robert Mondavi Winery, Red barn	Napa	2023	0.11	0	NA

203296	Ultragenyx Pharmaceutical Inc.	South San Francisco	2024	0.11	0	NA
18177	Sonoma County Sheriff's Office	Petaluma	2007	0.1	0	NA
202858	531 Bryant Street	San Francisco	2023	0.09	0	NA
201943	Caltrans - Devil's Slide	Pacifica	2020	0.04	0	NA
25127	Poplar Avenue Pump Station	San Mateo	2022	0.03	0	0
202730	Napa Regional Center	American Canyon	2022	0.03	0	0.21
24235	MRL San Francisco, LLC	South San Francisco	2019	0.02	0	0.96
23467	Vander-Bend Manufacturing Inc	San Jose	2025	NA	0	0.13
23492	C and H Enterprises	Fremont	2024	NA	0	0.78
12743	MCI, dba Verizon Business	Concord	2001	9.99	NA	NA
16421	City of San Jose, SBWRP	San Jose	2004	9.99	NA	NA
24528	Google LLC	Sunnyvale	2001	9.99	NA	NA
16787	Bayside Area Development, LLC c/ CBRE, Inc	South San Francisco	2005	9.98	NA	NA
14149	Contra Costa County	Pittsburg	2002	9.95	NA	NA
13513	AT&T	San Bruno	2002	9.93	NA	NA
13077	NOP 560 Mission LLC	San Francisco	2001	9.9	NA	NA
13554	Pacific Bell	Union City	2002	9.9	NA	NA
14200	XO Communications Services, LLC	Fremont	2002	9.9	NA	NA
14433	Pacific Bell	Windsor	2002	9.9	NA	NA
14776	Level 3 Communications	Suisun City	2002	9.9	NA	NA
15101	Redwood City	Redwood City	2012	9.9	NA	NA
16003	Comcast of California IX, Inc	Concord	2004	9.9	NA	NA
16345	Vi at Palo Alto	Palo Alto	2004	9.9	NA	NA
20885	Casino M8trix	San Jose	2011	9.9	NA	NA
21519	Alameda County Water District	Fremont	2012	9.9	NA	NA
13866	City of SSF Water Quality Plant	South San Francisco	2004	9.7	NA	NA
13877	Sanitary District No 1, Kentfield Pump Station	Kentfield	2002	9.6	NA	NA
20924	Juniper Networks	Sunnyvale	2002	9.2	NA	NA

21930	San Francisco Public Utilities Commission	San Francisco	2015	9.1	NA	NA
18852	Town of Hillsborough	Hillsborough	2008	8.3	NA	NA
22566	County of Marin c/o Sares Regis	San Rafael	2013	8.1	NA	NA
21057	Sutter Bay Hospitals	Santa Rosa	2012	7.6	NA	NA
13241	KGO Television ABC Inc	San Francisco	2001	7.2	NA	NA
21400	Intelsat Corporation	Napa	2012	7.2	NA	NA
14063	Central Contra Costa Sanitary District	Orinda	2004	7.1	NA	NA
13461	Pacific Bell	Cotati	2005	6.5	NA	NA
22032	Jamestown Concord Tech Bldg c/o SRP Mgmt, Inc	Concord	2012	6.4	NA	NA
1534	Silicon Valley Clean Water	Redwood City	1989	6	NA	NA
13450	Pacific Bell	Benicia	2003	6	NA	NA
100146	Costco Gasoline #482	Richmond	1999	5.7	NA	NA
22746	Fox Television Stations, Inc , on behalf of KTVU	Oakland	2012	5.3	NA	NA
15071	Pacific Bell	Sausalito	2005	4.9	NA	NA
15455	Marin Municipal Water District	Novato	2003	4.9	NA	NA
1634	Napa State Hospital	Napa	1990	4.1	NA	NA
8664	Crockett Cogeneration, LLC	Crockett	1991	4	NA	NA
12765	MCI,dba Verizon Business	Oakland	2000	4	NA	NA
15595	Golden Gate Ferry	Larkspur	2002	4	NA	NA
15789	City of Brentwood	Brentwood	2004	4	NA	NA
13471	Pacific Bell	Half Moon Bay	2002	3.9	NA	NA
19465	RNM Properties	Petaluma	2004	3.6	NA	NA
14992	Visa Land Management IV	Foster City	2002	3.5	NA	NA
19880	Bear Gulch Creek Partners LLC	Woodside	2010	3.1	NA	NA
20126	Evocative	Santa Clara	2013	3.1	NA	NA
22442	Azure Apartment Complex	San Francisco	2014	2.9	NA	NA
15291	Comcast Cable Corporation	Sebastopol	2003	2.84	NA	NA
13651	Mettler-Toledo Rainin,LLC	Oakland	2002	2.5	NA	NA

13867	City of SSF Water Quality Plant	South San Francisco	2004	2.3	NA	NA
16552	Contra Costa Water District	Concord	2005	2.2	NA	NA
2721	City of Palo Alto Landfill	Palo Alto	1989	2	NA	NA
16853	Town of Windsor	Windsor	2004	2	NA	NA
12969	Verizon Business - SBEZCA	San Jose	2001	1.8	NA	NA
16333	Verizon Wireless - Landess	Milpitas	2004	1.7	NA	NA
21708	Clorox Services Company	Pleasanton	2013	1.7	NA	NA
18875	Bay Street Apartments by Windsor	Emeryville	2005	1.4	NA	NA
19803	San Jose Water Company	San Jose	2015	1.4	NA	NA
12764	MCI dba Verizon Business	Dublin	2001	1.3	NA	NA
15362	George Roberts	Atherton	2003	1.2	NA	NA
18990	Phoenix American Inc	San Rafael	2008	1.2	NA	NA
24551	SFF 1650 Street LLC	Emeryville	2005	1.2	NA	NA
18753	City of Santa Clara	Santa Clara	2007	1.1	NA	NA
20413	Hawthorne Plaza Assoc LLC	San Francisco	2014	1.1	NA	NA
19090	San Francisco Public Utilities Commission	San Francisco	2010	1	NA	NA
20663	City of Cupertino	Cupertino	2012	1	NA	NA
13197	Town of Discovery Bay	Discovery Bay	2001	0.9	NA	NA
13949	Amazon.com Services LLC - DSJ9	Oakland	2002	0.83	NA	NA
24187	Shimmick/Danny's Joint Venture	Mill Valley	2019	0.8	NA	NA
13589	Pacific Bell	Sonoma	2006	0.7	NA	NA
7421	Pacific Bell	Fremont	2002	0.6	NA	NA
17428	Quadrus Sand Hill, LLC	Menlo Park	2005	0.6	NA	NA
2885	Union Sanitary Dist, Newark PS	Newark	2007	0.5	NA	NA
23557	New Cingular Wireless PCS dba AT&T Mobility	Pacifica	2016	0.5	NA	NA
202930	1700 Dell Avenue	Campbell	2023	0.49	NA	NA
18587	UC Hastings School of the Law	San Francisco	2019	0.3	NA	NA
22317	Thermo Fisher Scientific	Fremont	2014	0.3	NA	NA

16955	City of Santa Rosa Utilities Dept	Santa Rosa	2005	0.1	NA	NA
100768	Silver Oak Cellars	Oakville	2018	0.1	NA	NA

APPENDIX B – FACILITY RANKINGS AND REVIEW PHASES

This appendix provides the prioritization scores and facility rank (high, intermediate, and low priority) for all permitted facilities in the Bay Area that emit TACs. High priority facilities and select intermediate priority facilities are further categorized by a review phase assigned by the Air District. Table B-1 in Appendix B lists the high priority facilities in Phase I review status. Table B-2 lists the high priority facilities in Phase II review status. Table B-3 lists the high priority facilities in Phase III review status. Table B-4 lists the intermediate priority facilities. For all tables, the facilities are ordered by prioritization score from highest to lowest.

Table B-1. High Priority Facilities in Phase I Review Status

Facility Number	Facility Name	City	County	AB2588 Priority Ranking	HRA Year	HRA Cancer Risk (in chances in a million)	Chronic Hazard Index	Acute Hazard Index	Overburdened Community (Yes/No)
10	Chevron Products Company	Richmond	Contra Costa	High	1990	8	0.02	NA	Y
24726	Martinez Refining Company LLC	Martinez	Contra Costa	High	1990	9	0.02	NA	Y
12626	Valero Refining Company - California	Benicia	Solano	High	1991	9.1	0.02	0	N
21359	Phillips 66 Company - San Francisco Refinery	Rodeo	Contra Costa	High	1990	8.4	0.13	NA	Y
17419	Air Liquide Large Industries US LP	Rodeo	Contra Costa	High	NA	NA	NA	NA	Y
2066	Waste Management of Alameda County	Livermore	Alameda	High	2012	7.9	0.11	NA	N
11866	Los Medanos Energy Center	Pittsburg	Contra Costa	High	NA	NA	NA	NA	Y
24380	Corteva Agriscience - Pittsburg Operations	Pittsburg	Contra Costa	High	2001	5.2	0.18	NA	Y
14628	Tesoro Refining & Marketing Company, LLC	Martinez	Contra Costa	High	1995	6.9	0.3	NA	Y
14991	Donald Von Raesfeld Power Plant	Santa Clara	Santa Clara	High	2002	0.2	0.2	0.4	N

9013	International Disposal Corp of CA	Milpitas	Santa Clara	High	1991	0.9	0.09	NA	N
8664	Crockett Cogeneration, LLC	Crockett	Contra Costa	High	1991	4	NA	NA	N
18136	Russell City Energy Co, LLC	Hayward	Alameda	High	2007	0.7	0.01	0.02	Y
17667	Ameresco Keller Canyon LLC	Pittsburg	Contra Costa	High	NA	NA	NA	NA	Y
13289	Los Esteros Critical Energy Facility	San Jose	Santa Clara	High	2001	1.4	0.01	NA	N
705	Vulcan Materials, Western Division	Pleasanton	Alameda	High	NA	NA	NA	NA	N
3464	City of Santa Clara	Santa Clara	Santa Clara	High	1991	0.9	0.09	NA	N
11531	GreenWaste Z-Best Composting Facility	Gilroy	Santa Clara	High	NA	NA	NA	NA	Y
208	Radius Recycling dba Schnitzer Steel Products Company	Oakland	Alameda	High	NA	NA	NA	NA	Y
20139	Potrero Hills Energy Producers, LLC	Suisun City	Solano	High	2011	2.9	0.78	0.98	N
12095	Delta Energy Center	Pittsburg	Contra Costa	High	NA	NA	NA	NA	Y
2266	Browning-Ferris Industries of CA Inc	Half Moon Bay	San Mateo	High	1991	0.9	0.09	NA	N
18143	Gateway Generating Station	Antioch	Contra Costa	High	NA	NA	NA	NA	Y
4618	Keller Canyon Landfill Company	Pittsburg	Contra Costa	High	2006	9.8	0.37	NA	Y
4134	Irvington Memorial Cemetery	Fremont	Alameda	High	2006	2	0.9	NA	N
1427	Applied Materials	Santa Clara	Santa Clara	High	NA	NA	NA	NA	N
1812	Kirby Canyon Recycling and Disposal Facility	Morgan Hill	Santa Clara	High	NA	NA	NA	NA	N
1179	Redwood Landfill Inc	Novato	Marin	High	2010	8.2	0.23	NA	N
19931	K2 Pure Solutions Nocal, LP	Pittsburg	Contra Costa	High	2009	2.2	0.03	0.38	Y
25055	USS-UPI, LLC	Pittsburg	Contra Costa	High	1994	8	0.9	NA	Y
11002	Applied Materials	Sunnyvale	Santa Clara	High	NA	NA	NA	NA	N

22839	Apple, Inc	Santa Clara	Santa Clara	High	2015	3	0.01	0.06	N
148	Ball Metal Beverage Container Corp	Fairfield	Solano	High	NA	NA	NA	NA	N
22789	Eco Services Operations Corp	Martinez	Contra Costa	High	NA	NA	NA	NA	Y

Table B-2. High Priority Facilities in Phase II Review Status

Facility Number	Facility Name	City	County	AB2588 Priority Ranking	HRA Year	HRA Cancer Risk (in chances in a million)	Chronic Hazard Index	Acute Hazard Index	Overburdened Community (Yes/No)
591	East Bay Municipal Utility District	Oakland	Alameda	High	1991	8	0.06	NA	Y
778	San Jose-Santa Clara Regional Wastewater Facility	San Jose	Santa Clara	High	1991	3.9	0	NA	N
3499	City of Menlo Park	Menlo Park	San Mateo	High	NA	NA	NA	NA	N
20432	Ameresco Vasco Road LLC	Livermore	Alameda	High	2014	0.03	0.3	0.99	N
59	University of California, Berkeley	Berkeley	Alameda	High	NA	NA	NA	NA	N
23992	Pleasanton Garbage Service	Pleasanton	Alameda	High	NA	NA	NA	NA	N
9183	Napa-Vallejo Waste Management Authority	Napa	Napa	High	2003	3.6	0.9	NA	N
1257	Genentech, Inc	South San Francisco	San Mateo	High	NA	NA	NA	NA	Y
2039	Potrero Hills Landfill, Inc	Suisun City	Solano	High	1991	0.9	0.09	NA	N
19730	Mariposa Energy, LLC	Byron	Contra Costa	High	NA	NA	NA	NA	N
1784	San Francisco International Airport	San Francisco	San Francisco	High	NA	NA	NA	NA	N
255	Lawrence Livermore National Laboratory	Livermore	Alameda	High	1989	7.7	0.04	NA	N
22998	Huneeus Vintners LLC	Saint Helena	Napa	High	NA	NA	NA	NA	N
1271	West County Wastewater District	Richmond	Contra Costa	High	NA	NA	NA	NA	Y
3969	Stanford Health Care	Stanford	Santa Clara	High	NA	NA	NA	NA	N
7519	Pacific Bell	Fairfield	Solano	High	2012	6.4	0	NA	Y

3211	Santa Teresa Water Treatment Plant - STWTP	San Jose	Santa Clara	High	NA	NA	NA	NA	N
1082	Queen of the Valley Medical Center	Napa	Napa	High	2010	4.3	0.9	NA	N
146	CASS, Inc	Oakland	Alameda	High	NA	NA	NA	NA	Y
1371	Dublin San Ramon Services District - Wastewater TP	Pleasanton	Alameda	High	NA	NA	NA	NA	N
17111	CEMEX Construction Materials Pacific, LLC	San Francisco	San Francisco	High	NA	NA	NA	NA	N
20459	Tesla, Inc	Fremont	Alameda	High	NA	NA	NA	NA	N
1067	Oro Loma Sanitary District	San Lorenzo	Alameda	High	1989	3.8	0.01	NA	N
3974	San Francisco General Hospital	San Francisco	San Francisco	High	2010	7.4	0	NA	N
11247	Clover Flat Resource & Recovery Park	Calistoga	Napa	High	1991	0.9	0.09	NA	N
4449	Electro-Coatings of California Inc	Berkeley	Alameda	High	NA	NA	NA	NA	N
12181	American Airlines	San Francisco	San Francisco	High	NA	NA	NA	NA	N
17040	Ameresco Half Moon Bay LLC	Half Moon Bay	San Mateo	High	NA	NA	NA	NA	N
475	Santa Clara Valley Health & Hospital System	San Jose	Santa Clara	High	2012	7.2	0	NA	N
617	Palo Alto Regional Water Quality Control Plant	Palo Alto	Santa Clara	High	1989	8	0.42	NA	N
1753	John Muir Health - Concord Campus	Concord	Contra Costa	High	2012	9.9	0.09	0.03	N
907	Central Contra Costa Sanitary District	Martinez	Contra Costa	High	2012	0.3	0	NA	Y
22268	Nor-Cal Rock Inc	Hayward	Alameda	High	2014	9.98	0.01	NA	N
15574	Valero Refining Company	Benicia	Solano	High	NA	NA	NA	NA	N
550	NASA-AMES Research Center	Mountain View	Santa Clara	High	NA	NA	NA	NA	N
770	Travis AFB	Travis Afb	Solano	High	2012	8.4	0	NA	N
11887	Dynegy Oakland LLC	Oakland	Alameda	High	NA	NA	NA	NA	N

18604	Apple, Inc	Cupertino	Santa Clara	High	NA	NA	NA	NA	N
935	Levin Richmond Terminal Corporation	Richmond	Contra Costa	High	NA	NA	NA	NA	Y
2478	UCSF/Parnassus	San Francisco	San Francisco	High	1992	7.1	0.5	NA	N
639	Stanford University	Palo Alto	Santa Clara	High	NA	NA	NA	NA	N
3919	Kaiser Permanente San Jose Medical Center	San Jose	Santa Clara	High	NA	NA	NA	NA	N
13279	Opus One	Oakville	Napa	High	NA	NA	NA	NA	N
459	Veterans Administration Health Care System	San Francisco	San Francisco	High	NA	NA	NA	NA	N
51	United Airlines, Inc	San Francisco	San Francisco	High	1989	3.4	0.11	NA	Y
17052	BioMarin Pharmaceutical Inc	Novato	Marin	High	NA	NA	NA	NA	N
1634	Napa State Hospital	Napa	Napa	High	1990	4.1	NA	NA	N
568	San Francisco South East Treatment Plant	San Francisco	San Francisco	High	1990	4.5	0	NA	Y
24993	Bloom Energy BMCC	Fremont	Alameda	High	NA	NA	NA	NA	N
9684	Bay Ship & Yacht Co	Alameda	Alameda	High	NA	NA	NA	NA	Y
1258	Delta Diablo Sanitation District	Antioch	Contra Costa	High	NA	NA	NA	NA	Y
23438	Richmond Products Terminal	Richmond	Contra Costa	High	NA	NA	NA	NA	Y
20744	Trans Bay Cable LLC	Pittsburg	Contra Costa	High	NA	NA	NA	NA	Y
15476	Saint Mary's College of California	Moraga	Contra Costa	High	NA	NA	NA	NA	N
19169	Marsh Landing LLC (Marsh Landing Generating Sta)	Antioch	Contra Costa	High	NA	NA	NA	NA	Y
23131	Sutter Health-CPMC VNC	San Francisco	San Francisco	High	2015	0.52	0	NA	N
12596	National Park Service	San Francisco	San Francisco	High	2011	8	0	NA	N
2227	Mills Peninsula Medical Center	Burlingame	San Mateo	High	2009	0.95	0	NA	N
12455	Gilead Sciences	Foster City	San Mateo	High	NA	NA	NA	NA	N
15544	Kaiser Permanente	Redwood City	San Mateo	High	2013	4.6	0	NA	Y

861	San Mateo Water Quality Control Plant	San Mateo	San Mateo	High	1989	4.3	0	NA	N
3294	Guadalupe Rubbish Disposal	San Jose	Santa Clara	High	NA	NA	NA	NA	N
9339	San Jose State University	San Jose	Santa Clara	High	NA	NA	NA	NA	N
15870	Santa Rosa Junior College	Santa Rosa	Sonoma	High	NA	NA	NA	NA	N
12076	State of California	Richmond	Contra Costa	High	NA	NA	NA	NA	Y
16151	Energy Center San Francisco LLC	San Francisco	San Francisco	High	NA	NA	NA	NA	Y
4175	City of San Jose (Singleton Road Landfill)	San Jose	Santa Clara	High	NA	NA	NA	NA	N
723	Lawrence Berkeley National Laboratory	Berkeley	Alameda	High	NA	NA	NA	NA	N
12848	David Grant Medical Center	Travis Afb	Solano	High	2012	7.8	0.01	0	N
14362	Cisco Systems, Site 4 Campus, Bldgs 1-19	San Jose	Santa Clara	High	NA	NA	NA	NA	N
6390	Evergreen Cemetery	Oakland	Alameda	High	2008	2.5	0.9	NA	N
5095	Vasco Road Landfill	Livermore	Alameda	High	1991	4	0.44	NA	N
20905	S E Combined Services of California	Oakland	Alameda	High	2017	3	0.98	0.89	Y
20234	New Sonoma FBO, Inc	Santa Rosa	Sonoma	High	NA	NA	NA	NA	N
8996	Alameda County GSA	Dublin	Alameda	High	NA	NA	NA	NA	N
1534	Silicon Valley Clean Water	Redwood City	San Mateo	High	1989	6	NA	NA	N
1004	San Francisco State University	San Francisco	San Francisco	High	NA	NA	NA	NA	N
12769	Military Ocean Terminal Concord	Concord	Contra Costa	High	NA	NA	NA	NA	Y
1785	Children's Hospital, Oakland	Oakland	Alameda	High	2012	9.9	0.9	NA	Y
1403	Santa Rosa Water - Laguna Treatment Plant	Santa Rosa	Sonoma	High	2012	5.1	0.02	NA	N
1810	Sonoma State University	Rohnert Park	Sonoma	High	NA	NA	NA	NA	N
5148	Castro Valley Crematory Inc	Castro Valley	Alameda	High	NA	NA	NA	NA	N

3169	City of Livermore Water Reclamation Plant	Livermore	Alameda	High	NA	NA	NA	NA	N
20394	The Hillshire Brands Co a subsidiary of Tyson Food	San Lorenzo	Alameda	High	NA	NA	NA	NA	N
1982	County of Santa Clara - Hellyer Landfill	San Jose	Santa Clara	High	NA	NA	NA	NA	N
1009	Hayward Waste Water Treatment Plant	Hayward	Alameda	High	NA	NA	NA	NA	Y
9721	Apple Inc	Cupertino	Santa Clara	High	NA	NA	NA	NA	N
24259	Sutter Bay Hospitals	Oakland	Alameda	High	NA	NA	NA	NA	Y
1597	Las Gallinas Valley Sanitary District	San Rafael	Marin	High	NA	NA	NA	NA	N
17461	City of Redwood City	Redwood City	San Mateo	High	2012	1	0	NA	Y
83	United States Pipe & Foundry Company, LLC	Union City	Alameda	High	NA	NA	NA	NA	N
8020	Woodlawn Cemetery	Colma	San Mateo	High	NA	NA	NA	NA	N
5178	Kaiser Foundation Hospital	Santa Rosa	Sonoma	High	NA	NA	NA	NA	N
3011	IPT SRI Cogeneration Inc	Menlo Park	San Mateo	High	NA	NA	NA	NA	N
1771	City of Santa Clara	Santa Clara	Santa Clara	High	NA	NA	NA	NA	N
21775	Central Concrete Supply Inc	San Francisco	San Francisco	High	2017	5.43	0.76	0.09	N
1821	Kaiser Foundation Hospital	Walnut Creek	Contra Costa	High	NA	NA	NA	NA	N
200351	Illumina Inc	Foster City	San Mateo	High	2016	7.1	0	NA	N
19553	Thermo Fisher Scientific	Pleasanton	Alameda	High	NA	NA	NA	NA	N
7265	San Jose State University (Cogen Plant)	San Jose	Santa Clara	High	NA	NA	NA	NA	N
17657	Lodi Gas Storage LLC	Suisun City	Solano	High	2008	2.4	0.01	0.03	N
11924	California Pacific Medical Center	San Francisco	San Francisco	High	2012	1	0	NA	N
2740	City of Mountain View (Shoreline Landfill)	Mountain View	Santa Clara	High	NA	NA	NA	NA	N
23622	Vision Recycling Benicia	Benicia	Solano	High	2002	5	0.9	NA	N

450	Veterans Administration Medical Center	Palo Alto	Santa Clara	High	2011	9.9	0.9	NA	N
13160	University of California SF	San Francisco	San Francisco	High	2012	9.7	0.01	0	N
22751	Google LLC	Mountain View	Santa Clara	High	2011	9.9	0.9	NA	N
19281	State of California	Oakland	Alameda	High	NA	NA	NA	NA	Y
13290	City of San Jose Public Works Fleet Management	San Jose	Santa Clara	High	2006	8.45	0	NA	Y
1345	Sewerage Agency of South Marin	Mill Valley	Marin	High	NA	NA	NA	NA	N
1275	Novato Sanitary District	Novato	Marin	High	2009	9.9	0.9	NA	N
3273	Pacific Union College	Angwin	Napa	High	2004	1.5	0.9	NA	N
13566	Recology Pacheco Pass	Gilroy	Santa Clara	High	NA	NA	NA	NA	Y
14460	Santa Clara Valley Water Distric Almaden Campus	San Jose	Santa Clara	High	NA	NA	NA	NA	N
1995	Solano County Facilities Operations	Fairfield	Solano	High	NA	NA	NA	NA	Y
24047	West Valley Flying Club	Palo Alto	Santa Clara	High	NA	NA	NA	NA	N
2087	St Francis Memorial Hospital	San Francisco	San Francisco	High	2012	3.6	0	NA	N
15565	Western Digital Technologies	Fremont	Alameda	High	2012	7	0	NA	N
2440	Sequoia Hospital / Dignity Health	Redwood City	San Mateo	High	2011	4.3	0.9	NA	N
24646	Cypress Lawn Cremation Center	Colma	San Mateo	High	NA	NA	NA	NA	N
13074	NVIDIA	Santa Clara	Santa Clara	High	NA	NA	NA	NA	N
85	Western Digital Technologies Inc	San Jose	Santa Clara	High	1989	1.1	0.01	NA	N
17456	Peet's Coffee and Tea Inc	Alameda	Alameda	High	NA	NA	NA	NA	Y
108242	Rossi Aircraft Inc/Air Share Inc	Palo Alto	Santa Clara	High	NA	NA	NA	NA	N
1209	Union Sanitary District	Union City	Alameda	High	1989	4	0.03	NA	N
1507	North San Mateo County Sanitation Dist	Daly City	San Mateo	High	NA	NA	NA	NA	N

25210	HNG Atlas US LP	San Francisco	San Francisco	High	NA	NA	NA	NA	N
11180	Calpine Gilroy Cogen,LP & Gilroy Energy Center LLC	Gilroy	Santa Clara	High	NA	NA	NA	NA	Y
20413	Hawthorne Plaza Assoc LLC	San Francisco	San Francisco	High	2014	1.1	NA	NA	N
19138	Sutter Bay Medical Foundation DB Palo Alto M F	Palo Alto	Santa Clara	High	NA	NA	NA	NA	N
4205	Oak Hill Memorial Park & Mortuary	San Jose	Santa Clara	High	NA	NA	NA	NA	N
1462	Veterans Administration Medical Center	Menlo Park	San Mateo	High	2012	8.9	0	NA	N
22987	Republic Services of Sonoma County, Inc	Petaluma	Sonoma	High	NA	NA	NA	NA	N
15153	Sangamo Therapeutics, Inc.	Richmond	Contra Costa	High	NA	NA	NA	NA	Y
733	City of Sunnyvale Water Pollution Control	Sunnyvale	Santa Clara	High	NA	NA	NA	NA	N
3319	Vallejo Flood and Wastewater District	Vallejo	Solano	High	NA	NA	NA	NA	Y
1840	West Contra Costa County Landfill	Richmond	Contra Costa	High	NA	NA	NA	NA	Y
706	Gold Bond Building Products, LLC	Richmond	Contra Costa	High	NA	NA	NA	NA	Y
21709	Sunset Development Company	San Ramon	Contra Costa	High	NA	NA	NA	NA	N
22282	2600 CR LLC, Sunset Development	San Ramon	Contra Costa	High	NA	NA	NA	NA	N
22626	Thermo Fisher Scientific	Pleasanton	Alameda	High	2002	3.91	0	NA	N
3670	Kaiser Foundation Hospital	Vallejo	Solano	High	2007	9.5	0.9	NA	Y
20637	Boehringer Ingelheim Fremont Inc	Fremont	Alameda	High	2007	7.3	0	NA	N
6967	Town of Yountville	Yountville	Napa	High	NA	NA	NA	NA	N
24072	CBRE	Emeryville	Alameda	High	2004	7	0.01	NA	N
2168	Jelly Belly Candy Company	Fairfield	Solano	High	NA	NA	NA	NA	Y

55	Lockheed Martin Corporation	Sunnyvale	Santa Clara	High	1990	2	0.02	NA	N
13367	San Jose International Airport	San Jose	Santa Clara	High	NA	NA	NA	NA	N
1299	Skylawn Funeral Home and Memorial Park	San Mateo	San Mateo	High	NA	NA	NA	NA	N
21358	Knickerbocker Properties, Inc XXXIII	San Francisco	San Francisco	High	NA	NA	NA	NA	N
5755	UCSF/Mt Zion	San Francisco	San Francisco	High	NA	NA	NA	NA	N
3102	Pacific Gas and Electric Company	San Jose	Santa Clara	High	NA	NA	NA	NA	N
16930	San Mateo County Youth Services Center	San Mateo	San Mateo	High	2005	9.8	0.01	NA	N
1194	Pinole-Hercules Wastewater Treatment Plant	Pinole	Contra Costa	High	NA	NA	NA	NA	N
17712	Spirit HD Colma CA, LP	Colma	San Mateo	High	NA	NA	NA	NA	N
25125	Santa Clara County Roads and Airport Department	San Jose	Santa Clara	High	NA	NA	NA	NA	N
16749	General Services Administration-East Bay Office	Oakland	Alameda	High	NA	NA	NA	NA	Y
5876	South San Francisco-San Bruno Water Quality Plant	South San Francisco	San Mateo	High	1989	3.4	0.13	NA	Y
4021	SFPP, LP - Brisbane Terminal	Brisbane	San Mateo	High	NA	NA	NA	NA	N
2721	City of Palo Alto Landfill	Palo Alto	Santa Clara	High	1989	2	NA	NA	N
20897	Bristol-Myers Squibb	Redwood City	San Mateo	High	2012	6.15	0	NA	Y
14836	City of Fremont/Maintenance Facility	Fremont	Alameda	High	NA	NA	NA	NA	N
2340	San Leandro Water Pollution Control Plant	San Leandro	Alameda	High	NA	NA	NA	NA	Y
10520	Microwave Power Products, Inc.	Palo Alto	Santa Clara	High	NA	NA	NA	NA	N
10240	US Coast Guard	San Francisco	San Francisco	High	NA	NA	NA	NA	Y

10327	Sutter Bay Hospitals dba Mills-Peninsula Health	San Mateo	San Mateo	High	2010	0.3	0	NA	Y
107807	City of Hayward - Hayward Fire Station #6	Hayward	Alameda	High	NA	NA	NA	NA	Y
3162	Pacific Gas and Electric Company	Concord	Contra Costa	High	2002	2.8	0	NA	N
24638	Pick-N-Pull Auto Dismantlers	American Canyon	Napa	High	NA	NA	NA	NA	N
4863	Pleasant Hill Cemetery	Sebastopol	Sonoma	High	2016	0.22	0.02	0.45	N
25102	Uptown Broadway LLC	Oakland	Alameda	High	2016	0.47	0	NA	Y
23535	Judicial Council of CA, East County Hall Justice	Dublin	Alameda	High	2016	9.9	0.9	NA	N
21362	Hudson Rincon Center, LLC	San Francisco	San Francisco	High	NA	NA	NA	NA	N
20095	CIM Group/Ordway	Oakland	Alameda	High	NA	NA	NA	NA	Y
281	U S Veterans Administration Medical Center	Livermore	Alameda	High	NA	NA	NA	NA	N
25297	Berkeley HMA	Berkeley	Alameda	High	NA	NA	NA	NA	N
15278	Wareham Development	Emeryville	Alameda	High	2012	8.1	0	NA	N
13399	KLA Corporation	Milpitas	Santa Clara	High	2012	2.5	0.01	0	N
12071	Bayer US LLC	Berkeley	Alameda	High	NA	NA	NA	NA	Y
2320	Oak View Memorial Park	Antioch	Contra Costa	High	2016	4.7	0.99	0.74	Y
1500	Northern Calif Power Agency	Alameda	Alameda	High	NA	NA	NA	NA	Y
9653	Kaiser Permanente Medical Center	Fremont	Alameda	High	NA	NA	NA	NA	N
12773	ATS Products Inc	Richmond	Contra Costa	High	NA	NA	NA	NA	Y
25000	Civic Center Marin	San Rafael	Marin	High	NA	NA	NA	NA	N
24269	Sutter Bay Hospitals dba Alta Bates Summit Med Ctr	Oakland	Alameda	High	NA	NA	NA	NA	Y
6061	Lanteris Space LLC	Palo Alto	Santa Clara	High	NA	NA	NA	NA	N
15397	Santa Clara University	Santa Clara	Santa Clara	High	NA	NA	NA	NA	N
22285	Grifols Diagnostic Solutions, Inc	Emeryville	Alameda	High	NA	NA	NA	NA	N

7237	Bishop Ranch (Sunset Properties)	San Ramon	Contra Costa	High	NA	NA	NA	NA	N
21608	Pacific Place	San Francisco	San Francisco	High	NA	NA	NA	NA	N
25025	GNS South Tower, LP (FKA AP3-SF2 CT South LLC)	South San Francisco	San Mateo	High	NA	NA	NA	NA	Y
423	Chevron Richmond Technology Center	Richmond	Contra Costa	High	NA	NA	NA	NA	Y
4116	San Francisco Public Utilities Commission	San Francisco	San Francisco	High	NA	NA	NA	NA	N
4682	Laurel Heights Partners, LLC	San Francisco	San Francisco	High	NA	NA	NA	NA	N
3887	San Mateo Medical Center	San Mateo	San Mateo	High	2007	2.4	0.9	NA	N
6952	San Francisco Public Utilities Commission	San Francisco	San Francisco	High	NA	NA	NA	NA	N
24608	SFII 1333 Broadway, LLC	Oakland	Alameda	High	NA	NA	NA	NA	Y
2482	City of Richmond Wastewater Treatment Plant	Richmond	Contra Costa	High	NA	NA	NA	NA	Y
15654	Foothill/DeAnza Community College District	Cupertino	Santa Clara	High	NA	NA	NA	NA	N
8890	Stanford Health Care Tri-Valley	Pleasanton	Alameda	High	NA	NA	NA	NA	N
16778	Owl Energy Resources Inc	San Jose	Santa Clara	High	NA	NA	NA	NA	N
453	Good Samaritan Hospital	San Jose	Santa Clara	High	2005	6.7	0.9	NA	N
21539	Golden State Pet Cremation	Castro Valley	Alameda	High	2013	9.99	0.7	0.3	N
4096	VA Medical Center	Martinez	Contra Costa	High	NA	NA	NA	NA	N
3786	Chapel of the Chimes	Oakland	Alameda	High	NA	NA	NA	NA	N
1502	O'Connor Hospital	San Jose	Santa Clara	High	2012	4.1	0	NA	N
9255	San Francisco Campus for Jewish Living	San Francisco	San Francisco	High	NA	NA	NA	NA	N
2457	Regional Medical Center of San Jose	San Jose	Santa Clara	High	2011	2.9	0	NA	Y
7441	Flex	Milpitas	Santa Clara	High	NA	NA	NA	NA	N
21938	Caltrans Maintenance Station	San Martin	Santa Clara	High	NA	NA	NA	NA	N

653	Central Marin Sanitation Agency	San Rafael	Marin	High	1989	3.8	0	NA	Y
72	Chevron Inc (Americas OE/HES)	Richmond	Contra Costa	High	NA	NA	NA	NA	Y
20079	Menlo Park Portfolio II, LLC	Menlo Park	San Mateo	High	2016	2.5	0	NA	Y
23940	Chateau Montelena	Calistoga	Napa	High	NA	NA	NA	NA	N
11206	Phillip Burton Federal Bldg & US Courthouse	San Francisco	San Francisco	High	NA	NA	NA	NA	N
22691	Signature Flight Support	Santa Clara	Santa Clara	High	2015	9.9	0.9	NA	N
5433	Tulocay Cemetery Association	Napa	Napa	High	NA	NA	NA	NA	N
16637	Parc 55 Hotel	San Francisco	San Francisco	High	NA	NA	NA	NA	Y
1236	Town of Windsor	Windsor	Sonoma	High	NA	NA	NA	NA	N
1464	Acme Fill Corporation	Martinez	Contra Costa	High	1991	0.9	0.09	NA	Y
8399	Chapel of the Chimes Memorial Park & Funeral Home	Hayward	Alameda	High	NA	NA	NA	NA	N
21227	Phillips 66 Company	Richmond	Contra Costa	High	NA	NA	NA	NA	Y
2344	Hilton San Francisco Union Square	San Francisco	San Francisco	High	NA	NA	NA	NA	Y
632	Intel Corporation	Santa Clara	Santa Clara	High	NA	NA	NA	NA	N
16520	Hotel Nikko	San Francisco	San Francisco	High	NA	NA	NA	NA	Y
21532	Le Meridien San Francisco	San Francisco	San Francisco	High	NA	NA	NA	NA	N
14880	County of San Mateo	Redwood City	San Mateo	High	NA	NA	NA	NA	Y
22353	Sheriff's Office, County of San Mateo	Redwood City	San Mateo	High	2014	6.3	0	NA	Y
21298	Flintstone Enterprises DBA Forever My Pet	Gilroy	Santa Clara	High	2012	9.8	0.6	0.1	Y
3471	City of Calistoga	Calistoga	Napa	High	NA	NA	NA	NA	N
14285	U S Army Garrison Camp Parks	Dublin	Alameda	High	NA	NA	NA	NA	N
6044	O L S Energy-Agnews	San Jose	Santa Clara	High	NA	NA	NA	NA	N
4860	Pet's Rest Cemetery	Colma	San Mateo	High	NA	NA	NA	NA	N

23568	333 Bush LLC	San Francisco	San Francisco	High	NA	NA	NA	NA	N
3314	Roselawn Cemetery	Livermore	Alameda	High	NA	NA	NA	NA	N
22305	UE-00101CA, LLC	San Jose	Santa Clara	High	2014	0.8	0.01	0	N
24482	Filice Lansford Development Corporation	San Jose	Santa Clara	High	NA	NA	NA	NA	N
15982	Google LLC	Mountain View	Santa Clara	High	2012	8	0.9	NA	N
91	Chevron Avon Terminal	Martinez	Contra Costa	High	NA	NA	NA	NA	Y
19514	Oakland Center 21	Oakland	Alameda	High	NA	NA	NA	NA	Y
2531	St Joseph Health N CA, dba Santa Rosa Mem Hospital	Santa Rosa	Sonoma	High	1990	6	0	NA	N
3885	Alameda Health System - Highland Hospital Campus	Oakland	Alameda	High	NA	NA	NA	NA	N
290	DOE-KAO Sandia National Laboratories	Livermore	Alameda	High	NA	NA	NA	NA	N
19580	Peralta Community Colleges District Admin Center	Oakland	Alameda	High	2009	5.43	0	NA	Y
1228	Sonoma County Water Agency	Sonoma	Sonoma	High	2006	7.1	0.4	NA	N
10272	ALSCO	San Francisco	San Francisco	High	NA	NA	NA	NA	N
23913	One Front Street Owner LP	San Francisco	San Francisco	High	NA	NA	NA	NA	N
19432	Paramount Group	San Francisco	San Francisco	High	NA	NA	NA	NA	N
1529	Kaiser Permanente Medical Center	Oakland	Alameda	High	2011	7	0	NA	Y
21908	Federal Bureau of Prisons	Dublin	Alameda	High	NA	NA	NA	NA	N
14149	Contra Costa County	Pittsburg	Contra Costa	High	2002	9.95	NA	NA	Y
3711	Sutter Health Eden Medical Center	Castro Valley	Alameda	High	2010	9.9	0.9	NA	N
19546	Santa Rosa Jet Center, LLC	Santa Rosa	Sonoma	High	NA	NA	NA	NA	N
11953	Daniels Chapel of the Roses	Santa Rosa	Sonoma	High	NA	NA	NA	NA	N
24089	TransMontaigne Operating LP	Martinez	Contra Costa	High	2006	1.1	0.9	NA	Y
20428	Kaiser Hospital	San Leandro	Alameda	High	2010	3.3	0	NA	Y

22835	Golden State Pet Cremation	Livermore	Alameda	High	2015	8	0.21	NA	N
7111	High Lustre Metal Finishing	Hayward	Alameda	High	NA	NA	NA	NA	Y
24695	Mainspring Energy	South San Francisco	San Mateo	High	NA	NA	NA	NA	Y
9353	Safeway Milk Plant	San Leandro	Alameda	High	NA	NA	NA	NA	Y
18472	ELM Property Venture LLC	San Francisco	San Francisco	High	NA	NA	NA	NA	N
24945	Treasure Island Development Authority (TIDA)	San Francisco	San Francisco	High	NA	NA	NA	NA	Y
12163	Twin Chapels Mortuary	Vallejo	Solano	High	NA	NA	NA	NA	Y
17553	Rohm and Haas Chemicals LLC	Hayward	Alameda	High	NA	NA	NA	NA	Y
14877	County of San Mateo	Redwood City	San Mateo	High	NA	NA	NA	NA	Y
18990	Phoenix American Inc	San Rafael	Marin	High	2008	1.2	NA	NA	Y
21656	BAHA Authority c/o Cushman & Wakefield	San Francisco	San Francisco	High	NA	NA	NA	NA	N
21132	Texas Instruments, Inc	Santa Clara	Santa Clara	High	NA	NA	NA	NA	N
5791	Fairmont Memorial Park	Fairfield	Solano	High	NA	NA	NA	NA	N
2451	Pleasanton Garbage Service, Inc	Pleasanton	Alameda	High	NA	NA	NA	NA	N
21484	RNM 135 Main, L P	San Francisco	San Francisco	High	NA	NA	NA	NA	N
1071	City of Petaluma, Dept of Water Resources & Convs	Petaluma	Sonoma	High	NA	NA	NA	NA	N

Table B-3. High Priority Facilities in Phase III Review Status

Facility Number	Facility Name	City	County	AB2588 Priority Ranking	HRA Year	HRA Cancer Risk (in chances in a million)	Chronic Hazard Index	Acute Hazard Index	Overburdened Community (Yes/No)
2073	City of Pacifica	Pacifica	San Mateo	High	NA	NA	NA	NA	N
6426	Solano County Transit Operations	Vallejo	Solano	High	2017	5.8	0	NA	Y
7297	The Home Depot Store #0633	Vallejo	Solano	High	NA	NA	NA	NA	N
7420	New Cingular Wireless dba AT&T Mobility	Concord	Contra Costa	High	2016	9.9	0.01	NA	Y
7421	Pacific Bell	Fremont	Alameda	High	2002	0.6	NA	NA	N
10235	FAA, Oakland Air Route Traffic Control Ctr (ARTCC)	Fremont	Alameda	High	NA	NA	NA	NA	N
10704	AT&T	Palo Alto	Santa Clara	High	NA	NA	NA	NA	N
11403	XILINX Inc	San Jose	Santa Clara	High	NA	NA	NA	NA	N
12743	MCI, dba Verizon Business	Concord	Contra Costa	High	2001	9.99	NA	NA	Y
12763	Verizon Business	San Jose	Santa Clara	High	NA	NA	NA	NA	N
12764	MCI dba Verizon Business	Dublin	Alameda	High	2001	1.3	NA	NA	N
12765	MCI,dba Verizon Business	Oakland	Alameda	High	2000	4	NA	NA	Y
12936	Franklin Templeton Companies Inc	San Mateo	San Mateo	High	NA	NA	NA	NA	N
12946	Level 3 Communications Inc	Emeryville	Alameda	High	2002	9.6	0.01	NA	Y
13026	Pacific Gas & Electric	Fairfield	Solano	High	2008	5.6	0	NA	Y
13062	Sysco San Francisco, Inc	Fremont	Alameda	High	2001	1.7	0.9	0	N
13089	County of Santa Clara-Main Jail	San Jose	Santa Clara	High	NA	NA	NA	NA	N
13101	Vallejo Sanitation & Flood Control Dist	Vallejo	Solano	High	NA	NA	NA	NA	Y

13108	Vallejo Sanitation & Flood Control Dist	Vallejo	Solano	High	2004	1	0	NA	Y
13241	KGO Television ABC Inc	San Francisco	San Francisco	High	2001	7.2	NA	NA	N
13306	Equinix LLC	Santa Clara	Santa Clara	High	NA	NA	NA	NA	N
13335	San Jose Water Co-3Mile	San Jose	Santa Clara	High	2012	4.5	0	0	N
13340	Level 3 Communications LLC	Sunnyvale	Santa Clara	High	NA	NA	NA	NA	N
13453	Frontier California	Los Gatos	Santa Clara	High	NA	NA	NA	NA	N
13459	Pacific Bell	Concord	Contra Costa	High	NA	NA	NA	NA	N
13463	Pacific Bell	Danville	Contra Costa	High	NA	NA	NA	NA	N
13471	Pacific Bell	Half Moon Bay	San Mateo	High	2002	3.9	NA	NA	N
13485	AT&T	Livermore	Alameda	High	2008	7.8	0.01	NA	N
13487	Pacific Bell	Martinez	Contra Costa	High	2004	9.9	0	NA	N
13491	AT&T	Mountain View	Santa Clara	High	2003	1.1	0	0	N
13494	Pacific Bell	Oakland	Alameda	High	NA	NA	NA	NA	Y
13528	Pacific Bell	San Jose	Santa Clara	High	2012	3.5	0	0	N
13532	Pacific Bell	San Jose	Santa Clara	High	NA	NA	NA	NA	N
13540	Pacific Bell	San Rafael	Marin	High	NA	NA	NA	NA	N
13544	Pacific Bell	Santa Rosa	Sonoma	High	2008	9.9	0.01	NA	N
13550	SBC	Sunnyvale	Santa Clara	High	2003	9.86	0.01	NA	N
13554	Pacific Bell	Union City	Alameda	High	2002	9.9	NA	NA	N
13594	Santa Clara Valley Water District - RWTP	Los Gatos	Santa Clara	High	NA	NA	NA	NA	N
13598	Comcast	San Jose	Santa Clara	High	2018	4.1	0	NA	N
13711	Pacific Bell Corp dba AT&T CA	Santa Clara	Santa Clara	High	2002	8.5	0.01	0	N
13825	San Jose Water Co , Montevina	Los Gatos	Santa Clara	High	2016	1	0	NA	N
13866	City of SSF Water Quality Plant	South San Francisco	San Mateo	High	2004	9.7	NA	NA	Y
13877	Sanitary District No 1, Kentfield Pump Station	Kentfield	Marin	High	2002	9.6	NA	NA	N

13895	Centurylink Communications, LLC	San Francisco	San Francisco	High	NA	NA	NA	NA	Y
13900	Comcast Communications	Daly City	San Mateo	High	2004	3.2	0	NA	N
13986	City of Santa Rosa Utilities Dept	Santa Rosa	Sonoma	High	2023	0.38	0	NA	N
14000	Lake Berryessa Resort Improvement District	Pope Valley	Napa	High	2005	9.76	0.02	NA	N
14020	Prologis	San Francisco	San Francisco	High	2024	1.3	0	NA	N
14064	Central Contra Costa Sanitary District - Maltby Pump Station	Martinez	Contra Costa	High	2023	5.9	0	NA	Y
14093	Verizon Business - HAWDCA	Hayward	Alameda	High	NA	NA	NA	NA	Y
14242	City of St Helena Water Treatment Plant	Saint Helena	Napa	High	NA	NA	NA	NA	N
14421	City of Millbrae	Millbrae	San Mateo	High	NA	NA	NA	NA	N
14436	County of Santa Clara	Milpitas	Santa Clara	High	NA	NA	NA	NA	N
14502	City of Oakland Envir Scvs Division	Oakland	Alameda	High	NA	NA	NA	NA	Y
14503	City of Oakland Envir Scvs Division	Oakland	Alameda	High	NA	NA	NA	NA	Y
14624	Verizon-California Inc	Los Gatos	Santa Clara	High	NA	NA	NA	NA	N
14676	Equinix LLC	San Jose	Santa Clara	High	2024	6.4	0	0	N
14691	Verizon Wireless Pleasanton Switch	Pleasanton	Alameda	High	2003	7	0.01	NA	N
14717	Verizon Business - SANFCA, SFQCCA	San Francisco	San Francisco	High	NA	NA	NA	NA	N
14775	Level 3 Communications	San Francisco	San Francisco	High	2002	2.3	0	NA	N
14776	Level 3 Communications	Suisun City	Solano	High	2002	9.9	NA	NA	N
14783	City of San Mateo City Hall	San Mateo	San Mateo	High	NA	NA	NA	NA	N
14812	City of Vallejo Water Division	Suisun City	Solano	High	2002	9.9	0	NA	N
15101	Redwood City	Redwood City	San Mateo	High	2012	9.9	NA	NA	Y

15169	Adobe Systems, Inc	San Jose	Santa Clara	High	NA	NA	NA	NA	N
15199	2403 Walsh Avenue LLC	Santa Clara	Santa Clara	High	NA	NA	NA	NA	N
15330	San Jose Water Co , Batista	San Jose	Santa Clara	High	2003	5.5	0	NA	N
15449	Pacific Bell	Santa Rosa	Sonoma	High	NA	NA	NA	NA	N
15465	Kaiser Permanente - Regional Lab Annex	Richmond	Contra Costa	High	2003	9.88	0.01	NA	Y
15561	Comcast Cable Corporation	Fairfield	Solano	High	2003	4.4	0	NA	Y
15895	Heritage Estates/Sundt Construction, Inc	Livermore	Alameda	High	2004	4.3	0	NA	N
15906	1035 Market Street	San Francisco	San Francisco	High	2004	0.85	0	NA	Y
16003	Comcast of California IX, Inc	Concord	Contra Costa	High	2004	9.9	NA	NA	Y
16028	MCMIF Crossroads Holdco, LLC	San Mateo	San Mateo	High	NA	NA	NA	NA	N
16234	County of Sonoma Juvenile Justice Center	Santa Rosa	Sonoma	High	2004	9.8	0.01	NA	N
16248	Comcast of California IX Inc	Fremont	Alameda	High	2015	1.2	0	NA	N
16345	Vi at Palo Alto	Palo Alto	Santa Clara	High	2004	9.9	NA	NA	N
16421	City of San Jose, SBWRP	San Jose	Santa Clara	High	2004	9.99	NA	NA	N
16534	Stanford Health Care	Palo Alto	Santa Clara	High	NA	NA	NA	NA	N
16620	Embassy Suites Hotel	San Rafael	Marin	High	NA	NA	NA	NA	N
16724	New Cingular Wireless dba AT&T Mobility	Santa Clara	Santa Clara	High	2024	1.4	0	0	N
16725	AT&T Mobility/AT&T Services	Concord	Contra Costa	High	2005	5.36	0	NA	Y
16735	Marvell Technology Group, Ltd	Santa Clara	Santa Clara	High	NA	NA	NA	NA	N
16740	HCP LS Redwood City, LLC	Redwood City	San Mateo	High	NA	NA	NA	NA	N
16795	Westfield San Francisco Center	San Francisco	San Francisco	High	2005	1.2	0.9	NA	Y
16846	T-Mobile - Santa Clara Satellite	Santa Clara	Santa Clara	High	2022	2.3	0	0.01	N
17001	University of California Santa Cruz	San Jose	Santa Clara	High	NA	NA	NA	NA	N

17248	City of Santa Clara - Laurelwood Storm	Santa Clara	Santa Clara	High	2022	0.69	0	0	N
17249	City of Santa Clara - Lickmill Storm	Santa Clara	Santa Clara	High	NA	NA	NA	NA	N
17351	Napa Berryessa Resort Improvement District	Napa	Napa	High	2007	6.3	0	NA	N
17428	Quadrus Sand Hill, LLC	Menlo Park	San Mateo	High	2005	0.6	NA	NA	N
17546	Camino Medical Group-ASC Building	Mountain View	Santa Clara	High	2006	9.4	0.01	NA	N
17769	T5@Silicon Valley, LP	Newark	Alameda	High	2010	7.2	0.9	NA	N
17771	Verizon Wireless (Sunnyvale MSC)	Sunnyvale	Santa Clara	High	2007	9.97	0.01	NA	N
17864	Peralta Community College District	Berkeley	Alameda	High	2006	1.59	0	NA	N
17906	City of San Rafael Dept of Public Works	San Rafael	Marin	High	NA	NA	NA	NA	Y
17910	City of San Rafael Dept of Public Works	San Rafael	Marin	High	NA	NA	NA	NA	N
17950	City of Hayward Public Works Utilities	Hayward	Alameda	High	2006	0.98	0	NA	Y
18013	200 Paul Avenue LLC, c/o Digital Realty Trust	San Francisco	San Francisco	High	2012	2.1	0	NA	Y
18031	Kaiser Permanente	Napa	Napa	High	2012	2.2	0	NA	N
18111	Level 3 Communications	Santa Clara	Santa Clara	High	NA	NA	NA	NA	N
18227	City of Gilroy	Gilroy	Santa Clara	High	2007	9.3	0.01	NA	Y
18239	CoreSite	Milpitas	Santa Clara	High	2007	9.9	0.01	NA	N
18242	Equinix LLC	Sunnyvale	Santa Clara	High	NA	NA	NA	NA	N
18411	Sutter Health Enterprise Data Center dba Palo Alto Medical Fndn	Sunnyvale	Santa Clara	High	2016	6.9	0	NA	N
18486	San Jose Fire Dept	San Jose	Santa Clara	High	2007	2.6	0	NA	Y

18557	John Muir Health	Concord	Contra Costa	High	2007	9.9	0.01	NA	Y
18801	Xeres Ventures, LP (SC1)	Santa Clara	Santa Clara	High	2016	9.8	0.01	NA	N
18807	California Highway Patrol, Cordelia Insp Facility	Fairfield	Solano	High	2014	0.32	0	NA	N
19001	Equinix LLC	San Jose	Santa Clara	High	NA	NA	NA	NA	N
19010	Quality Investment Properties Santa Clara, LLC	Santa Clara	Santa Clara	High	NA	NA	NA	NA	N
19019	Sonoma Police Department	Sonoma	Sonoma	High	2010	9.87	0.01	NA	N
19060	Hosting Com	San Francisco	San Francisco	High	2009	7.4	0.9	NA	N
19102	Verizon Wireless-Fairfield MSC	Fairfield	Solano	High	2008	2.8	0	NA	Y
19127	Parkmerced Investors LLC	San Francisco	San Francisco	High	2008	0.9	0	NA	N
19162	BMR-Pacific Research Center, LP	Newark	Alameda	High	2003	3.1	0.9	NA	N
19268	ARE - San Francisco No. 43 Owner, LLC	San Francisco	San Francisco	High	2009	7.7	0	NA	N
19294	RAR2-Stadium Tech Center 123, LL c/o JLL	Santa Clara	Santa Clara	High	NA	NA	NA	NA	N
19298	DataPipe Inc	San Jose	Santa Clara	High	NA	NA	NA	NA	N
19323	555 YVR, LLC	Walnut Creek	Contra Costa	High	2008	3.2	0	NA	N
19348	Cisco Systems	Mountain View	Santa Clara	High	NA	NA	NA	NA	N
19403	USPS San Mateo Information Technology and Acct Svc	San Mateo	San Mateo	High	2010	9	0.01	NA	N
19470	Westfield Valley Fair	Santa Clara	Santa Clara	High	2018	1.9	0	NA	N
19493	American AgCredit, FLCA	Santa Rosa	Sonoma	High	NA	NA	NA	NA	N
19495	Alameda County Public Works Agency	Hayward	Alameda	High	NA	NA	NA	NA	N
19539	CoreSite Real Estate	Santa Clara	Santa Clara	High	2024	2.1	0	NA	N
19597	San Francisco Hall of Justice	San Francisco	San Francisco	High	2009	10	0.01	NA	Y
19686	Microsoft Corporation	Santa Clara	Santa Clara	High	NA	NA	NA	NA	N

19747	Aquarium of the Bay	San Francisco	San Francisco	High	NA	NA	NA	NA	N
19779	Alameda County Public Works Agency	Hayward	Alameda	High	2009	9.9	0.9	NA	N
19802	San Jose Water Company	San Jose	Santa Clara	High	NA	NA	NA	NA	Y
19803	San Jose Water Company	San Jose	Santa Clara	High	2015	1.4	NA	NA	N
19806	San Jose Water Company	San Jose	Santa Clara	High	NA	NA	NA	NA	N
19807	San Jose Water Company	San Jose	Santa Clara	High	NA	NA	NA	NA	N
19924	The Irvine Company	San Jose	Santa Clara	High	2010	1.8	0	NA	N
19929	The Moscone Center	San Francisco	San Francisco	High	NA	NA	NA	NA	Y
19950	Santa Clara County Fire Dept	Cupertino	Santa Clara	High	NA	NA	NA	NA	N
19954	Santa Clara County Fire Dept	Los Gatos	Santa Clara	High	NA	NA	NA	NA	N
19956	Santa Clara County Fire Dept	Los Gatos	Santa Clara	High	2010	7.69	0.01	NA	N
19966	San Francisco Unified School Dist (SFUSD)	San Francisco	San Francisco	High	2010	7.8	0.01	NA	N
20009	Hayward Point Eden Business Center	Hayward	Alameda	High	2010	6.9	0	NA	Y
20013	Mpower Communications / Telepacific	Oakland	Alameda	High	NA	NA	NA	NA	Y
20043	City of Santa Rosa	Santa Rosa	Sonoma	High	NA	NA	NA	NA	N
20072	Kaiser Permanente	Pleasanton	Alameda	High	NA	NA	NA	NA	N
20077	RREEF America REIT II Corp, RRR	San Francisco	San Francisco	High	NA	NA	NA	NA	N
20126	Evocative	Santa Clara	Santa Clara	High	2013	3.1	NA	NA	N
20228	Amazon Data Services, Inc	Hayward	Alameda	High	2014	2.9	0.03	NA	Y
20295	Vantage Data Centers Management Co , LLC	Santa Clara	Santa Clara	High	2023	9.5	0.02	0.09	N
20356	Digital 365, LLC	San Francisco	San Francisco	High	2006	9.9	0.01	NA	N

20461	The Pyramid Center	San Francisco	San Francisco	High	2017	0.81	0	NA	N
20504	Las Gallinas Valley Sanitary District	San Rafael	Marin	High	2011	2.8	0	NA	N
20555	Mercy Housing California	San Francisco	San Francisco	High	2011	6.8	0	NA	Y
20586	Digital 720 2nd LLC	Oakland	Alameda	High	2007	9.45	0.01	NA	Y
20668	Meta Platforms Inc-MPK 10-27	Menlo Park	San Mateo	High	NA	NA	NA	NA	N
20685	Ariba	Sunnyvale	Santa Clara	High	2011	9.6	0	NA	N
20775	SYNNEX Corporation	Fremont	Alameda	High	2015	2.1	0	NA	N
20903	CoreSite	San Jose	Santa Clara	High	NA	NA	NA	NA	N
21057	Sutter Bay Hospitals	Santa Rosa	Sonoma	High	2012	7.6	NA	NA	N
21100	Siemens Medical Solutions USA, Inc	Mountain View	Santa Clara	High	NA	NA	NA	NA	N
21192	City of Dublin/Public Works	Dublin	Alameda	High	2012	0.5	0	NA	N
21193	Comcast Cable	Santa Clara	Santa Clara	High	2020	3.1	0	NA	N
21236	Caltrans - Caldecott Tunnel	Oakland	Alameda	High	NA	NA	NA	NA	N
21402	Forty Niners Stadium, LLC	Santa Clara	Santa Clara	High	2012	1.5	0	NA	N
21450	Geary Market Investment Co	San Francisco	San Francisco	High	NA	NA	NA	NA	Y
21478	San Francisco Federal Reserve Bank	San Francisco	San Francisco	High	NA	NA	NA	NA	N
21522	San Francisco Housing Authority	San Francisco	San Francisco	High	NA	NA	NA	NA	N
21575	233 Geary Street Property Owner, LLC	San Francisco	San Francisco	High	NA	NA	NA	NA	Y
21597	BayCrest Towers (HOA)	San Francisco	San Francisco	High	NA	NA	NA	NA	N
21607	State of California	San Francisco	San Francisco	High	NA	NA	NA	NA	N

21615	City & County of SF (Real Estate Div)	San Francisco	San Francisco	High	2019	9.9	0.9	NA	Y
21676	Evocative Data Centers	San Jose	Santa Clara	High	NA	NA	NA	NA	N
21793	Pacific Gas & Electric Company	San Ramon	Contra Costa	High	2013	9.84	0	NA	N
21808	San Jose Fire Dept / Accts Payable	San Jose	Santa Clara	High	NA	NA	NA	NA	N
21870	Google LLC	Redwood City	San Mateo	High	NA	NA	NA	NA	N
21930	San Francisco Public Utilities Commission	San Francisco	San Francisco	High	2015	9.1	NA	NA	N
22032	Jamestown Concord Tech Bldg c/o SRP Mgmt, Inc	Concord	Contra Costa	High	2012	6.4	NA	NA	N
22035	Lakeshore Residential Owners Assoc	Discovery Bay	Contra Costa	High	NA	NA	NA	NA	N
22058	KRE 1221 Broadway Owners LLC	Oakland	Alameda	High	2001	0.4	0	NA	Y
22085	Dolby Laboratories, Inc	San Francisco	San Francisco	High	NA	NA	NA	NA	Y
22102	Southern Wine And Spirits	Union City	Alameda	High	2013	2.8	0	NA	N
22105	The Lodge at Morgan Hill c/o Buckingham Property	Morgan Hill	Santa Clara	High	2013	5.7	0	NA	Y
22177	BTIG, LLC	San Francisco	San Francisco	High	NA	NA	NA	NA	N
22317	Thermo Fisher Scientific	Fremont	Alameda	High	2014	0.3	NA	NA	N
22322	CBRE Asset Services	Walnut Creek	Contra Costa	High	NA	NA	NA	NA	N
22375	Amazon Data Services, Inc.	Santa Clara	Santa Clara	High	2015	9.8	0.01	NA	N
22420	Restoration Management Company	Hayward	Alameda	High	2014	8.7	0.01	NA	Y
22435	1155 SF Partners LLC	San Francisco	San Francisco	High	NA	NA	NA	NA	Y
22442	Azure Apartment Complex	San Francisco	San Francisco	High	2014	2.9	NA	NA	N
22623	Cologix, Inc. SV1	Santa Clara	Santa Clara	High	2016	9.91	0.01	NA	N

22649	Caltrans	Oakland	Alameda	High	2017	9.9	0	NA	Y
22658	Element Critical	Sunnyvale	Santa Clara	High	NA	NA	NA	NA	N
22740	Las Gallinas Valley Sanitary District	San Rafael	Marin	High	2015	9.99	0	NA	N
22938	Visual Concepts Entertainment	Novato	Marin	High	2015	0.8	0	NA	N
22964	Intuit, Inc	Mountain View	Santa Clara	High	NA	NA	NA	NA	N
22974	Stack Infrastructure	San Jose	Santa Clara	High	2014	8.1	0	NA	N
23016	Healthpeak Properties, HCP Oyster Point III LLC	South San Francisco	San Mateo	High	2017	7.5	0	NA	Y
23086	Paraduxx Winery	Napa	Napa	High	2015	9.9	0.9	NA	N
23132	1634 Pine Street LLC	San Francisco	San Francisco	High	2015	4.2	0	NA	N
23178	Downtown RWC RES, LLC	Redwood City	San Mateo	High	2014	6	0	NA	Y
23199	Bergman Residence	Saint Helena	Napa	High	2015	9.9	0.9	NA	N
23223	Everest Infrastructure Partners - Mt. Diablo	Clayton	Contra Costa	High	NA	NA	NA	NA	N
23274	OnTrac Logistics, Inc	Fremont	Alameda	High	2016	0.49	0	NA	N
23395	KBSIII Almaden Financial Plaza, LC	San Jose	Santa Clara	High	NA	NA	NA	NA	N
23398	Film Werks International	San Francisco	San Francisco	High	2016	9.9	0	NA	N
23528	Brand Winery	Saint Helena	Napa	High	2016	9.9	0	NA	N
23586	Bay Alarm-Concord	Concord	Contra Costa	High	2016	3.1	0	NA	Y
23616	Central Wolfe LLC	Sunnyvale	Santa Clara	High	2016	1.6	0	NA	N
23664	BCORE Colleman Owner LLC	San Jose	Santa Clara	High	2023	5.9	0	NA	N
23738	Chinatown Community Development Center	San Francisco	San Francisco	High	2007	0.87	0	NA	N
23902	EQUINIX INC SV14-SV17	Santa Clara	Santa Clara	High	2015	7.2	0	NA	N
23984	4700 Old Ironsides Drive LLC	Santa Clara	Santa Clara	High	2003	5.6	0.9	NA	N

24042	Vantage Data Centers Management Co	Santa Clara	Santa Clara	High	2024	4.8	0	0.02	N
24059	Phoenix Data Center Leasehold LLC	Sunnyvale	Santa Clara	High	2005	9.99	0.01	NA	N
24146	Best Fang Holdings, LLC	San Jose	Santa Clara	High	NA	NA	NA	NA	N
24421	1500 Space Park Drive LLC	Santa Clara	Santa Clara	High	2022	2	0	0.02	N
24511	US Army Corps of Engineers	Sausalito	Marin	High	NA	NA	NA	NA	N
24514	Bay Club Walnut Creek, LLC	Walnut Creek	Contra Costa	High	2002	1.5	0	NA	N
24535	NTT Global Data Centers Americas, Inc	Santa Clara	Santa Clara	High	2020	2.31	0	NA	N
24713	CCSF-TC & FSD	San Francisco	San Francisco	High	2020	0.15	0	NA	N
24750	274 Brannan Street Property Owner LLC	San Francisco	San Francisco	High	NA	NA	NA	NA	N
24758	Amazon Data Services, Inc	Santa Clara	Santa Clara	High	2023	2.93	0	0.05	N
24927	Pacific Service Credit Union	Concord	Contra Costa	High	NA	NA	NA	NA	Y
24972	Genomic Health, Inc	Redwood City	San Mateo	High	2009	0.91	0	NA	N
25011	San Mateo County Office of Education	Redwood City	San Mateo	High	2022	9.9	0.1	NA	N
25033	Rosemark Commercial Facilities Mgmt Services	Point Reyes Station	Marin	High	NA	NA	NA	NA	N
25083	Market Center	San Francisco	San Francisco	High	NA	NA	NA	NA	N
25311	230 East Grand Ave (PG II 230 East Grand LLC)	South San Francisco	San Mateo	High	NA	NA	NA	NA	Y
200396	Linkedin Corporation	Mountain View	Santa Clara	High	2019	3.7	0	NA	N
200402	San Jose Water Company	San Jose	Santa Clara	High	2017	2.8	0	NA	Y
200431	Seed Testing Real Estate II	Gilroy	Santa Clara	High	2019	9.9	0.9	NA	Y
200439	Mosser Company	San Francisco	San Francisco	High	2017	3.2	0	NA	N
200471	Frito Lay, Inc.	Alameda	Alameda	High	2017	9.9	0.9	NA	Y

200541	Workday	Pleasanton	Alameda	High	2017	2.6	0	NA	N
200628	City of Union City	Union City	Alameda	High	2017	0.9	0	NA	N
200691	41 Tehama, LP	San Francisco	San Francisco	High	2017	9.7	0	NA	N
200744	Fremont Bank Livermore Operations	Livermore	Alameda	High	2021	0.75	0	NA	N
200756	Hampton Inn San Jose	San Jose	Santa Clara	High	2019	2.6	0	NA	N
200804	San Mateo County	Redwood City	San Mateo	High	NA	NA	NA	NA	Y
200833	The Grad Student Housing	San Jose	Santa Clara	High	2019	4.5	0	NA	N
200901	Veritas Headquarters - Equipment Yard	Santa Clara	Santa Clara	High	NA	NA	NA	NA	N
200909	Partnership Health Plan of California	Fairfield	Solano	High	2018	9.99	1	NA	N
201073	Sutter Shared Lab	Livermore	Alameda	High	2018	8.65	0	NA	N
201165	CoreSite Real Estate 3045 Stender, LP	Santa Clara	Santa Clara	High	2024	2.1	0	NA	N
201183	Alexander Station Apartments	Gilroy	Santa Clara	High	2018	9.99	1	NA	Y
201226	Aralon Properties	South San Francisco	San Mateo	High	NA	NA	NA	NA	Y
201322	Pink Sunset	Atherton	San Mateo	High	2021	9.9	0	NA	N
201412	Synopsys Pathline Building 1	Sunnyvale	Santa Clara	High	2023	3.4	0	NA	N
201511	Bay Area Rapid Transit	Oakland	Alameda	High	2018	2.9	0	NA	Y
201578	Inglenook Winery	Rutherford	Napa	High	2019	2.3	0	NA	N
201589	Fireye, Inc.	Milpitas	Santa Clara	High	NA	NA	NA	NA	N
201620	SJSC Properties LLC	San Jose	Santa Clara	High	2019	6.6	0	NA	N
201688	Stonestown Anchor Acquisition, LP	San Francisco	San Francisco	High	2019	9.9	0.9	NA	N
201797	M2 Apartments	San Francisco	San Francisco	High	2020	9.9	0.1	NA	Y
201802	Snowflake	Menlo Park	San Mateo	High	2019	1.7	0	NA	N

201806	Amazon USF1 Santa Clara	Santa Clara	Santa Clara	High	2019	2.8	0	NA	N
201853	Wornick Estates	Saint Helena	Napa	High	NA	NA	NA	NA	N
201860	Atherton Civic Center	Atherton	San Mateo	High	NA	NA	NA	NA	N
201872	CBRE	South San Francisco	San Mateo	High	2020	9.9	0	NA	Y
201885	SUNRISE VILLA SONOMA	Sonoma	Sonoma	High	2020	9.9	0.1	NA	N
201891	Realm Cellars	Napa	Napa	High	2020	9.9	0	NA	N
201899	1201 Broadway - Operator, LLC	Millbrae	San Mateo	High	NA	NA	NA	NA	N
201943	Caltrans - Devil's Slide	Pacifica	San Mateo	High	2020	0.04	0	NA	N
201957	Promontory Winery	Napa	Napa	High	2020	9.9	0.1	NA	N
202012	Marciano Winery	Saint Helena	Napa	High	2020	7.9	0	NA	N
202077	GI TC Perry Park LLC	Sunnyvale	Santa Clara	High	2020	6.3	0	NA	N
202121	Impossible Foods - Pilot Plant	Redwood City	San Mateo	High	2021	3.9	0	NA	Y
202156	Align Technology - Bldg. 3	San Jose	Santa Clara	High	2021	9.9	0.1	NA	N
202176	ZENNI OPTICAL	Novato	Marin	High	2021	9.9	0.1	NA	N
202281	601 California Street (International Building)	San Francisco	San Francisco	High	NA	NA	NA	NA	N
202376	Brasswood Estates	Calistoga	Napa	High	NA	NA	NA	NA	N
202382	SJFD TRAINING CENTER	San Jose	Santa Clara	High	2025	3.5	0	NA	Y
202512	The Forum at Rancho San Antonio	Cupertino	Santa Clara	High	2022	1.7	0	NA	N
202534	47071 Bayside Parkway	Fremont	Alameda	High	2022	9.9	0.1	NA	N
202546	Restaurant Depot	Concord	Contra Costa	High	NA	NA	NA	NA	Y
202581	GeneFab, LLC	Alameda	Alameda	High	2022	1.7	0	NA	N
202600	30680 Huntwood	Hayward	Alameda	High	2022	2	0	NA	N
202629	Villa del Lago Winery	St. Helena	Napa	High	2022	9.9	0.1	NA	N
202660	Peninsula Innovation Point	Burlingame	San Mateo	High	2022	0.79	0	NA	N
202691	Vantage	South San Francisco	San Mateo	High	2022	1.5	0	0.01	Y
202707	Presidio Bay Ventures	San Carlos	San Mateo	High	2024	6.4	0	NA	N

202716	901 Mariners Island Boulevard	San Mateo	San Mateo	High	2022	0.15	0	0	N
202756	3440 Hillview Avenue - Bldg 7 & 8	Palo Alto	Santa Clara	High	2022	9.9	0	NA	N
202828	Tasman ASL PropCo LLC	Santa Clara	Santa Clara	High	2023	3.3	0	0.05	N
202846	Hyatt Centric Hotel - Santa Clara	Santa Clara	Santa Clara	High	2023	5.7	0	NA	N
202957	950 Page Mill Road	Palo Alto	Santa Clara	High	2023	2.5	0	NA	N
202964	Redwood Bay Biotech. LLC	Redwood City	San Mateo	High	2023	3.2	0	NA	Y
202972	Southline Phase 1 Building 1	South San Francisco	San Mateo	High	2025	3.7	0	0	Y
203042	Silicon Valley Surgery Center	Campbell	Santa Clara	High	2023	1.5	0	NA	N
203120	Allen Brothers NorCal	Richmond	Contra Costa	High	2023	0.71	0	NA	Y
203143	Amazon.com Services - DSF8	Richmond	Contra Costa	High	2023	1.4	0	NA	Y
203158	PG III 250 East Grand, LLC	South San Francisco	San Mateo	High	2023	2.2	0	NA	Y
203178	The Larry Ellison Conservation Center For Wildlife Care	Saratoga	Santa Clara	High	NA	NA	NA	NA	N
203345	Hummingbird ESS LLC	San Jose	Santa Clara	High	2024	0.73	0	NA	N
203485	Vine & Fig	St. Helena	Napa	High	2024	0.68	0	NA	N
203490	Ellman Winery	Napa	Napa	High	2024	9.9	0	NA	N
203672	Bristol Myers Squibb	Brisbane	San Mateo	High	NA	NA	NA	NA	Y

Table B-4. Intermediate Priority Facilities

Facility Number	Facility Name	City	County	AB2588 Priority Ranking	HRA Year	HRA Cancer Risk (in chances in a million)	Chronic Hazard Index	Acute Hazard Index	Overburdened Community (Yes/No)
11971	Parent-Sorensen Mortuary	Petaluma	Sonoma	Intermediate	NA	NA	NA	NA	N
8227	Pacific Interment Service	Emeryville	Alameda	Intermediate	NA	NA	NA	NA	Y
279	Keysight Technologies	Santa Rosa	Sonoma	Intermediate	NA	NA	NA	NA	N
19463	Grissom's Chapel & Mortuary	San Lorenzo	Alameda	Intermediate	NA	NA	NA	NA	N
19204	Wyant & Smith Crematory	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
1364	Cypress Amloc Land Co , Inc	Colma	San Mateo	Intermediate	NA	NA	NA	NA	N
23637	Ardagh Metal Beverage USA Inc	Fairfield	Solano	Intermediate	NA	NA	NA	NA	N
24609	SLD Laser	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
4831	L P McNear Brick Co Inc	San Rafael	Marin	Intermediate	NA	NA	NA	NA	N
24255	GreenWaste Transfer Station of Hayward	Hayward	Alameda	Intermediate	NA	NA	NA	NA	Y
16993	KVAL Inc	Petaluma	Sonoma	Intermediate	NA	NA	NA	NA	N
1618	Sanmina Corporation	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	Y
2206	Streamline Circuits LLC dba Summit Interconnect SC	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
1276	Novato Sanitary District	Novato	Marin	Intermediate	NA	NA	NA	NA	N
1430	Nazareth House of San Rafael	San Rafael	Marin	Intermediate	2013	8.3	0	NA	N

1669	Kaiser Permanente Medical Center	Martinez	Contra Costa	Intermediate	NA	NA	NA	NA	N
2094	Contra Costa County	Martinez	Contra Costa	Intermediate	NA	NA	NA	NA	N
3739	Sutter Bay Hospitals dba Alta Bates Summit Medical Center	Berkeley	Alameda	Intermediate	NA	NA	NA	NA	N
3893	Sonoma Valley Hospital District	Sonoma	Sonoma	Intermediate	NA	NA	NA	NA	N
4007	Central Contra Costa Sanitary District	Orinda	Contra Costa	Intermediate	2021	0.79	0	0	N
5383	Foothill Community College	Los Altos	Santa Clara	Intermediate	NA	NA	NA	NA	N
6023	The Home Depot Store #0630	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
6024	The Home Depot Store #0629	Pleasanton	Alameda	Intermediate	NA	NA	NA	NA	N
6487	The Home Depot Store #0635	Union City	Alameda	Intermediate	NA	NA	NA	NA	N
6997	30 CES/CEIEC	Half Moon Bay	San Mateo	Intermediate	NA	NA	NA	NA	N
7189	Delta Diablo Sanitation District	Antioch	Contra Costa	Intermediate	2006	1.5	0	NA	Y
8032	Campton Place Hotel	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
8175	The Home Depot Store #0643	El Cerrito	Contra Costa	Intermediate	2010	6.6	0.01	NA	Y
8723	The City of Fremont Fire Station #1	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N

8998	West Valley Community College	Saratoga	Santa Clara	Intermediate	2011	9.9	0	NA	N
9153	City of Petaluma	Petaluma	Sonoma	Intermediate	NA	NA	NA	NA	N
9161	Mission Community College	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
9597	Central Contra Costa Sanitary District	Walnut Creek	Contra Costa	Intermediate	NA	NA	NA	NA	N
9598	City & County of San Francisco - Bruce Flynn Pump	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
10170	The Home Depot Store #0639	Colma	San Mateo	Intermediate	NA	NA	NA	NA	N
10184	San Mateo County Transit District	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
10185	San Mateo County Transit District	San Carlos	San Mateo	Intermediate	NA	NA	NA	NA	N
11058	San Leandro Surgery Center	San Leandro	Alameda	Intermediate	NA	NA	NA	NA	N
11261	Nordstrom DC 499	Newark	Alameda	Intermediate	NA	NA	NA	NA	N
11764	Bay Area Rapid Transit District	Oakland	Alameda	Intermediate	2012	7.7	0.01	NA	Y
12449	Federal Aviation Administration, SFO	Millbrae	San Mateo	Intermediate	NA	NA	NA	NA	N
12638	CenturyLink Communications, LLC	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
12875	City of Daly City	Daly City	San Mateo	Intermediate	NA	NA	NA	NA	N

12876	City of Daly City	Daly City	San Mateo	Intermediate	NA	NA	NA	NA	N
12916	Cisco System	Milpitas	Santa Clara	Intermediate	2004	9.8	0.9	0	N
12930	Delta Diablo Sanitation	Pittsburg	Contra Costa	Intermediate	NA	NA	NA	NA	Y
12969	Verizon Business - SBEZCA	San Jose	Santa Clara	Intermediate	2001	1.8	NA	NA	N
12972	Verizon Business	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
12974	County of Santa Clara	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
13015	Omni San Francisco Hotel	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
13066	Pacific Bell Corp	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
13077	NOP 560 Mission LLC	San Francisco	San Francisco	Intermediate	2001	9.9	NA	NA	N
13121	Young's Market Company	Morgan Hill	Santa Clara	Intermediate	NA	NA	NA	NA	N
13187	East Bay Dischargers Authority	San Lorenzo	Alameda	Intermediate	NA	NA	NA	NA	N
13202	Lowe's HTW, Inc /Corporate Payables	San Bruno	San Mateo	Intermediate	NA	NA	NA	NA	Y
13215	Digital Realty	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
13217	West Coast Quartz Inc	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N

13223	The Home Depot Store #6667	Windsor	Sonoma	Intermediate	NA	NA	NA	NA	N
13224	CBS Inc	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
13226	The Home Depot Store #1017	Hayward	Alameda	Intermediate	2001	1.7	0	NA	Y
13240	The Home Depot Store #1009	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
13299	MetroPCS California/Florida Inc	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
13322	Clover Stornetta Farms Inc	Petaluma	Sonoma	Intermediate	NA	NA	NA	NA	N
13325	Embassy Suites Hotel	Burlingame	San Mateo	Intermediate	NA	NA	NA	NA	N
13332	Level 3 Communications	San Martin	Santa Clara	Intermediate	2001	2.9	0	NA	N
13333	Saratoga Retirement Community	Saratoga	Santa Clara	Intermediate	2001	1	0	0	N
13346	Third & Mission Associates	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
13347	Jameco Electronics	Belmont	San Mateo	Intermediate	NA	NA	NA	NA	N
13351	Rector Water Treatment Plant	Yountville	Napa	Intermediate	NA	NA	NA	NA	N
13360	Costco Wholesale #41	Santa Rosa	Sonoma	Intermediate	NA	NA	NA	NA	Y
13365	County of Santa Clara	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	Y

13371	Chinese Hospital	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
13377	Napa County Public Works	Napa	Napa	Intermediate	NA	NA	NA	NA	N
13383	Lowe's HIW, Inc /Corporate Payables	Union City	Alameda	Intermediate	NA	NA	NA	NA	N
13390	City of San Mateo	San Mateo	San Mateo	Intermediate	NA	NA	NA	NA	Y
13410	Pacific Bell Corporation	Walnut Creek	Contra Costa	Intermediate	2001	9.9	0	NA	N
13418	Sewer Authority Mid-Coastside	Half Moon Bay	San Mateo	Intermediate	NA	NA	NA	NA	N
13444	Verizon California	Gilroy	Santa Clara	Intermediate	NA	NA	NA	NA	Y
13446	Pacific Bell	Alameda	Alameda	Intermediate	NA	NA	NA	NA	N
13447	Pacific Bell	Albany	Alameda	Intermediate	NA	NA	NA	NA	N
13448	Pacific Bell	Angwin	Napa	Intermediate	NA	NA	NA	NA	N
13450	Pacific Bell	Benicia	Solano	Intermediate	2003	6	NA	NA	N
13451	Pacific Bell	Berkeley	Alameda	Intermediate	NA	NA	NA	NA	N
13454	Pacific Bell	Burlingame	San Mateo	Intermediate	NA	NA	NA	NA	N
13456	Pacific Bell	Clayton	Contra Costa	Intermediate	NA	NA	NA	NA	N

13460	Pacific Bell	Suisun City	Solano	Intermediate	NA	NA	NA	NA	N
13461	Pacific Bell	Cotati	Sonoma	Intermediate	2005	6.5	NA	NA	N
13465	Pacific Bell	El Sobrante	Contra Costa	Intermediate	NA	NA	NA	NA	N
13467	Pacific Bell	Fairfield	Solano	Intermediate	2005	9.8	0.01	NA	Y
13472	Pacific Bell	Hayward	Alameda	Intermediate	NA	NA	NA	NA	N
13474	Pacific Bell	Hayward	Alameda	Intermediate	NA	NA	NA	NA	N
13477	Pacific Bell	Hercules	Contra Costa	Intermediate	NA	NA	NA	NA	N
13480	Pacific Bell	La Honda	San Mateo	Intermediate	2008	9.92	0.01	NA	N
13481	Pacific Bell	Lafayette	Contra Costa	Intermediate	NA	NA	NA	NA	N
13484	Pacific Bell	Larkspur	Marin	Intermediate	NA	NA	NA	NA	N
13486	Pacific Bell	Los Altos	Santa Clara	Intermediate	NA	NA	NA	NA	N
13488	Pacific Bell	Menlo Park	San Mateo	Intermediate	NA	NA	NA	NA	N
13489	Pacific Bell	Millbrae	San Mateo	Intermediate	NA	NA	NA	NA	N
13492	Pacific Bell	Napa	Napa	Intermediate	NA	NA	NA	NA	N

13495	Pacific Bell	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
13496	Pacific Bell	Oakland	Alameda	Intermediate	NA	NA	NA	NA	N
13497	Pacific Bell	Oakland	Alameda	Intermediate	NA	NA	NA	NA	N
13498	Pacific Bell	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
13499	Pacific Bell	Orinda	Contra Costa	Intermediate	NA	NA	NA	NA	N
13502	Pacific Bell	Pescadero	San Mateo	Intermediate	NA	NA	NA	NA	N
13503	AT&T	Petaluma	Sonoma	Intermediate	NA	NA	NA	NA	N
13504	Pacific Bell	Pittsburg	Contra Costa	Intermediate	NA	NA	NA	NA	Y
13505	AT&T	Pleasanton	Alameda	Intermediate	NA	NA	NA	NA	N
13507	Pacific Bell	Pleasanton	Alameda	Intermediate	NA	NA	NA	NA	N
13509	Pacific Bell	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	Y
13510	Pacific Bell	Richmond	Contra Costa	Intermediate	NA	NA	NA	NA	Y
13512	Pacific Bell	Saint Helena	Napa	Intermediate	NA	NA	NA	NA	N
13513	AT&T	San Bruno	San Mateo	Intermediate	2002	9.93	NA	NA	Y

13514	Pacific Bell	San Carlos	San Mateo	Intermediate	NA	NA	NA	NA	N
13515	AT&T	San Francisco	San Francisco	Intermediate	2006	6.3	0.9	0	N
13516	Pacific Bell	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
13517	Pacific Bell	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
13518	SBC	San Francisco	San Francisco	Intermediate	2004	1.03	0	NA	Y
13519	Pacific Bell	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
13521	Pacific Bell	San Francisco	San Francisco	Intermediate	2006	4.1	0	NA	N
13526	Pacific Bell	Oakley	Contra Costa	Intermediate	NA	NA	NA	NA	N
13529	Pacific Bell	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
13530	AT&T California	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
13533	Pacific Bell	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
13534	Pacific Bell	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
13537	Pacific Bell	San Leandro	Alameda	Intermediate	NA	NA	NA	NA	N
13538	Pacific Bell	San Martin	Santa Clara	Intermediate	NA	NA	NA	NA	N

13541	AT&T	San Ramon	Contra Costa	Intermediate	NA	NA	NA	NA	N
13542	Pacific Bell	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
13545	Pacific Bell	Sebastopol	Sonoma	Intermediate	NA	NA	NA	NA	N
13548	Pacific Bell	Suisun City	Solano	Intermediate	NA	NA	NA	NA	N
13549	Pacific Bell	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
13556	Pacific Bell	Vallejo	Solano	Intermediate	2003	3	0	NA	Y
13557	Pacific Bell	Valley Ford	Sonoma	Intermediate	NA	NA	NA	NA	N
13559	Pacific Bell	Yountville	Napa	Intermediate	NA	NA	NA	NA	N
13561	Frontier	Los Gatos	Santa Clara	Intermediate	NA	NA	NA	NA	N
13589	Pacific Bell	Sonoma	Sonoma	Intermediate	2006	0.7	NA	NA	N
13599	Diablo Water District	Oakley	Contra Costa	Intermediate	NA	NA	NA	NA	N
13603	City of Oakland, Envr Scvs Division	Oakland	Alameda	Intermediate	NA	NA	NA	NA	N
13626	HCP BTC, LLC c/o CBRE	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
13633	Stryker Corporation	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N

13651	Mettler-Toledo Rainin,LLC	Oakland	Alameda	Intermediate	2002	2.5	NA	NA	Y
13665	California Water Service Co	Atherton	San Mateo	Intermediate	NA	NA	NA	NA	N
13669	Lowe's HIW, Inc ,Corporate Payables	Livermore	Alameda	Intermediate	NA	NA	NA	NA	N
13687	City of Sunnyvale - Environmental Services	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
13695	Lowe's HIW, Inc	Antioch	Contra Costa	Intermediate	2002	2.2	0	NA	Y
13715	East Bay Municipal Utility Dist	Oakland	Alameda	Intermediate	NA	NA	NA	NA	N
13716	East Bay Municipal Utility Dist - Danville PP	Danville	Contra Costa	Intermediate	NA	NA	NA	NA	N
13720	East Bay Municipal Utility Dist - Orinda WTP	Orinda	Contra Costa	Intermediate	NA	NA	NA	NA	N
13721	EBMUD, San Pablo Water Treatment Plant	Kensington	Alameda	Intermediate	2020	4.7	0	NA	N
13724	East Bay Municipal Utility Dist	Walnut Creek	Contra Costa	Intermediate	NA	NA	NA	NA	N
13728	East Bay Municipal Utility Dist	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
13735	East Bay Municipal Utility Dist PSH	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
13739	East Bay Municipal Utility Dist PSQ	Berkeley	Alameda	Intermediate	NA	NA	NA	NA	N
13742	East Bay Municipal Utility Dist	Richmond	Contra Costa	Intermediate	2005	0.7	0	NA	Y

13788	City of Antioch	Antioch	Contra Costa	Intermediate	NA	NA	NA	NA	Y
13812	Oracle America	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
13832	Pleasant Hill Police Department	Pleasant Hill	Contra Costa	Intermediate	NA	NA	NA	NA	N
13834	Cordilleras Mental Health Center	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	N
13841	405 Howard St Foundry II	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
13843	BCAL 44 Montgomery Property	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
13862	City of SSF Water Quality Plant	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
13865	City of SSF Water Quality Plant	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
13867	City of SSF Water Quality Plant	South San Francisco	San Mateo	Intermediate	2004	2.3	NA	NA	Y
13873	HWA 555 Owners LLC c/o So Hudson 555 Mgmt , Inc	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
13874	Boston Properties	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
13883	Delta Diablo Sanitation District	Antioch	Contra Costa	Intermediate	NA	NA	NA	NA	Y
13884	Delta Diablo Sanitation District	Pittsburg	Contra Costa	Intermediate	2022	0.11	0	NA	Y
13906	Santa Rosa Memorial Hospital	Santa Rosa	Sonoma	Intermediate	NA	NA	NA	NA	N

13920	South County Regional Wastewater Authority	Gilroy	Santa Clara	Intermediate	NA	NA	NA	NA	Y
13930	Alameda County GSA	San Leandro	Alameda	Intermediate	NA	NA	NA	NA	N
13947	Hills Plaza Complex	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
13957	Avalon Bay Communities Inc	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
13958	SAP Labs LLC	Palo Alto	Santa Clara	Intermediate	NA	NA	NA	NA	N
13975	Kaiser Permanente Walnut Creek Data Center	Walnut Creek	Contra Costa	Intermediate	NA	NA	NA	NA	N
13985	City of Santa Rosa Utilities Dept	Santa Rosa	Sonoma	Intermediate	2015	9.6	0	NA	N
13990	Las Trampas	Alamo	Contra Costa	Intermediate	NA	NA	NA	NA	N
13993	Napa County Public Works	Napa	Napa	Intermediate	NA	NA	NA	NA	N
14001	Napa Berryessa Resort Improvement District	Napa	Napa	Intermediate	NA	NA	NA	NA	N
14029	USL Property Management	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
14031	City of Concord-Police Department	Concord	Contra Costa	Intermediate	NA	NA	NA	NA	N
14036	Silicon Valley Clean Water, Redwood City Pump Station	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	Y
14042	Contra Costa Water District	Brentwood	Contra Costa	Intermediate	NA	NA	NA	NA	N

14045	Contra Costa Water District	Concord	Contra Costa	Intermediate	NA	NA	NA	NA	N
14060	Central Contra Costa Sanitary District	Martinez	Contra Costa	Intermediate	NA	NA	NA	NA	Y
14063	Central Contra Costa Sanitary District	Orinda	Contra Costa	Intermediate	2004	7.1	NA	NA	N
14065	Central Contra Costa Sanitary District	Martinez	Contra Costa	Intermediate	NA	NA	NA	NA	N
14067	Kaiser Permanente Berkeley Campus	Berkeley	Alameda	Intermediate	NA	NA	NA	NA	N
14070	S F Bay Area Rapid Transit District	Walnut Creek	Contra Costa	Intermediate	NA	NA	NA	NA	N
14071	S F Bay Area Rapid Transit District	Concord	Contra Costa	Intermediate	NA	NA	NA	NA	N
14072	S F Bay Area Rapid Transit District	Colma	San Mateo	Intermediate	NA	NA	NA	NA	N
14073	S F Bay Area Rapid Transit District	Castro Valley	Alameda	Intermediate	NA	NA	NA	NA	N
14074	S F Bay Area Rapid Transit District	Hayward	Alameda	Intermediate	NA	NA	NA	NA	N
14075	S F Bay Area Rapid Transit District	Pleasanton	Alameda	Intermediate	NA	NA	NA	NA	N
14077	S F Bay Area Rapid Transit District	Pittsburg	Contra Costa	Intermediate	NA	NA	NA	NA	Y
14078	S F Bay Area Rapid Transit District	El Cerrito	Contra Costa	Intermediate	NA	NA	NA	NA	Y
14089	Pacific Bell Corporation	Pittsburg	Contra Costa	Intermediate	NA	NA	NA	NA	Y

14090	Pacific Bell Corporation	Moss Beach	San Mateo	Intermediate	NA	NA	NA	NA	N
14091	AT&T	Brentwood	Contra Costa	Intermediate	NA	NA	NA	NA	N
14092	Pacific Bell Corporation	Milpitas	Santa Clara	Intermediate	2002	8.9	0.01	0	N
14094	San Ramon Marriott Hotel	San Ramon	Contra Costa	Intermediate	NA	NA	NA	NA	N
14096	Westborough Water District	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	N
14097	Westborough Water District	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	N
14099	City of Daly City	Daly City	San Mateo	Intermediate	NA	NA	NA	NA	N
14100	Vitalant	Brisbane	San Mateo	Intermediate	NA	NA	NA	NA	N
14102	City of Daly City	Daly City	San Mateo	Intermediate	NA	NA	NA	NA	N
14103	City of Daly City	Daly City	San Mateo	Intermediate	NA	NA	NA	NA	N
14104	Bellevue Pump Station	Daly City	San Mateo	Intermediate	NA	NA	NA	NA	N
14105	City of Daly City	Daly City	San Mateo	Intermediate	NA	NA	NA	NA	N
14107	City of Daly City	Daly City	San Mateo	Intermediate	NA	NA	NA	NA	N
14110	City of Daly City	Daly City	San Mateo	Intermediate	NA	NA	NA	NA	N

14115	City of Sunnyvale - Environmental Services	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
14129	Contra Costa County	Pittsburg	Contra Costa	Intermediate	NA	NA	NA	NA	Y
14138	Contra Costa County	Martinez	Contra Costa	Intermediate	NA	NA	NA	NA	N
14167	Pacific Gas and Electric	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
14174	Pacific Gas and Electric	San Mateo	San Mateo	Intermediate	NA	NA	NA	NA	Y
14179	JPPF 1155 Battery, LP	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
14181	State of California Department of Trans	Richmond	Contra Costa	Intermediate	NA	NA	NA	NA	N
14186	State of California Department of Transportation	Hayward	Alameda	Intermediate	NA	NA	NA	NA	N
14187	State of California Department of Transportation	Newark	Alameda	Intermediate	NA	NA	NA	NA	N
14188	State of Calif Dept of Transport tion	Menlo Park	San Mateo	Intermediate	NA	NA	NA	NA	N
14189	State of California	Vallejo	Solano	Intermediate	NA	NA	NA	NA	N
14192	State of California Department of Transportation	Antioch	Contra Costa	Intermediate	NA	NA	NA	NA	Y
14200	XO Communications Services, LLC	Fremont	Alameda	Intermediate	2002	9.9	NA	NA	N
14204	City of Mountain View Fleet Services	Mountain View	Santa Clara	Intermediate	NA	NA	NA	NA	N

14205	City of Mountain View Fleet Services	Mountain View	Santa Clara	Intermediate	NA	NA	NA	NA	N
14211	City of Mountain View Fleet Services	Mountain View	Santa Clara	Intermediate	NA	NA	NA	NA	N
14212	City of Mountain View Fleet Services	Mountain View	Santa Clara	Intermediate	NA	NA	NA	NA	N
14216	Zoo Wet Weather Pump Station	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
14227	City of Mountain View Fleet Services	Mountain View	Santa Clara	Intermediate	NA	NA	NA	NA	N
14228	City of Mountain View Fleet Services	Mountain View	Santa Clara	Intermediate	NA	NA	NA	NA	N
14230	City of Mountain View Fleet Services	Mountain View	Santa Clara	Intermediate	NA	NA	NA	NA	N
14231	Griffith Pump Station	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
14238	East Bay Municipal Utility Distr ct	Alameda	Alameda	Intermediate	NA	NA	NA	NA	Y
14245	Fairfield-Suisun Sewer District (Suisun Pump Sta)	Suisun City	Solano	Intermediate	NA	NA	NA	NA	N
14247	Fairfield-Suisun Sewer District (Cordelia Pump Sta)	Fairfield	Solano	Intermediate	NA	NA	NA	NA	N
14248	Fairfield-Suisun Sewer District (Central Pump Sta)	Fairfield	Solano	Intermediate	NA	NA	NA	NA	Y
14258	Rohnert Park Timely Care	Rohnert Park	Sonoma	Intermediate	NA	NA	NA	NA	N
14271	City of Foster City	Foster City	San Mateo	Intermediate	NA	NA	NA	NA	N

14273	City of Foster City	Foster City	San Mateo	Intermediate	NA	NA	NA	NA	N
14291	City of Oakland , Public Works Facilities	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
14295	City of Oakland Envir Scvs Division	Oakland	Alameda	Intermediate	NA	NA	NA	NA	N
14301	City of Oakland Envr Scvs Division	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
14372	Contra Costa County Fire Protection District #2	Pleasant Hill	Contra Costa	Intermediate	NA	NA	NA	NA	N
14373	Contra Costa County Fire Protection District	Concord	Contra Costa	Intermediate	NA	NA	NA	NA	N
14423	Oakland 14th Office	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
14425	345 California LP c/o Cushman & Wakefield of CA	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
14433	Pacific Bell	Windsor	Sonoma	Intermediate	2002	9.9	NA	NA	N
14442	County of Santa Clara	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
14451	County of Santa Clara	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
14483	California Water Service Company	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
14484	Pacific Bell	Danville	Contra Costa	Intermediate	2002	3	0.9	0	N
14493	County of Santa Clara - Facilities & Fleet Dept	San Martin	Santa Clara	Intermediate	NA	NA	NA	NA	N

14494	Santa Clara County Roads & Airports Dept	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
14495	Santa Clara County Roads & Airports Dept	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	Y
14517	Union Sanitary Dist, Boyce LS	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
14520	Kaiser Permanente	Gilroy	Santa Clara	Intermediate	NA	NA	NA	NA	Y
14529	Good Samaritan Hospital LP	Los Gatos	Santa Clara	Intermediate	NA	NA	NA	NA	N
14532	AC Transit General Office	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
14541	Sewer Authority Mid-Coastside	El Granada	San Mateo	Intermediate	NA	NA	NA	NA	N
14542	Sewer Authority Mid-Coastside	Half Moon Bay	San Mateo	Intermediate	NA	NA	NA	NA	N
14543	Montara Sanitary District c/o SAM	Half Moon Bay	San Mateo	Intermediate	NA	NA	NA	NA	N
14545	Montara Sanitary District	Moss Beach	San Mateo	Intermediate	NA	NA	NA	NA	N
14546	Sewer Authority Mid-Coastside	Montara	San Mateo	Intermediate	NA	NA	NA	NA	N
14547	Montara Sanitary District	Montara	San Mateo	Intermediate	NA	NA	NA	NA	N
14548	Montara Sanitary District	Montara	San Mateo	Intermediate	2021	9.9	0	NA	N
14585	City of Benicia Fire Station #1	Benicia	Solano	Intermediate	NA	NA	NA	NA	N

14588	City of Benicia Water Treatment Facility	Benicia	Solano	Intermediate	NA	NA	NA	NA	N
14590	City of Fremont	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
14592	Frontier-California Inc	Morgan Hill	Santa Clara	Intermediate	NA	NA	NA	NA	N
14607	300 F. Ogawa Plaza LP.	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
14609	One California Street Partners	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
14611	California Water Service Company	Livermore	Alameda	Intermediate	2018	6.7	0	NA	N
14666	Ronald McDonald House at Stanford	Palo Alto	Santa Clara	Intermediate	NA	NA	NA	NA	N
14669	INKO Industrial Corporation	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
14670	County of San Mateo	San Carlos	San Mateo	Intermediate	NA	NA	NA	NA	N
14672	SEECON Investments	Concord	Contra Costa	Intermediate	NA	NA	NA	NA	Y
14688	Centurylink Communications, LLC	Emeryville	Alameda	Intermediate	NA	NA	NA	NA	N
14707	Verizon Business - SQZPCA	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
14715	Verizon Business - SNIWCA	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
14716	Verizon Business - SNTLCA	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N

14720	Verizon Business - FRMOCA	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
14722	Verizon Business - SFCXCA	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
14726	Sewerage Agency of Southern Marin	Tiburon	Marin	Intermediate	NA	NA	NA	NA	N
14727	Sewerage Agency of Southern Marin	Tiburon	Marin	Intermediate	NA	NA	NA	NA	N
14728	Kaiser Permanente	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
14729	Kaiser Permanente	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
14738	Tishman Speyer Properties	Mountain View	Santa Clara	Intermediate	NA	NA	NA	NA	N
14751	City of Brentwood	Brentwood	Contra Costa	Intermediate	NA	NA	NA	NA	N
14785	City of San Mateo	San Mateo	San Mateo	Intermediate	NA	NA	NA	NA	N
14805	Federal Aviation Administration	Napa	Napa	Intermediate	NA	NA	NA	NA	N
14813	County of San Mateo DPW	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	Y
14814	Pacific Bell	Mill Valley	Marin	Intermediate	2002	9.9	0.01	NA	N
14822	Federal Aviation Administration	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
14823	Contra Costa Water District	Concord	Contra Costa	Intermediate	NA	NA	NA	NA	N

14826	Contra Costa Water District	Concord	Contra Costa	Intermediate	NA	NA	NA	NA	N
14828	Contra Costa Water District	Concord	Contra Costa	Intermediate	NA	NA	NA	NA	Y
14837	Trans Pacific Centre	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
14847	Synaptics Inc	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
14850	City of Burlingame Public Works Department	Burlingame	San Mateo	Intermediate	NA	NA	NA	NA	N
14852	Genesys Telecommunications Laboratories Inc	Daly City	San Mateo	Intermediate	NA	NA	NA	NA	N
14875	County of San Mateo	Woodside	San Mateo	Intermediate	NA	NA	NA	NA	N
14898	City of Oakland , Envr Scvs Division	Oakland	Alameda	Intermediate	NA	NA	NA	NA	N
14901	University of Ca SF General Hospital	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
14904	Sierra Pacific Properties, Inc	Concord	Contra Costa	Intermediate	NA	NA	NA	NA	Y
14942	City of Palo Alto	Palo Alto	Santa Clara	Intermediate	NA	NA	NA	NA	N
14948	National Weather Service - SF Bay Area	Los Gatos	Santa Clara	Intermediate	NA	NA	NA	NA	N
14949	Fifth & Potter Street Assoc	Berkeley	Alameda	Intermediate	NA	NA	NA	NA	N
14950	Frontier California	Kenwood	Sonoma	Intermediate	2009	0.52	0	NA	N

14960	Verizon Wireless Hwy 152 (G7)	Gilroy	Santa Clara	Intermediate	NA	NA	NA	NA	N
14964	Wells Fargo Bank	Fremont	Alameda	Intermediate	2014	2.2	0	NA	N
14969	State of California DOT	Martinez	Contra Costa	Intermediate	NA	NA	NA	NA	Y
14981	City of San Mateo	San Mateo	San Mateo	Intermediate	NA	NA	NA	NA	N
14985	SJ Cityview LLC	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
14992	Visa Land Management IV	Foster City	San Mateo	Intermediate	2002	3.5	NA	NA	N
15060	ThermoFisher Scientific	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
15071	Pacific Bell	Sausalito	Marin	Intermediate	2005	4.9	NA	NA	N
15080	Lowe's HIW, Inc /Corporate Payables	Gilroy	Santa Clara	Intermediate	NA	NA	NA	NA	Y
15093	Belmont Fire Protection District Station 14	Belmont	San Mateo	Intermediate	NA	NA	NA	NA	N
15148	City of San Rafael Dept of Public Works	San Rafael	Marin	Intermediate	NA	NA	NA	NA	Y
15186	The Home Depot Store #0628	San Carlos	San Mateo	Intermediate	NA	NA	NA	NA	N
15237	SBC	Tiburon	Marin	Intermediate	NA	NA	NA	NA	N
15254	Williams Sonoma	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N

15282	Comcast Cable Corporation	Rohnert Park	Sonoma	Intermediate	NA	NA	NA	NA	N
15284	City of Dublin	Dublin	Alameda	Intermediate	2022	1	0	NA	N
15290	Comcast Communications	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
15292	IKEA California LLC	East Palo Alto	San Mateo	Intermediate	2003	6.6	0.9	NA	Y
15305	Stanford Health Care Tri-Valley	Livermore	Alameda	Intermediate	NA	NA	NA	NA	N
15337	Verizon Global Networks	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
15346	IBM Corporation	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
15356	Sonoma County Morgue	Santa Rosa	Sonoma	Intermediate	NA	NA	NA	NA	N
15358	KPIX TV 5	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
15433	Marin Municipal Water District	Tiburon	Marin	Intermediate	NA	NA	NA	NA	N
15446	Tamalpais Community Services District	Mill Valley	Marin	Intermediate	NA	NA	NA	NA	N
15454	The Peninsula Mandalay OA c/o Titan Management	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
15473	City of Milpitas	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
15505	The Home Depot #1044	Hercules	Contra Costa	Intermediate	NA	NA	NA	NA	N

15529	City of Sunnyvale - DPS -164-0 & 165-0	Sunnyvale	Santa Clara	Intermediate	2019	9.9	0.9	NA	N
15532	Carneros Business Park	Sonoma	Sonoma	Intermediate	NA	NA	NA	NA	N
15546	Westfield Oakridge	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
15550	Amports	Benicia	Solano	Intermediate	NA	NA	NA	NA	N
15583	Cisco Systems Inc	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
15585	Comcast Communications	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
15598	AXA Rosenberg Global Services LLC	Fairfield	Solano	Intermediate	NA	NA	NA	NA	N
15608	Photon Dynamics - Orbotech	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
15612	Martin Building Company	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
15613	Operating Engineers Local Union #3 Federal Credit	Livermore	Alameda	Intermediate	NA	NA	NA	NA	N
15619	Foundry Square IV	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
15624	199 New Montgomery Owners Assoc c/o Titan Mgmt Grp	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
15653	The Home Depot Store #1076	Brentwood	Contra Costa	Intermediate	2005	2.4	0.9	NA	N
15658	Pacific Bell/SBC Environmental	Novato	Marin	Intermediate	NA	NA	NA	NA	N

15702	Napa County Sheriff Facility	Napa	Napa	Intermediate	NA	NA	NA	NA	N
15731	The Home Depot Store #6652	Napa	Napa	Intermediate	NA	NA	NA	NA	N
15780	City of Gilroy	Gilroy	Santa Clara	Intermediate	NA	NA	NA	NA	N
15785	AT&T Bush Street	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
15812	One Bush, Inc c/o Property Management	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
15827	City of Gilroy	Gilroy	Santa Clara	Intermediate	NA	NA	NA	NA	Y
15828	Santa Clara County Roads & Airports Dept	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
15831	The Metropolitan Association	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
15835	University Circle	East Palo Alto	San Mateo	Intermediate	NA	NA	NA	NA	Y
15839	Santa Clara Police Facility	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
15872	The Home Depot Store #0632	San Mateo	San Mateo	Intermediate	NA	NA	NA	NA	N
15874	The J David Gladstone Institutes	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
15888	Dublin San Ramon Services District	Dublin	Alameda	Intermediate	NA	NA	NA	NA	N
15889	Dublin San Ramon Services District	Dublin	Alameda	Intermediate	2004	1.96	0	NA	N

15933	Comcast of California IX, Inc	San Mateo	San Mateo	Intermediate	NA	NA	NA	NA	N
15934	Comcast of California/Massachusetts/Michigan/Utah,	Walnut Creek	Contra Costa	Intermediate	NA	NA	NA	NA	N
15935	Comcast of California/Colorado/Texas/Washington	Pleasanton	Alameda	Intermediate	2023	7	0.01	NA	N
15939	U S Technical Ceramics Inc	Morgan Hill	Santa Clara	Intermediate	NA	NA	NA	NA	Y
15948	The Home Depot Store #0634	Concord	Contra Costa	Intermediate	NA	NA	NA	NA	Y
15960	Comcast Cable Corporation	Petaluma	Sonoma	Intermediate	NA	NA	NA	NA	N
15999	Frank Family Vineyards	Calistoga	Napa	Intermediate	2019	8.5	0	NA	N
16024	Genentech, Inc	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
16037	Santa Clara County Roads & Airports Dept	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
16039	Comcast Cable Corporation	Pinole	Contra Costa	Intermediate	NA	NA	NA	NA	Y
16073	Visa Land Development II, L P	Foster City	San Mateo	Intermediate	NA	NA	NA	NA	N
16081	City of Calistoga - Water Treatment Plant	Calistoga	Napa	Intermediate	NA	NA	NA	NA	N
16091	Comcast of California III, Inc	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
16092	Comcast of Colorado/Texas/Washington, Inc	Pittsburg	Contra Costa	Intermediate	NA	NA	NA	NA	Y

16117	Verizon Wireless	Martinez	Contra Costa	Intermediate	NA	NA	NA	NA	N
16118	Verizon Wireless (South Gilroy)	Gilroy	Santa Clara	Intermediate	NA	NA	NA	NA	Y
16125	San Jose Fire Dept Stn#13 / Accts Payable	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
16127	Pacific Bell (dba: AT&T CA)	Pleasanton	Alameda	Intermediate	2007	6.7	0	NA	N
16163	Suisun - Solano Water Authority Sports Complex	Suisun City	Solano	Intermediate	NA	NA	NA	NA	N
16200	The Gymboree Corporation	San Francisco	San Francisco	Intermediate	2004	4.9	0.9	NA	N
16242	Sonoma-Cutrer Vineyards	Windsor	Sonoma	Intermediate	NA	NA	NA	NA	N
16265	BP3-SF8 1400 FI LLC	San Mateo	San Mateo	Intermediate	NA	NA	NA	NA	N
16280	Verizon Wireless- HWY 35/280	San Bruno	San Mateo	Intermediate	NA	NA	NA	NA	N
16299	Lowe's HIW, Inc	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
16318	KNTV Television, Inc	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
16325	Mid Peninsula Water District	Woodside	San Mateo	Intermediate	NA	NA	NA	NA	N
16344	International Hotel	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
16370	San Francisco Public Library	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y

16374	Wal-Mart Store #5435 c/o APTIM	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	Y
16384	San Rafael Sanitation District	San Rafael	Marin	Intermediate	NA	NA	NA	NA	N
16386	San Rafael Sanitation District	San Rafael	Marin	Intermediate	NA	NA	NA	NA	N
16399	Cushman / Wakefield, Agent for Adobe Sys, Inc	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
16402	Hall Wines	Rutherford	Napa	Intermediate	NA	NA	NA	NA	N
16411	City of Alameda / Public Works Dept	Alameda	Alameda	Intermediate	2007	1.4	0.9	NA	N
16422	City of San Jose, SBWRP	San Jose	Santa Clara	Intermediate	2004	9.93	0	NA	Y
16437	City of Rohnert Park	Rohnert Park	Sonoma	Intermediate	NA	NA	NA	NA	N
16441	City of Hayward Department of Public Works	Hayward	Alameda	Intermediate	2005	9.1	0.9	NA	N
16442	City of Hayward Well D2	Hayward	Alameda	Intermediate	NA	NA	NA	NA	Y
16443	City of Hayward Well C	Hayward	Alameda	Intermediate	NA	NA	NA	NA	Y
16444	City of Hayward Well B	Hayward	Alameda	Intermediate	NA	NA	NA	NA	Y
16445	City of Hayward Garin P/S	Hayward	Alameda	Intermediate	NA	NA	NA	NA	N
16446	City of Hayward 1000' Reservoir	Hayward	Alameda	Intermediate	NA	NA	NA	NA	N

16447	City of Hayward 750' Reservoir	Hayward	Alameda	Intermediate	NA	NA	NA	NA	N
16518	Northrop Grumman Systems Corp	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
16543	Peninsula Property JV LLC	Burlingame	San Mateo	Intermediate	NA	NA	NA	NA	N
16552	Contra Costa Water District	Concord	Contra Costa	Intermediate	2005	2.2	NA	NA	N
16581	Daly City	Daly City	San Mateo	Intermediate	NA	NA	NA	NA	N
16603	Verizon Wireless-816226	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
16627	Worldpac	Newark	Alameda	Intermediate	NA	NA	NA	NA	N
16635	San Francisco Public Utilities Commission	Daly City	San Mateo	Intermediate	NA	NA	NA	NA	N
16652	Hudson Metro Plaza, LLC	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
16701	CA 201 Mission Street - LLP	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
16703	California Water Service Company	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	N
16705	Hilton San Francisco Airport Hotel	Burlingame	San Mateo	Intermediate	NA	NA	NA	NA	N
16708	San Francisco Museum of Modern Art	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
16710	Lowe's HIW, Inc	Antioch	Contra Costa	Intermediate	NA	NA	NA	NA	N

16717	San Francisco Public Utilities Commission	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
16722	Villa Marin Homeowners Association	San Rafael	Marin	Intermediate	NA	NA	NA	NA	N
16743	Neiman Marcus	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
16747	Reutlinger Community For Jewish Living	Danville	Contra Costa	Intermediate	NA	NA	NA	NA	N
16787	Bayside Area Development, LLC c/ CBRE, Inc	South San Francisco	San Mateo	Intermediate	2005	9.98	NA	NA	Y
16794	The Home Depot Store #1092	Daly City	San Mateo	Intermediate	NA	NA	NA	NA	N
16812	City of San Jose Municipal Water	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
16817	Renesas Electronics America Inc.	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
16825	Lowe's HIW, Inc #1901	Cotati	Sonoma	Intermediate	NA	NA	NA	NA	N
16829	The Home Depot Store #0641	Rohnert Park	Sonoma	Intermediate	NA	NA	NA	NA	Y
16833	Santa Rosa Silvercrest Residences	Santa Rosa	Sonoma	Intermediate	NA	NA	NA	NA	N
16850	SPRINT	Oakland	Alameda	Intermediate	NA	NA	NA	NA	N
16853	Town of Windsor	Windsor	Sonoma	Intermediate	2004	2	NA	NA	N
16858	Sprint San Jose POP	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N

16866	County of Sonoma	Santa Rosa	Sonoma	Intermediate	NA	NA	NA	NA	N
16887	Charleston Properties	Mountain View	Santa Clara	Intermediate	NA	NA	NA	NA	N
16908	Beacon Commercial Owners Association	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
16917	Verizon Wireless Piedmont Sierra	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
16919	KBHK TV	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
16924	Kilroy Realty, LP	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
16927	Fairfield-Suisun Sewer District	Fairfield	Solano	Intermediate	NA	NA	NA	NA	N
16965	Ikea US West Inc - 165 Emeryville	Emeryville	Alameda	Intermediate	NA	NA	NA	NA	Y
16987	Sonoma County Water Agency	Petaluma	Sonoma	Intermediate	NA	NA	NA	NA	N
16994	Thermo Fisher Scientific (dba Dionex)	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
17018	San Jose Redevelopment Agency	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	Y
17019	Cadence Design Systems, Inc	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
17049	Verizon Wireless	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
17081	City of Gilroy	Gilroy	Santa Clara	Intermediate	NA	NA	NA	NA	N

17082	City of Gilroy	Gilroy	Santa Clara	Intermediate	NA	NA	NA	NA	Y
17112	KNTV Television	Daly City	San Mateo	Intermediate	NA	NA	NA	NA	N
17113	County of Marin, Jail	San Rafael	Marin	Intermediate	NA	NA	NA	NA	N
17114	Alameda County Public Works Agency	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
17141	City of Milpitas	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
17144	Westborough Water District-Rowntree Lift Station	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	N
17152	City of Milpitas	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
17154	City of Milpitas	Milpitas	Santa Clara	Intermediate	2016	9.9	0.9	NA	N
17156	City of Milpitas	Milpitas	Santa Clara	Intermediate	2010	9.97	0.01	NA	N
17160	City of Milpitas	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
17163	City of Milpitas	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
17179	Mission Creek Community/Mercy Housing Grp	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
17214	City of Milpitas	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
17232	City of Santa Clara - Well Site: Zone 1, 28	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N

17234	City of Santa Clara - Well Site: Zone 2, 17-02	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
17235	City of Santa Clara - Well Site: Zone 2A, 15	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
17236	City of Santa Clara - Well Site: Zone 1, 7	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
17237	City of Santa Clara - Well Site: Zone 1, 3-02	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
17240	City of Santa Clara - Water Booster Site: Serra	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
17245	City of Santa Clara - "Freedom Circle" Storm	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
17246	City of Santa Clara - Fairway Glen Storm	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
17247	City of Santa Clara - Lakeside Storm	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
17252	City of Santa Clara - Westside Storm	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
17287	F1 Stevenson LLC c/o Cushman & Wakefield	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
17291	Watermark HOA	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
17306	Sonoma County Water Agency-Sonoma Booster Station	Santa Rosa	Sonoma	Intermediate	2020	1.74	0	NA	N
17314	Silicon Valley Bank	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
17320	T-Mobile USA Inc	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y

17323	City of Santa Clara, Electric Utility Yard	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
17326	City of Santa Clara, Park Service Ctr	Santa Clara	Santa Clara	Intermediate	2021	5	0	NA	N
17334	Lowe's HIW, Inc	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
17340	Sutter Bay Medical Foundation DB Palo Alto M F	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
17369	City of Hayward	Hayward	Alameda	Intermediate	NA	NA	NA	NA	N
17372	Cal Academy of Sciences 501/C3 Non-Profit Corp	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
17381	Dallas Ranch MSL, LLC - a DE Limited Liability Co	Antioch	Contra Costa	Intermediate	NA	NA	NA	NA	N
17386	Broadcom Limited	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
17400	Millennium Tower Association	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
17407	Fisher Investments	San Mateo	San Mateo	Intermediate	2005	5.8	0	NA	N
17417	AlmaVia of San Rafael	San Rafael	Marin	Intermediate	NA	NA	NA	NA	N
17442	Verizon Wireless (Nicasio)	Nicasio	Marin	Intermediate	NA	NA	NA	NA	N
17443	Verizon Wireless (Hwy 4 Bypass)	Antioch	Contra Costa	Intermediate	NA	NA	NA	NA	N
17458	Verizon Wireless (Sebastopol)	Sebastopol	Sonoma	Intermediate	NA	NA	NA	NA	N

17462	City of Redwood City #5546	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	Y
17466	City of Redwood City #8520	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	N
17474	Marina Village Pump Station - Town of Corte Madera	Corte Madera	Marin	Intermediate	NA	NA	NA	NA	N
17478	City of Berkeley Fire Department	Berkeley	Alameda	Intermediate	NA	NA	NA	NA	N
17483	City of Redwood City	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	N
17506	City of Redwood City	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	N
17507	City of Redwood City	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	N
17517	Fed Ex Express - SFOA	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
17518	FedEx Express - OAKRT	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
17528	The Infinity Owners Association	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
17533	FedEx Express-OAKH	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
17536	188 KING STREET HOA	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
17556	101 Second Street Inc	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
17571	Ardagh Group	Fairfield	Solano	Intermediate	NA	NA	NA	NA	N

17573	San Francisco Municipal Railway	San Francisco	San Francisco	Intermediate	2006	1.58	0	NA	N
17584	Alexandria Real Estate Equities, Inc	South San Francisco	San Mateo	Intermediate	2006	2.1	0	NA	Y
17587	Global Power Group Inc (Toys "R" Us)	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	Y
17597	Sterling Vineyards	Calistoga	Napa	Intermediate	NA	NA	NA	NA	N
17604	Downtown Properties V,LLC c/o Spectrum Interests	San Mateo	San Mateo	Intermediate	NA	NA	NA	NA	Y
17621	Skywest Emergency Pump Station	Hayward	Alameda	Intermediate	NA	NA	NA	NA	Y
17622	City of Daly City	Daly City	San Mateo	Intermediate	NA	NA	NA	NA	N
17633	Amidi Real Estate Plug and Play, LLC	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
17658	City Of San Mateo Fire Station #23	San Mateo	San Mateo	Intermediate	NA	NA	NA	NA	N
17659	Mt Diablo Plaza	Walnut Creek	Contra Costa	Intermediate	NA	NA	NA	NA	N
17668	Tata Communications [America] Inc	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
17672	Sanrio, Inc	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
17675	Sheriff's Dept County Jail 1 & 2	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
17685	Eastern Contra Costa Transit Authority	Antioch	Contra Costa	Intermediate	NA	NA	NA	NA	Y

17689	The Home Depot Store #0625	San Leandro	Alameda	Intermediate	NA	NA	NA	NA	Y
17696	Stanford University	Palo Alto	Santa Clara	Intermediate	NA	NA	NA	NA	N
17702	The Home Depot Store #0644	Pittsburg	Contra Costa	Intermediate	NA	NA	NA	NA	Y
17703	The Home Depot Store #0627	Emeryville	Alameda	Intermediate	NA	NA	NA	NA	Y
17704	The Home Depot Store #0640	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
17710	3E Company/Regulatory Dept c/o Home Depot #6603	East Palo Alto	San Mateo	Intermediate	2023	0.29	0	NA	Y
17717	2350 Mission Building, LLC	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
17728	Fry's Electronics Inc	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
17730	The Home Depot Store #6604	San Ramon	Contra Costa	Intermediate	NA	NA	NA	NA	N
17731	The Home Depot Store #6621	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
17733	The Home Depot #6635	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
17734	The Home Depot Store #6636	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
17740	The Home Depot Store #6678	Livermore	Alameda	Intermediate	NA	NA	NA	NA	N
17741	The Home Depot Store #6655	Colma	San Mateo	Intermediate	NA	NA	NA	NA	N

17742	The Home Depot Store #6677	Gilroy	Santa Clara	Intermediate	2023	5.9	0	NA	Y
17753	Oracle America	Pleasanton	Alameda	Intermediate	NA	NA	NA	NA	N
17759	City of South San Francisco (Pump Station #3)	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
17761	Mavericks Realty Management	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
17787	City of Fremont	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
17788	City Heights At Pellier Park	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
17805	AT & T Corp	Hayward	Alameda	Intermediate	NA	NA	NA	NA	N
17811	United Parcel Service	Richmond	Contra Costa	Intermediate	NA	NA	NA	NA	Y
17898	New San Francisco Federal Building	San Francisco	San Francisco	Intermediate	2006	9.99	0.01	NA	Y
17902	Verizon Wireless (Smiley Tower)	Mountain View	Santa Clara	Intermediate	NA	NA	NA	NA	N
17904	AT&T	Point Reyes Station	Marin	Intermediate	NA	NA	NA	NA	N
17930	The Home Depot Store #1379	Santa Rosa	Sonoma	Intermediate	NA	NA	NA	NA	N
17946	Regulus	Napa	Napa	Intermediate	NA	NA	NA	NA	N
17947	City of Redwood City Public Works	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	N

17951	City of Hayward Public Works Utilities	Hayward	Alameda	Intermediate	NA	NA	NA	NA	N
17954	Verizon Wireless (East Antioch)	Antioch	Contra Costa	Intermediate	NA	NA	NA	NA	N
17976	Byron Bethany Irrigation District	Byron	Contra Costa	Intermediate	2008	5.8	0	NA	N
17991	AT&T Corp	Novato	Marin	Intermediate	NA	NA	NA	NA	N
17994	Verizon Wireless (McKee & Toyon)	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
17995	Verizon Wireless (Rancho Solano)	Fairfield	Solano	Intermediate	NA	NA	NA	NA	N
18009	Skyline at Tamien Station Association	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
18027	City of Oakland, Envr Scvs Division	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
18034	Trans Bay Cable LLC	Pittsburg	Contra Costa	Intermediate	NA	NA	NA	NA	Y
18039	Cisco Systems Inc	San Jose	Santa Clara	Intermediate	2008	5.3	0	NA	N
18040	The Shops at Tanforan	San Bruno	San Mateo	Intermediate	NA	NA	NA	NA	Y
18054	Terraces Home Owner's Association	Dublin	Alameda	Intermediate	NA	NA	NA	NA	N
18058	Best Buy Company, Inc	San Rafael	Marin	Intermediate	NA	NA	NA	NA	Y
18059	Prologis	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N

18067	Sanitary District No 2 of Marin County	Corte Madera	Marin	Intermediate	2007	9.7	0.01	NA	N
18095	The Swig Company	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
18155	4988 Great America Pkwy, Santa Clara, CA 95054	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
18169	Woodside Fire Station #19	Woodside	San Mateo	Intermediate	2007	9.7	0.01	NA	N
18232	Contra Costa County Fire Protection Dist	Concord	Contra Costa	Intermediate	NA	NA	NA	NA	N
18252	Silicon Valley Animal Control Authority	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
18254	ISCS, Inc	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
18259	County of Santa Clara - VHC Gilroy	Gilroy	Santa Clara	Intermediate	NA	NA	NA	NA	Y
18262	225 Bush St Owners LLC c/o 225 Bush St Partners	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
18271	Council On Aging	Santa Rosa	Sonoma	Intermediate	NA	NA	NA	NA	Y
18275	City of Belmont	Belmont	San Mateo	Intermediate	NA	NA	NA	NA	N
18292	Paradise Valley Estates	Fairfield	Solano	Intermediate	2007	8.4	0	NA	N
18367	FedEx Freight	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
18395	Lowe's of Dublin, CA#2273	Dublin	Alameda	Intermediate	NA	NA	NA	NA	N

18397	American Multi Cinema, Inc	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
18400	Golden Gate Ntl Recreation Area	Sausalito	Marin	Intermediate	NA	NA	NA	NA	N
18401	Luminous Solar West, LLC	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
18422	AT&T CA	San Rafael	Marin	Intermediate	NA	NA	NA	NA	N
18424	County of Marin, Juvenile Hall	San Rafael	Marin	Intermediate	NA	NA	NA	NA	N
18462	Stanford Medicine Outpatient Center	Redwood City	San Mateo	Intermediate	2008	2.5	0	NA	Y
18482	Alameda County Public Works Agency	Hayward	Alameda	Intermediate	NA	NA	NA	NA	Y
18507	Verizon Wireless (Lockheed)	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
18522	Sonoma Airport Properties, LLC	Santa Rosa	Sonoma	Intermediate	NA	NA	NA	NA	N
18533	Verizon Wireless (Knightsen)	Brentwood	Contra Costa	Intermediate	NA	NA	NA	NA	N
18542	Napa County Animal Shelter	Napa	Napa	Intermediate	NA	NA	NA	NA	N
18553	Cupertino City Center Buildings	Cupertino	Santa Clara	Intermediate	NA	NA	NA	NA	N
18593	Healthpeak Properties Inc. c/o CB Richard Ellis Property Manager	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
18599	SRS Development	Walnut Creek	Contra Costa	Intermediate	NA	NA	NA	NA	N

18615	Verizon Wireless (Kings Estate)	Oakland	Alameda	Intermediate	NA	NA	NA	NA	N
18624	Napa Sanitation District	Napa	Napa	Intermediate	NA	NA	NA	NA	N
18628	Alameda County Public Works Agency	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
18636	California Water Service Company	Livermore	Alameda	Intermediate	NA	NA	NA	NA	N
18637	California Water Service Company	Livermore	Alameda	Intermediate	NA	NA	NA	NA	N
18650	The Home Depot Store #0637	Fairfield	Solano	Intermediate	NA	NA	NA	NA	Y
18653	Valeroso Stables	Petaluma	Sonoma	Intermediate	NA	NA	NA	NA	N
18655	The Home Depot Store #1861	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
18658	San Francisco Bay Bridge Toll Plaza	Oakland	Alameda	Intermediate	2007	1.2	0	NA	Y
18670	Point Pillar Development LLC	Half Moon Bay	San Mateo	Intermediate	NA	NA	NA	NA	N
18742	Verizon Wireless (Hamilton AFB)	Novato	Marin	Intermediate	NA	NA	NA	NA	N
18753	City of Santa Clara	Santa Clara	Santa Clara	Intermediate	2007	1.1	NA	NA	N
18759	Deer Creek Pump Station,Purissima Hills Water Dist	Los Altos Hills	Santa Clara	Intermediate	NA	NA	NA	NA	N
18762	Verizon Wireless / ENGLISH HILL	Sebastopol	Sonoma	Intermediate	NA	NA	NA	NA	N

18769	Jay Paul Company	Sunnyvale	Santa Clara	Intermediate	2019	9.9	0.9	NA	N
18792	Rosewood Hotel	Menlo Park	San Mateo	Intermediate	NA	NA	NA	NA	N
18808	Verizon Wireless (Orwood Tract)	Brentwood	Contra Costa	Intermediate	2008	4.1	0	NA	N
18819	Stags Leap Winery	Napa	Napa	Intermediate	NA	NA	NA	NA	N
18822	Zone 7 Water Agency	Livermore	Alameda	Intermediate	NA	NA	NA	NA	N
18830	Avalon Bay Communities	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
18832	SSCOP Properties LLC	Petaluma	Sonoma	Intermediate	NA	NA	NA	NA	N
18838	BP MV Research Park, LLC, c/o Boston Properties	Mountain View	Santa Clara	Intermediate	NA	NA	NA	NA	N
18852	Town of Hillsborough	Hillsborough	San Mateo	Intermediate	2008	8.3	NA	NA	N
18877	South San Francisco Water Quality	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
18895	Bay Area Rapid Transit	Dublin	Alameda	Intermediate	NA	NA	NA	NA	N
18905	Mare Island Outpatient Clinic	Vallejo	Solano	Intermediate	NA	NA	NA	NA	Y
18915	City of San Jose Municipal Water	San Jose	Santa Clara	Intermediate	2024	0.84	0	NA	N
18916	City of San Jose Municipal Water	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N

18917	City of San Jose Municipal Water	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
18919	City of San Jose Municipal Water	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
18921	City of San Jose Municipal Water	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
18922	City of San Jose Municipal Water	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
18923	City of San Jose Municipal Water	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
18932	Verizon Wireless (Kirker Pass)	Concord	Contra Costa	Intermediate	NA	NA	NA	NA	Y
18934	Verizon Wireless (HWY 680/Bernal)	Pleasanton	Alameda	Intermediate	NA	NA	NA	NA	N
18941	Verizon Wireless (Harbor View)	Martinez	Contra Costa	Intermediate	NA	NA	NA	NA	N
18945	City of Fremont	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
18956	Argenta	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
18971	UCSF/CPFM	San Francisco	San Francisco	Intermediate	2008	8.4	0.9	NA	N
18977	Hall Wines	Saint Helena	Napa	Intermediate	NA	NA	NA	NA	N
18979	Genomic Health, Inc	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	N
18984	ARE - San Francisco No 12 LLC	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y

18985	Presentation Center, Los Gatos	Los Gatos	Santa Clara	Intermediate	NA	NA	NA	NA	N
19012	Lowe's HIW, Inc	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	Y
19025	City of Fremont Development	Fremont	Alameda	Intermediate	2008	3.2	0	NA	N
19068	Qualcomm	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
19083	County of San Mateo	La Honda	San Mateo	Intermediate	NA	NA	NA	NA	N
19089	San Francisco Public Utilities Commission	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
19090	San Francisco Public Utilities Commission	San Francisco	San Francisco	Intermediate	2010	1	NA	NA	N
19091	San Francisco Public Utilities Commission	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
19092	San Francisco Public Utilities Commission	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
19094	San Francisco Public Utilities Commission	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
19135	Kaiser Permanente	Napa	Napa	Intermediate	NA	NA	NA	NA	N
19156	North Bay Regional Surgery Ctr	Novato	Marin	Intermediate	NA	NA	NA	NA	N
19170	North Coast County Water District	San Bruno	San Mateo	Intermediate	2008	3.1	0	NA	N
19179	MacroGenics West,Inc	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y

19180	San Francisco Public Utilities Commission	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
19213	Westin St Francis Hotel	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
19227	Town of Los Gatos	Los Gatos	Santa Clara	Intermediate	NA	NA	NA	NA	N
19236	County of Marin	San Rafael	Marin	Intermediate	2008	9.2	0.01	NA	Y
19290	Verizon Wireless (Tomales)	Tomales	Marin	Intermediate	NA	NA	NA	NA	N
19301	East Contra Costa Fire District	Discovery Bay	Contra Costa	Intermediate	NA	NA	NA	NA	N
19306	Verizon Wireless-Victoria Island	Discovery Bay	Contra Costa	Intermediate	NA	NA	NA	NA	N
19316	Access Properties LLC	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
19317	ARM	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
19353	Hurricane Electric Internet Services	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
19366	Comcast Sportsnet Bay Area	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
19369	Verizon Wireless (Napa Airport)	Napa	Napa	Intermediate	NA	NA	NA	NA	N
19376	County of Santa Clara-Valley HealthCenter/Milpitas	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
19379	Kaiser Permanente - Antioch Medical Center	Livermore	Alameda	Intermediate	NA	NA	NA	NA	N

19388	Nordstrom Inc	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
19404	Fairfield Fire Department - Station 41	Fairfield	Solano	Intermediate	NA	NA	NA	NA	N
19405	Fairfield Fire Department - Station 37	Fairfield	Solano	Intermediate	2009	1	0	NA	Y
19442	Sequoia Union High School District	Atherton	San Mateo	Intermediate	2018	9.9	0.9	NA	N
19453	UCSF / Oyster Point	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
19455	Verizon Wireless - Fulton Francisco	Fulton	Sonoma	Intermediate	NA	NA	NA	NA	N
19471	Bay Area Rapid Transit	Dublin	Alameda	Intermediate	NA	NA	NA	NA	N
19483	County of Marin	Novato	Marin	Intermediate	NA	NA	NA	NA	N
19498	Hundred Acre Wine Group	Calistoga	Napa	Intermediate	NA	NA	NA	NA	N
19504	City of Fremont	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
19512	City of Union City	Union City	Alameda	Intermediate	NA	NA	NA	NA	N
19518	Altamont Pump Station, Purissima Hills Water Dist	Los Altos Hills	Santa Clara	Intermediate	NA	NA	NA	NA	N
19535	Visa, Inc	Foster City	San Mateo	Intermediate	NA	NA	NA	NA	N
19548	San Leandro Senior Housing, Inc	San Leandro	Alameda	Intermediate	NA	NA	NA	NA	N

19560	Lowe's HIW, Inc	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
19566	Verizon Wireless (Hwy 101 & Levesley)	Gilroy	Santa Clara	Intermediate	NA	NA	NA	NA	Y
19570	Verizon Wireless (Hwy 1 & 84)	San Gregorio	San Mateo	Intermediate	NA	NA	NA	NA	N
19574	City of Mountain View	Mountain View	Santa Clara	Intermediate	NA	NA	NA	NA	N
19584	Electric Power Research Institute	Palo Alto	Santa Clara	Intermediate	NA	NA	NA	NA	N
19588	Lowe's HIW, Inc #2604	Concord	Contra Costa	Intermediate	NA	NA	NA	NA	Y
19594	Lowe's HIW, Inc	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
19600	City of Union City	Union City	Alameda	Intermediate	NA	NA	NA	NA	N
19604	Judicial Council of California, JCC 38-A1	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
19605	El Camino Hospital - Los Gatos	Los Gatos	Santa Clara	Intermediate	NA	NA	NA	NA	N
19610	Verizon Wireless (MFoxworthy)	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
19614	Trinity Properties	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
19645	Bio-Rad Laboratories	Richmond	Contra Costa	Intermediate	NA	NA	NA	NA	Y
19655	SFPUC - SCVWD Intertie Pump Station	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N

19670	The Meadows of Napa Valley	Napa	Napa	Intermediate	2017	6.8	0	NA	N
19675	City of Belmont	Belmont	San Mateo	Intermediate	NA	NA	NA	NA	N
19702	Wind River Systems, Inc	Alameda	Alameda	Intermediate	NA	NA	NA	NA	N
19709	County of San Mateo	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	Y
19716	City of San Jose Fire Station # 2 /Accts Payable	San Jose	Santa Clara	Intermediate	2009	5.8	0	NA	N
19722	Scale AI Headquarters	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
19737	Avalon Bay Communities, Inc	Walnut Creek	Contra Costa	Intermediate	NA	NA	NA	NA	N
19741	Nordstrom, Inc	Walnut Creek	Contra Costa	Intermediate	NA	NA	NA	NA	N
19749	Brannan Owners Association	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
19758	60SOMA Fee Owner CA,LLC c/o Harvest Properties	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
19763	The Town of Los Gatos	Los Gatos	Santa Clara	Intermediate	NA	NA	NA	NA	N
19767	Contra Costa County Firestation#83	Antioch	Contra Costa	Intermediate	NA	NA	NA	NA	Y
19788	Fourth Street Apartments	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
19792	San Jose Water Company	Los Gatos	Santa Clara	Intermediate	NA	NA	NA	NA	N

19793	San Jose Water Company	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
19794	San Jose Water Company	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
19795	San Jose Water Company	Saratoga	Santa Clara	Intermediate	NA	NA	NA	NA	N
19796	San Jose Water Company	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
19798	Fremont Surgery Center	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
19799	San Jose Water Company	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
19801	San Jose Water Company	Los Gatos	Santa Clara	Intermediate	NA	NA	NA	NA	N
19804	San Jose Water Company	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	Y
19805	SJW Vickery Av Station	Saratoga	Santa Clara	Intermediate	2020	9.9	0	NA	N
19808	San Jose Water Company	Los Gatos	Santa Clara	Intermediate	NA	NA	NA	NA	N
19817	County of Marin, MER, Bolinas	Bolinas	Marin	Intermediate	2008	0.9	0	NA	N
19827	County of Solano	Vallejo	Solano	Intermediate	NA	NA	NA	NA	Y
19834	City of Daly City	Daly City	San Mateo	Intermediate	NA	NA	NA	NA	N
19837	City of Daly City	Daly City	San Mateo	Intermediate	NA	NA	NA	NA	N

19856	ON Semiconductor Inc	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
19859	Ygnacio Center Walnut Creek, LLC	Walnut Creek	Contra Costa	Intermediate	NA	NA	NA	NA	N
19875	Verizon Wireless (WILLIAMS & DAFFODIL)	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
19877	Contra Costa Water Dist (Country Club Pump Sta)	Pleasant Hill	Contra Costa	Intermediate	NA	NA	NA	NA	N
19893	Costco Wholesale #1042	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	Y
19899	Pearl Investment Co, LLC	Livermore	Alameda	Intermediate	NA	NA	NA	NA	N
19910	Nihonmachi Terrace	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
19912	Bayside Acquisitions, LLC	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
19913	Lowe's HIW, Inc	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
19938	3832 Bay Center Place	Hayward	Alameda	Intermediate	NA	NA	NA	NA	Y
19939	Napa Sanitation District	Napa	Napa	Intermediate	2021	9.9	0	NA	N
19951	Santa Clara County Fire Dept	Los Gatos	Santa Clara	Intermediate	NA	NA	NA	NA	N
19953	Santa Clara County Fire Dept	Los Gatos	Santa Clara	Intermediate	2022	1.9	0	NA	N
19955	Santa Clara County Fire Dept	Cupertino	Santa Clara	Intermediate	NA	NA	NA	NA	N

19957	Santa Clara County Fire Dept	Saratoga	Santa Clara	Intermediate	NA	NA	NA	NA	N
19962	Santa Clara County Fire Dept	Los Altos	Santa Clara	Intermediate	NA	NA	NA	NA	N
19963	Santa Clara County Fire Dept	Los Altos Hills	Santa Clara	Intermediate	NA	NA	NA	NA	N
19971	Essex Portfolio LLC DBA The Grand Apartments	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
19974	City of Los Altos	Los Altos	Santa Clara	Intermediate	NA	NA	NA	NA	N
19982	Waddell Residence	Half Moon Bay	San Mateo	Intermediate	NA	NA	NA	NA	N
19985	Mendelsohn House	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
19987	Ceatrice Polite Apts	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
19990	Woolf House	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
19991	Leland Apartments	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
19997	BCAL LMP Harrison Property LLC c/o Avison Young	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
20000	City of Fremont	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
20038	Wine Country Cellars	Windsor	Sonoma	Intermediate	NA	NA	NA	NA	N
20039	Atria Senior Living Group	Novato	Marin	Intermediate	NA	NA	NA	NA	N

20056	The Doctors Company	Napa	Napa	Intermediate	NA	NA	NA	NA	N
20067	Contra Costa County Fire Protection District	Walnut Creek	Contra Costa	Intermediate	NA	NA	NA	NA	N
20068	Contra Costa County Fire Protection District	Lafayette	Contra Costa	Intermediate	NA	NA	NA	NA	N
20071	Harvest Properties Parkside Towers c/o TR Parkside	Foster City	San Mateo	Intermediate	NA	NA	NA	NA	N
20078	Lowe's HIW, Inc	Vallejo	Solano	Intermediate	NA	NA	NA	NA	N
20098	Kaiser Permanente	Pleasanton	Alameda	Intermediate	NA	NA	NA	NA	N
20114	One Hawthorne Owners Association	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
20162	HWA 555 Owners, LLC	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
20163	Zoetis, Inc.	Union City	Alameda	Intermediate	2010	8.3	0.01	NA	N
20172	Pacific Fertility Center	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
20179	Siemens Industry Software Inc.	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
20189	Livermore Municipal Water - Vasco Rd Pump Station	Livermore	Alameda	Intermediate	NA	NA	NA	NA	N
20233	488 Almaden Owner LLC	San Jose	Santa Clara	Intermediate	2007	2	0	NA	N
20236	Biotech Gateway - HCP c/o CBRE	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y

20248	SOF-XI WFO Harrison Owner, LLC c/o Cushman Wakefield	Oakland	Alameda	Intermediate	2016	9.7	0.01	NA	Y
20249	Vallejo Sanitation & Flood Control Dist	Vallejo	Solano	Intermediate	2010	9.99	0.01	NA	Y
20256	Digital Realty	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
20258	Contra Costa Community College District	Martinez	Contra Costa	Intermediate	NA	NA	NA	NA	N
20260	Atria Senior Living Group, Inc	Walnut Creek	Contra Costa	Intermediate	NA	NA	NA	NA	N
20263	City of Hayward	Hayward	Alameda	Intermediate	NA	NA	NA	NA	N
20266	First Solar, Inc	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
20294	Medland Development	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
20300	Neiman Marcus	Walnut Creek	Contra Costa	Intermediate	NA	NA	NA	NA	N
20319	New Cingular Wireless, PCS, LLC dba AT&T Mobility	Los Gatos	Santa Clara	Intermediate	NA	NA	NA	NA	N
20326	Digital Realty	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
20353	William Hill Estate Winery	Napa	Napa	Intermediate	NA	NA	NA	NA	N
20370	1101 Space Park Partners, LLC	Santa Clara	Santa Clara	Intermediate	2022	8.33	0.01	0	N
20383	Baywood Court Retirement Facility	Castro Valley	Alameda	Intermediate	NA	NA	NA	NA	N

20387	Apple Inc. (CC02)	Cupertino	Santa Clara	Intermediate	NA	NA	NA	NA	N
20407	East Bay Tire Company	Fairfield	Solano	Intermediate	NA	NA	NA	NA	N
20437	100 Van Ness Association,LLC	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
20445	Walmart #2048	Fairfield	Solano	Intermediate	NA	NA	NA	NA	N
20446	General Services Administration	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
20486	400 Howard Street	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
20503	Las Gallinas Valley Sanitary District	San Rafael	Marin	Intermediate	NA	NA	NA	NA	N
20527	Oakland Unified School District	Oakland	Alameda	Intermediate	2025	4.3	0	0.79	Y
20537	Department of Transportation	Oakland	Alameda	Intermediate	2010	9.8	0	NA	Y
20552	SF Police Crime Lab	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
20558	City of Brisbane	Brisbane	San Mateo	Intermediate	NA	NA	NA	NA	N
20559	City of Brisbane	Brisbane	San Mateo	Intermediate	NA	NA	NA	NA	N
20560	City of Brisbane	Brisbane	San Mateo	Intermediate	NA	NA	NA	NA	N
20561	City of Brisbane	Brisbane	San Mateo	Intermediate	NA	NA	NA	NA	N

20574	Digital Realty	Santa Clara	Santa Clara	Intermediate	2014	9.99	0.01	NA	N
20604	Dodge & Cox	San Ramon	Contra Costa	Intermediate	NA	NA	NA	NA	N
20609	Timber Soma MC LP	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
20611	EQUINIX-SV8	Palo Alto	Santa Clara	Intermediate	2014	9.2	0.01	NA	N
20620	131 Steuart St Foundation	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
20628	Mission Bay Stormwater Pump Station #6	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
20632	Verizon Wireless (Hwy 680 and Mission)	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
20638	Boehringer Ingelheim Fremont Inc	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
20639	Sonoma County Water Agency	Santa Rosa	Sonoma	Intermediate	NA	NA	NA	NA	N
20641	Verizon Wireless Niles Canyon	Castro Valley	Alameda	Intermediate	NA	NA	NA	NA	N
20644	Buck Institute for Age Research	Novato	Marin	Intermediate	NA	NA	NA	NA	N
20645	Judicial Council of California, JCC 07-E3	Pittsburg	Contra Costa	Intermediate	NA	NA	NA	NA	Y
20701	Verizon Wireless (Morgan Territory Road)	Clayton	Contra Costa	Intermediate	NA	NA	NA	NA	N
20703	Bay Area Rapid Transit Dist (BART)	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y

20709	The Fillmore Center Commercial	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
20720	San Francisco Public Utilities Commission	San Francisco	San Francisco	Intermediate	2020	2	0	NA	Y
20724	FEMA Region 9	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
20734	County of Marin, Pt Reyes Fire	Point Reyes Station	Marin	Intermediate	NA	NA	NA	NA	N
20740	TIBCO Software, Inc	Palo Alto	Santa Clara	Intermediate	NA	NA	NA	NA	N
20746	Walmart #1972	Livermore	Alameda	Intermediate	NA	NA	NA	NA	N
20750	Roche Sequencing Solutions	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
20769	Google LLC	Mountain View	Santa Clara	Intermediate	NA	NA	NA	NA	N
20792	City of Morgan Hill (Jackson Booster)	Morgan Hill	Santa Clara	Intermediate	2024	4.4	0	NA	N
20794	City of Morgan Hill (C Lift Station)	Morgan Hill	Santa Clara	Intermediate	2023	4.4	0	NA	N
20798	San Jose Fire Department Station #24	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
20808	VMware	Palo Alto	Santa Clara	Intermediate	NA	NA	NA	NA	N
20809	Zone 7 Water Agency	Livermore	Alameda	Intermediate	NA	NA	NA	NA	N
20817	Ardenwood	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N

20825	Moffett Field Commissary/DeCA	Mountain View	Santa Clara	Intermediate	NA	NA	NA	NA	N
20829	Ensign Sonoma Healthcare Center	Sonoma	Sonoma	Intermediate	NA	NA	NA	NA	N
20853	City of Redwood City Water Department	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	N
20858	Verizon Wireless (HWY 1 North Pacifica)	Pacifica	San Mateo	Intermediate	NA	NA	NA	NA	N
20859	Verizon Wireless (San Felipe Lake)	Gilroy	Santa Clara	Intermediate	NA	NA	NA	NA	N
20861	Judicial Council of California, JCC 43-N1	Morgan Hill	Santa Clara	Intermediate	NA	NA	NA	NA	Y
20872	City of Fairfield	Fairfield	Solano	Intermediate	NA	NA	NA	NA	N
20879	ABS-CBN International	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	N
20885	Casino M8trix	San Jose	Santa Clara	Intermediate	2011	9.9	NA	NA	N
20899	Napa County Airport	Napa	Napa	Intermediate	NA	NA	NA	NA	N
20920	Verizon Wireless (West Santa Rosa)	Santa Rosa	Sonoma	Intermediate	NA	NA	NA	NA	N
20924	Juniper Networks	Sunnyvale	Santa Clara	Intermediate	2002	9.2	NA	NA	N
20930	Contra Costa County	Richmond	Contra Costa	Intermediate	NA	NA	NA	NA	Y
20933	Biosearch Technologies, Inc	Novato	Marin	Intermediate	NA	NA	NA	NA	N

20937	Golden Living Center - Napa	Napa	Napa	Intermediate	NA	NA	NA	NA	N
20942	Exploratorium	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
20947	Post Montgomery Associates	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
20968	Guardant Health Inc.	Redwood City	San Mateo	Intermediate	2019	9.9	0.9	NA	N
20971	City of Berkeley Fire Station #5	Berkeley	Alameda	Intermediate	NA	NA	NA	NA	N
20980	Central Contra Costa Sanitary District	Orinda	Contra Costa	Intermediate	NA	NA	NA	NA	N
21003	GLL BIT Fremont Street Partners, L P	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21004	Level 3 Communications	Hayward	Alameda	Intermediate	NA	NA	NA	NA	Y
21016	Juniper Networks Inc	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
21024	EdgeConneX Silicon Valley Holdings, LLC	Santa Clara	Santa Clara	Intermediate	2017	6.7	0.01	NA	N
21029	Pacific Renaissance Plaza	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
21036	701 Gateway Center, LLC	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
21054	City of Berkeley Public Safety Building	Berkeley	Alameda	Intermediate	NA	NA	NA	NA	N
21077	SPF China Basin Holdings LLC	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N

21078	Stanford University Medical Center	Palo Alto	Santa Clara	Intermediate	NA	NA	NA	NA	N
21081	Crow Canyon Medical Center	Danville	Contra Costa	Intermediate	NA	NA	NA	NA	N
21104	Stanford University Data Center	Menlo Park	San Mateo	Intermediate	NA	NA	NA	NA	N
21109	City of Berkeley - Corporation Yard	Berkeley	Alameda	Intermediate	NA	NA	NA	NA	N
21121	Swords to Plowshares	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
21130	US Postal Service - Building Maintenance	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
21134	Speiker Keech Investments c/o Embarcadero Realty	Pleasanton	Alameda	Intermediate	NA	NA	NA	NA	N
21157	GC Net Lease San Carlos Investors, LLC c/o Transwestern	San Carlos	San Mateo	Intermediate	NA	NA	NA	NA	Y
21160	Caltrans-Caldecott Tunnel Orinda	Orinda	Contra Costa	Intermediate	NA	NA	NA	NA	N
21161	San Jose Water Company-Fleming Station	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
21167	San Jose Water Company-Columbine Station	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
21219	San Rafael Sanitation District	San Rafael	Marin	Intermediate	NA	NA	NA	NA	Y
21222	Kilroy Realty LP	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21225	Exabeam	Foster City	San Mateo	Intermediate	NA	NA	NA	NA	N

21231	IMCO Parking, LLC	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21247	San Rafael Sanitation District	San Rafael	Marin	Intermediate	NA	NA	NA	NA	N
21248	San Rafael Sanitation District	San Rafael	Marin	Intermediate	NA	NA	NA	NA	N
21251	1080 Sutter Owners Association c/o Action Property Mngmt	San Francisco	San Francisco	Intermediate	2012	8.8	0	NA	N
21267	Fremont Hospital	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
21270	Judicial Council of California, JCC 48-A3	Fairfield	Solano	Intermediate	NA	NA	NA	NA	Y
21287	Merck Sharp & Dohme Corp	Palo Alto	Santa Clara	Intermediate	NA	NA	NA	NA	N
21293	Pacific Gas and Electric Company	Livermore	Alameda	Intermediate	NA	NA	NA	NA	N
21295	California Hotel	Oakland	Alameda	Intermediate	2012	2.9	0	NA	Y
21309	West Bay Sanitary District	Menlo Park	San Mateo	Intermediate	NA	NA	NA	NA	N
21315	Opera Plaza	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21323	State Bar of California	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21348	Apple Inc	Sunnyvale	Santa Clara	Intermediate	2012	1.7	0	NA	N
21364	FHF I Montgomery, LLC	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N

21366	Pier 39	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21384	Stifel Nicolaus	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21385	One Embarcadero South Home Owners Assn	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21386	Santa Rosa Jr College Campus (SRJC)	Petaluma	Sonoma	Intermediate	2012	1.3	0	NA	N
21389	Fox Television Stations, Inc on behalf of KICU	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
21397	AT&T Park Willie Mays Plaza	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21403	750 Battery Street Corporation	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21405	Kilroy Realty Finance Partnership,L P	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21410	San Francisco Bar Pilots	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21411	Cushman & Wakefield at NortonLifeLock	Mountain View	Santa Clara	Intermediate	NA	NA	NA	NA	N
21418	City of Berkeley Civic Center	Berkeley	Alameda	Intermediate	NA	NA	NA	NA	N
21420	City of Berkeley Fire Station #6	Berkeley	Alameda	Intermediate	NA	NA	NA	NA	N
21422	City of Fremont Fire Station #9	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
21423	City of Fremont-Fire Station #10	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N

21424	City of Fremont-Fire Station #4	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
21426	Franciscan Vineyards Inc. dba Quarry Winery	Sonoma	Sonoma	Intermediate	NA	NA	NA	NA	N
21428	City of Fremont-Fire Station #5	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
21436	Ghirardelli Square	San Francisco	San Francisco	Intermediate	2023	9.9	0	NA	N
21443	Tower 737 Condominium Rentals	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
21477	90 New Montgomery Partners, LP	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21492	350-380 Ellis Street	Mountain View	Santa Clara	Intermediate	NA	NA	NA	NA	N
21498	East Bay Regional Communications System Authority	Moraga	Contra Costa	Intermediate	NA	NA	NA	NA	N
21500	Pacific Service Credit Union	Concord	Contra Costa	Intermediate	NA	NA	NA	NA	N
21506	TIAA c/o CAC Real Estate Management Co, Inc	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21519	Alameda County Water District	Fremont	Alameda	Intermediate	2012	9.9	NA	NA	N
21533	East Bay Regional Communications System Authority	Oakland	Alameda	Intermediate	NA	NA	NA	NA	N
21535	Gap, Inc	San Francisco	San Francisco	Intermediate	2015	1.7	0	NA	N
21537	Wells Fargo Bank c/o Jones Lang LaSalle	San Leandro	Alameda	Intermediate	NA	NA	NA	NA	Y

21540	100 Bush Corporation	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21591	Zabor Corporation	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
21596	CCSF - DEM	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21600	The Sobrato Organization, LLC	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21602	EB Regional Communications Sys Authority	Walnut Creek	Contra Costa	Intermediate	NA	NA	NA	NA	N
21606	Trinity Properties	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
21611	City & County of San Francisco Real Estate Divisio	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
21616	Market Delores LLC	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21648	100 Pine Owner LLC	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21658	Jones Lang LaSalle	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21660	Action Property Management	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21661	Academy of Art University	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21662	Nordstrom, Inc	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
21668	IDEC Corporation	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N

21677	City of Santa Clara	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
21686	Harrison Fremont LLC	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21705	Aurora Behavioral Healthcare-Santa Rosa LLC	Santa Rosa	Sonoma	Intermediate	NA	NA	NA	NA	N
21734	Eastern Park Apartments	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21738	Hearst Communications	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
21756	Cathedral Hill Plaza	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21784	Kilroy Reality, LP	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21806	Whole Foods Distribution Center	Richmond	Contra Costa	Intermediate	NA	NA	NA	NA	Y
21814	The Clorox Company	Pleasanton	Alameda	Intermediate	NA	NA	NA	NA	N
21826	Sutro BioPharma	San Carlos	San Mateo	Intermediate	NA	NA	NA	NA	N
21827	City College of San Francisco	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
21829	Vaxart, Inc.	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
21830	BCP-CG 650 Property LLC c/o Beacon Capital Partners, LLC	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21835	Menlo Park Fire	Menlo Park	San Mateo	Intermediate	NA	NA	NA	NA	N

21838	Allied Telesis	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
21843	CordeValle Resort	San Martin	Santa Clara	Intermediate	2013	8.7	0	NA	N
21845	Kilroy Realty Corporation	Mountain View	Santa Clara	Intermediate	NA	NA	NA	NA	N
21852	Exelixis, Inc	Alameda	Alameda	Intermediate	NA	NA	NA	NA	Y
21865	Clean Energy	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
21881	Perry-Arrillaga	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
21902	Palo Alto Medical Foundation - San Carlos Center	San Carlos	San Mateo	Intermediate	NA	NA	NA	NA	N
21911	885 Woodside Rd LLC	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	N
21925	City of Richmond Main Library	Richmond	Contra Costa	Intermediate	NA	NA	NA	NA	Y
21952	Canon USA, Inc	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
21989	Hudson 901 Market, LLC	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
22000	Forza Telecom-Ph8 Chestnut Head End	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
22001	FedEx Freight, Inc	Hayward	Alameda	Intermediate	2013	1.9	0	NA	N
22006	New Cingular Wireless PCS dba AT&T Mobility	Menlo Park	San Mateo	Intermediate	NA	NA	NA	NA	N

22008	Nordstrom	Palo Alto	Santa Clara	Intermediate	NA	NA	NA	NA	N
22021	Eurofins EAG Materials Science, LLC	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
22046	Forest Surgery Center	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
22052	Treat Towers Owner LLC	Walnut Creek	Contra Costa	Intermediate	NA	NA	NA	NA	N
22057	Burlingame Long Term Care Center	Burlingame	San Mateo	Intermediate	NA	NA	NA	NA	N
22061	Abbott Diagnostics	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
22069	Che Chen Liu & Shu Fen Liu Trust	Pinole	Contra Costa	Intermediate	NA	NA	NA	NA	N
22076	City of Fremont	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
22078	Samsung Semiconductor, Inc	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
22093	A&P Children Investments LLC	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
22094	American Tower LLC - 89375- Starr Canyon Site	Morgan Hill	Santa Clara	Intermediate	2013	1.6	0	NA	N
22095	American Tower LLC (41642-Golf Course CA)	Alameda	Alameda	Intermediate	NA	NA	NA	NA	N
22128	G&I IX Marina Village Research	Alameda	Alameda	Intermediate	NA	NA	NA	NA	N
22144	Irvine Company Office Properties	Santa Clara	Santa Clara	Intermediate	2013	0.2	0	NA	N

22146	San Leandro Hospital	San Leandro	Alameda	Intermediate	NA	NA	NA	NA	N
22154	Avalon Bay Communities	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
22160	Outdoor Supply Hardware	Moraga	Contra Costa	Intermediate	NA	NA	NA	NA	N
22175	M West Propco XVII, LLC	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
22195	Worldpac San Jose	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	Y
22201	BXP Mission 535 LLC c/o Boston Properties Limited	San Francisco	San Francisco	Intermediate	2014	5.6	0	NA	N
22203	Peninsula Land Capital	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
22218	BBT, LLC & Socks, LLC	Petaluma	Sonoma	Intermediate	NA	NA	NA	NA	N
22221	Westlake Hardware, Inc.	Mountain View	Santa Clara	Intermediate	NA	NA	NA	NA	N
22222	Westlake Hardware, Inc.	Livermore	Alameda	Intermediate	NA	NA	NA	NA	N
22243	Mardit Properties Limited Partnership	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
22248	City of San Mateo	San Mateo	San Mateo	Intermediate	NA	NA	NA	NA	Y
22265	Luminus, Inc	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
22273	Jefferson Union High School District (Terra Nova)	Pacifica	San Mateo	Intermediate	NA	NA	NA	NA	N

22274	Jefferson Union High School District (Bus Garage)	Daly City	San Mateo	Intermediate	NA	NA	NA	NA	N
22275	Jefferson Union High School District (Jefferson)	Daly City	San Mateo	Intermediate	NA	NA	NA	NA	N
22276	Jefferson Union High School District (Westmoor HS)	Daly City	San Mateo	Intermediate	NA	NA	NA	NA	N
22292	Jabil Silver Creek	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
22298	201 Spear Property, LLC c/o Cushman & Wakefield	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
22312	Friedman's Home Improvement	Petaluma	Sonoma	Intermediate	NA	NA	NA	NA	N
22337	Arcus Biosciences, Inc.	Hayward	Alameda	Intermediate	NA	NA	NA	NA	Y
22348	SoMa Square Apartments	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
22357	Santa Rosa Surgery Center	Santa Rosa	Sonoma	Intermediate	NA	NA	NA	NA	N
22365	Crossing 900	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	Y
22376	Hobby Lobby Stores	Dublin	Alameda	Intermediate	NA	NA	NA	NA	N
22379	Preferred Freezer Services	San Leandro	Alameda	Intermediate	2014	1.3	0	NA	Y
22380	City of Brentwood	Brentwood	Contra Costa	Intermediate	2014	2	0.01	NA	N
22394	Applied Materials Inc	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N

22398	225 West Santa Clara LLC c/o Harvest Properties	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
22407	Kistler Winery-Tasting Room	Forestville	Sonoma	Intermediate	2014	2.5	0	NA	N
22409	Somersville Town Center Equities LLC	Antioch	Contra Costa	Intermediate	NA	NA	NA	NA	Y
22415	Essex OSM Reit, LLC	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
22432	Fortinet Inc.	Union City	Alameda	Intermediate	NA	NA	NA	NA	N
22448	City of Pacifica Water Recycling/Wastewater Treat	Pacifica	San Mateo	Intermediate	NA	NA	NA	NA	N
22460	ARE- San Francisco No 46, LLC	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
22479	Walmart.com Headquarters #8771	San Bruno	San Mateo	Intermediate	NA	NA	NA	NA	N
22481	Eikon Therapeutics, Inc.	Hayward	Alameda	Intermediate	NA	NA	NA	NA	Y
22512	1200 Ashby, LLC	Berkeley	Alameda	Intermediate	NA	NA	NA	NA	Y
22518	SPG Center, LLC	Palo Alto	Santa Clara	Intermediate	NA	NA	NA	NA	N
22523	Canyon Ranch Wellness Retreat	Woodside	San Mateo	Intermediate	2009	8.93	0.01	NA	N
22524	Trinity Management	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
22570	First Community Housing Inc	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	Y

22572	Subacute Saratoga Children's Hospital	Saratoga	Santa Clara	Intermediate	NA	NA	NA	NA	N
22579	Atria Senior Living Facility	Walnut Creek	Contra Costa	Intermediate	NA	NA	NA	NA	N
22580	DJONT/CMB SSF LLC(dba Embassy Suites SF Airpt	South San Francisco	San Mateo	Intermediate	2022	9.9	0	NA	Y
22586	JJ&W - Walsh LLC	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
22587	ManorCare Health Services-Tice Valley	Walnut Creek	Contra Costa	Intermediate	NA	NA	NA	NA	N
22591	Informatica, LLC	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	N
22594	Sutter Bay Medical Foundation DBA Palo Alto M F	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
22595	Augustine Bowers LLC c/o The Irvine Company LLC	Santa Clara	Santa Clara	Intermediate	2016	3.6	0	NA	N
22596	American Ag Credit	Santa Rosa	Sonoma	Intermediate	NA	NA	NA	NA	N
22597	Crossings at 880 Industrial, LLC	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
22600	Peninsula Corridor Joint Powers Board	Menlo Park	San Mateo	Intermediate	NA	NA	NA	NA	N
22604	Golden State Heart & Vascular Associates	Burlingame	San Mateo	Intermediate	NA	NA	NA	NA	N
22615	Stanford Health Care	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
22617	Equity-Tasman Apartments, LLC	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N

22624	Golub Real Estate Corporation	San Francisco	San Francisco	Intermediate	2014	1.2	0	NA	N
22636	LBA RIV-Company XXV, LLC	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
22640	Rosewood Commons Property Owner, LLC	Pleasanton	Alameda	Intermediate	NA	NA	NA	NA	N
22656	Evocative, LLC	Emeryville	Alameda	Intermediate	NA	NA	NA	NA	N
22709	Vida Owners Association	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
22734	Tiburon Fire Protection District	Tiburon	Marin	Intermediate	NA	NA	NA	NA	N
22738	Sunrise Senior Living	Burlingame	San Mateo	Intermediate	NA	NA	NA	NA	N
22739	Las Gallinas Valley Sanitary District	San Rafael	Marin	Intermediate	NA	NA	NA	NA	N
22746	Fox Television Stations, Inc , on behalf of KTVU	Oakland	Alameda	Intermediate	2012	5.3	NA	NA	Y
22769	New Cingular Wireless dba AT&T Mobility	Clayton	Contra Costa	Intermediate	NA	NA	NA	NA	N
22781	Oakland Marriott City Center	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
22782	Kunde Family Winery	Kenwood	Sonoma	Intermediate	NA	NA	NA	NA	N
22787	Atria -Daly City	Daly City	San Mateo	Intermediate	NA	NA	NA	NA	N
22793	RAPT Therapeutics Inc	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y

22810	William Chuang	Tiburon	Marin	Intermediate	NA	NA	NA	NA	N
22852	San Mateo County Event Center	San Mateo	San Mateo	Intermediate	NA	NA	NA	NA	N
22860	Google Inc	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	N
22876	California Water Service Company	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	N
22882	Sutter Bay Medical Foundation DBA Palo Alto M F	Los Altos	Santa Clara	Intermediate	NA	NA	NA	NA	N
22899	City of Santa Clara - Water & Sewer Utilities	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
22911	Dominican Sisters of Mission San Jose	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
22930	Simplex Grinnell	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	Y
22955	Natera, Inc	San Carlos	San Mateo	Intermediate	NA	NA	NA	NA	N
22965	The Irvine Company Monticello Village	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
22969	399 Fremont, LLC	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
22981	Buzz Oates Construction, Inc	Fairfield	Solano	Intermediate	NA	NA	NA	NA	Y
22990	Davis Estates Winery	Calistoga	Napa	Intermediate	2015	9.6	0	NA	N
23005	Olive Tree Manor LLC	Napa	Napa	Intermediate	2015	9.9	0.9	NA	N

23011	Janssen Research & Development LLC	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
23017	Sequoia Union High School District	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	Y
23020	Stella Capital c/o Kodama Diseno Associates	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
23033	New Cingular Wireless PCS, LLC dba AT&T Mobility	Half Moon Bay	San Mateo	Intermediate	NA	NA	NA	NA	N
23059	Level 3 Communications LLC	Walnut Creek	Contra Costa	Intermediate	NA	NA	NA	NA	N
23079	Oakland Logistics Center LLC c/o JLL	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
23091	Apple Inc. (Orchard Parkway 2)	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
23147	Hudson Pacific Properties	San Carlos	San Mateo	Intermediate	NA	NA	NA	NA	N
23148	Hudson Pacific Properties	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	N
23153	Leland Stanford Junior University	Palo Alto	Santa Clara	Intermediate	NA	NA	NA	NA	N
23159	360 Mountain Home Rd Residence	Woodside	San Mateo	Intermediate	NA	NA	NA	NA	N
23161	Alameda County GSA	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
23188	Level 3 Communications, LLC	Pleasanton	Alameda	Intermediate	NA	NA	NA	NA	N
23189	Specialized Bicycle	Morgan Hill	Santa Clara	Intermediate	NA	NA	NA	NA	Y

23190	Healthpeak Properties, Inc. c/o CBRE	South San Francisco	San Mateo	Intermediate	2015	9.9	0	NA	Y
23192	Meta Platforms Inc - MPK29	Menlo Park	San Mateo	Intermediate	NA	NA	NA	NA	N
23204	United Natural Foods Inc (UNFI)	Gilroy	Santa Clara	Intermediate	2016	9.99	1	NA	Y
23216	Hudson Skyport Plaza, LLC	San Jose	Santa Clara	Intermediate	2003	9.7	0	NA	N
23231	Level 3 Communications LLC	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
23234	City of San Bruno	San Bruno	San Mateo	Intermediate	NA	NA	NA	NA	N
23236	SI 37, LLC; c/o The Sobrato Organization	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
23240	Hudson Pacific Properties, Techmart	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
23243	Fedex-South San Francisco	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
23252	Google LLC	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
23267	HCP, Inc. c/o CBRE Inc	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
23291	KBS 111 Ten Almaden LLC	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
23302	Arcus Biosciences	Hayward	Alameda	Intermediate	NA	NA	NA	NA	Y
23305	Cupertino Electric, Inc	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	Y

23341	Westcore Bravo Livermore, LLC	Livermore	Alameda	Intermediate	NA	NA	NA	NA	N
23351	New Cingular Wireless LLC dba AT&T Mobility	Mountain View	Santa Clara	Intermediate	NA	NA	NA	NA	N
23371	Alexandria Real Estate Equities, Inc	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
23403	Apple, Inc	Cupertino	Santa Clara	Intermediate	NA	NA	NA	NA	N
23413	Post Montgomery and Associates	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
23418	MidPen Housing Corporation	Foster City	San Mateo	Intermediate	NA	NA	NA	NA	N
23427	FN Cellars, Inc.	Saint Helena	Napa	Intermediate	2023	9.9	0	NA	N
23430	Kaiser Permanente	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
23432	Kaiser Permanente	Livermore	Alameda	Intermediate	NA	NA	NA	NA	N
23436	Pacific Cruise Ship Terminals	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
23439	Napa County	Napa	Napa	Intermediate	NA	NA	NA	NA	N
23444	Silver Springs Networks, Inc	San Jose	Santa Clara	Intermediate	2016	9.9	0.9	NA	N
23445	California Water Service Company	Portola Valley	San Mateo	Intermediate	NA	NA	NA	NA	N
23451	Uber Technologies	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N

23457	Chevron	Dublin	Alameda	Intermediate	NA	NA	NA	NA	N
23466	Prologis	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
23470	Walker Cellular	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
23471	Orion V SAC Village Office Property LLC c/o Brookfield	Mountain View	Santa Clara	Intermediate	NA	NA	NA	NA	N
23473	Apple Inc	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
23489	Winslow Street Development	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	Y
23499	Altera	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
23510	Deacon Corporation	Mountain View	Santa Clara	Intermediate	NA	NA	NA	NA	N
23523	TE Connectivity	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
23532	Shorenstein Realty Services	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
23548	140 New Montgomery LLC	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
23553	Santa Clara Valley Transportation Authority	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	Y
23555	Oxford Group	Rohnert Park	Sonoma	Intermediate	NA	NA	NA	NA	Y
23557	New Cingular Wireless PCS dba AT&T Mobility	Pacifica	San Mateo	Intermediate	2016	0.5	NA	NA	N

23565	Lucile Packard Children's Hospital Stanford	Sunnyvale	Santa Clara	Intermediate	2007	8.8	0	NA	N
23579	220 Humboldt Ct.	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
23587	ICBP IV Holdings 37, LLC.	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
23597	Community Housing Partnership	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
23604	Equity Residential - Archstone Concourse LLCI	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
23612	City Hall - City of San Ramon	San Ramon	Contra Costa	Intermediate	2016	9.99	0.99	NA	N
23620	Creekside at 17	Campbell	Santa Clara	Intermediate	NA	NA	NA	NA	N
23625	Resident	Deer Park	Napa	Intermediate	NA	NA	NA	NA	N
23628	Areof Vl Pilgrim-Triton LLC c/o Ares Management	Foster City	San Mateo	Intermediate	NA	NA	NA	NA	N
23629	Belmont Village Albany	Albany	Alameda	Intermediate	NA	NA	NA	NA	N
23651	North First SJ, LP c/o Colliers Int, LLC	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
23655	City of Pleasanton	Pleasanton	Alameda	Intermediate	NA	NA	NA	NA	N
23663	Living Spaces	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
23666	Arden Owners Association	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N

23671	City of Hayward-21st Century Library	Hayward	Alameda	Intermediate	NA	NA	NA	NA	N
23675	Mt Diablo Unified School District	Concord	Contra Costa	Intermediate	NA	NA	NA	NA	Y
23694	ASB 799 Market, LLC	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
23727	2700 Middlefield Road, LLC c/o Embarcadero Advs	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	Y
23742	Amazon com Services Inc - OAK5	Newark	Alameda	Intermediate	2017	5.7	0	NA	N
23762	America Center Maintenance Association	Alviso	Santa Clara	Intermediate	NA	NA	NA	NA	N
23765	Gap Inc	Pleasanton	Alameda	Intermediate	NA	NA	NA	NA	N
23768	Columbia REIT- 650 California Street, LLC	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
23799	Peju Calmere Estate	Napa	Napa	Intermediate	NA	NA	NA	NA	N
23805	349 OPT	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
23806	MediaTek USA Inc	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
23813	Sidra Montgomery, LLC	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
23814	PayPal Inc	San Jose	Santa Clara	Intermediate	2019	9.9	0.9	NA	N
23827	Shorenstein Realty Services	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N

23843	Mercy Terrace Housing	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
23889	WaveDivision Holdings LLC	San Francisco	San Francisco	Intermediate	2012	4.9	0	NA	Y
23900	Google LLC	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
23910	Robert Bosch LLC	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
23915	Principal Real Estate Holding Company, LLC / Sycamore Plaza I-A	Pleasanton	Alameda	Intermediate	NA	NA	NA	NA	N
23916	Airbnb, Inc	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
23917	Maxlinear, Inc	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	Y
23928	HCP c/o Britannia Gateway	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
23946	Hudson Concourse, LLC	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
23961	Kaiser Foundation Hospital	Daly City	San Mateo	Intermediate	NA	NA	NA	NA	N
23970	Google Inc	San Bruno	San Mateo	Intermediate	NA	NA	NA	NA	Y
23971	7th Street Properties	Berkeley	Alameda	Intermediate	NA	NA	NA	NA	N
24005	Stonebridge Companies	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
24006	Frontier California Inc	Novato	Marin	Intermediate	NA	NA	NA	NA	N

24040	Google LLC, c/o CBRE Inc	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
24041	Copper Cane	Rutherford	Napa	Intermediate	NA	NA	NA	NA	N
24049	GC 555 Montgomery LLC	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
24054	Sutter West Santa Clara Campus 2821	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
24061	Ellis 350 Associates, L P	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
24068	Pacific Oak SOR II Oakland City Center LLC	Oakland	Alameda	Intermediate	2023	0.18	0	NA	Y
24077	Dollinger Olcott Associates	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
24097	706 Mission Center Association	San Francisco	San Francisco	Intermediate	2018	4.6	0	NA	Y
24105	Applied Materials	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
24127	Riverpark Towers	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
24131	303 Almaden Blvd	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
24141	Timber Soma MC LP	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
24150	SonicWall Inc	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
24154	Lowenberg Corporation	Fairfield	Solano	Intermediate	NA	NA	NA	NA	Y

24163	JFK Tower L P	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
24188	Lyten	San Jose	Santa Clara	Intermediate	2020	1.6	0.03	0.97	N
24192	Irvine Company LLC	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
24225	US ER America Center 4, LLC	Alviso	Santa Clara	Intermediate	NA	NA	NA	NA	N
24237	California Water Service	Portola Valley	San Mateo	Intermediate	NA	NA	NA	NA	N
24241	Palo Alto Networks	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
24260	Micron Technology, Inc	San Jose	Santa Clara	Intermediate	2009	7.9	0	NA	N
24310	Google LLC	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	N
24311	Meta Platforms Inc-FRE 118	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
24312	LeanTeq LLC	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
24317	Planetary Ventures	Mountain View	Santa Clara	Intermediate	2019	0.85	0	NA	N
24352	Seer, Inc.	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	N
24356	Pacific Oak SOR II Oakland City enter LLC	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
24373	ColFin 2019-2D Industrial Owner LLC	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N

24374	China Mobile International Infrastructural (US1)	San Jose	Santa Clara	Intermediate	2021	7.37	0.01	NA	N
24376	555 Golden Gate LLC	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
24384	K&K Outdoor Advertising LLC	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
24417	One Mission Bay - HOA	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
24428	Kashiwa Fudosan America, Inc	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
24487	Sunnyvale Owner, LLC	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
24522	Courtyards at 65th	Emeryville	Alameda	Intermediate	NA	NA	NA	NA	N
24552	Stanford Imaging Clinic in Emeryville	Emeryville	Alameda	Intermediate	NA	NA	NA	NA	Y
24578	1760 Bush	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
24607	Stanford University School of Medicine	Palo Alto	Santa Clara	Intermediate	NA	NA	NA	NA	N
24611	BCal 655 Montgomery Property LLC	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
24622	San Francisco Bay Area Rapid Transit District	Oakland	Alameda	Intermediate	2018	9.9	0.9	NA	Y
24644	Union Square Garage (LAZ Parking	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
24652	Zoetis, Inc	Union City	Alameda	Intermediate	2024	4.2	0	0	N

24653	BART	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
24664	101 Mission Street	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
24668	Outdoor Supply Hardware	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	Y
24673	600 California Owner LLC	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
24687	Aralon Properties	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
24689	Apple Valley Post Acute Rehab	Sebastopol	Sonoma	Intermediate	NA	NA	NA	NA	N
24699	830 Eddy Street LLC	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
24720	2016 Telegraph Owner LLC	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
24721	Amazon USF3	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
24735	CLPF 215 Fremont Owner, LP	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
24749	Corsair	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
24769	Ross Stores	Dublin	Alameda	Intermediate	2003	2.6	0	NA	N
24787	T-C 55 Second Street LLC	San Francisco	San Francisco	Intermediate	2002	9.9	0	NA	N
24809	400 California, LLC	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N

24815	Zynga, Inc	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
24827	C & J Office Buildings, LLC	Palo Alto	Santa Clara	Intermediate	NA	NA	NA	NA	N
24828	Zayo Group, LLC	Santa Clara	Santa Clara	Intermediate	2023	5.9	0.46	NA	N
24925	BioSquare Silicon Valley	San Jose	Santa Clara	Intermediate	2021	0.3	0	NA	N
24966	Vitalant	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
24973	Genomic Health, Inc	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	N
24974	Genomic Health, Inc	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	N
24979	Coloma Sanitary Sewer Pump Station #2	Sausalito	Marin	Intermediate	NA	NA	NA	NA	N
24992	BGO Ardenwood Owner, LLC	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
24994	BCSP Holis Property, LLC	Emeryville	Alameda	Intermediate	NA	NA	NA	NA	N
25013	Ingka Centres San Francisco LLC	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
25026	Google, LLC	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
25032	Rosemark Commercial Facilities Mgmt Services	Bolinas	Marin	Intermediate	NA	NA	NA	NA	N
25037	QuantumScape	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N

25038	NASH Holland 24th and Waverly Investors LLC	Oakland	Alameda	Intermediate	2022	4.2	0	NA	N
25053	Standford Health Care	Castro Valley	Alameda	Intermediate	2020	1.4	0	NA	N
25054	America Center I & II Owner LLC	Alviso	Santa Clara	Intermediate	NA	NA	NA	NA	N
25088	Badass Labs	Alameda	Alameda	Intermediate	NA	NA	NA	NA	N
25098	Sunset Development Company BR15	San Ramon	Contra Costa	Intermediate	NA	NA	NA	NA	N
25099	Analog Devices, Inc	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
25111	Sutro BioPharma	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
25137	921 Howard	San Francisco	San Francisco	Intermediate	2022	0.47	0	NA	Y
25193	ARE - San Francisco No 63, LLC	San Carlos	San Mateo	Intermediate	NA	NA	NA	NA	N
25195	Walmart Crossman Campus	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
25217	Goodwill of Silicon Valley	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
25324	QuantumScape SJ3	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
25334	EVODC Raymond LLC	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
100030	Xtra Oil Company	Alameda	Alameda	Intermediate	NA	NA	NA	NA	N

100088	Costco Wholesale #146	Livermore	Alameda	Intermediate	NA	NA	NA	NA	N
100092	Chevron #207718	Menlo Park	San Mateo	Intermediate	NA	NA	NA	NA	N
100108	Costco Fuel Facility (Loc. 148)	San Jose	Santa Clara	Intermediate	2017	2.6	0	NA	N
100146	Costco Gasoline #482	Richmond	Contra Costa	Intermediate	1999	5.7	NA	NA	N
100156	Costco Gasoline #475	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	N
100325	Xtra Oil Company	Castro Valley	Alameda	Intermediate	NA	NA	NA	NA	N
100340	Costco Wholesale #132	Vallejo	Solano	Intermediate	2019	9.99	0.11	NA	N
100563	Costco Gasoline #663	Concord	Contra Costa	Intermediate	2019	9.6	0.07	NA	N
100576	Costco Wholesale #118	San Leandro	Alameda	Intermediate	NA	NA	NA	NA	Y
100619	Quik Stop Market #157	Livermore	Alameda	Intermediate	NA	NA	NA	NA	N
100630	Gas & Shop	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	Y
100649	Costco Gasoline #1002	Antioch	Contra Costa	Intermediate	NA	NA	NA	NA	Y
100768	Silver Oak Cellars	Oakville	Napa	Intermediate	2018	0.1	NA	NA	N
100771	ARCO Facility #03001	Hayward	Alameda	Intermediate	NA	NA	NA	NA	N

100814	Safeway Store #1883	American Canyon	Napa	Intermediate	NA	NA	NA	NA	N
100909	Safeway Store #0968	Vallejo	Solano	Intermediate	NA	NA	NA	NA	Y
100927	Safeway Fuel Center #1953	Dublin	Alameda	Intermediate	NA	NA	NA	NA	N
101061	Chevron Station #91166	Union City	Alameda	Intermediate	NA	NA	NA	NA	N
101716	Xtra Oil Company	Walnut Creek	Contra Costa	Intermediate	NA	NA	NA	NA	N
101752	Chevron Station #99206	Walnut Creek	Contra Costa	Intermediate	NA	NA	NA	NA	N
101763	Chevron Station #94737	Corte Madera	Marin	Intermediate	NA	NA	NA	NA	N
101781	Chevron Station #98933	Greenbrae	Marin	Intermediate	NA	NA	NA	NA	N
101909	Chevron Station #93553	San Rafael	Marin	Intermediate	NA	NA	NA	NA	N
102195	Simas	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
102901	Chevron Station #97927	Half Moon Bay	San Mateo	Intermediate	NA	NA	NA	NA	N
103137	Econo Gasoline	San Bruno	San Mateo	Intermediate	NA	NA	NA	NA	N
103305	Xtra Oil Company	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	N
104102	ARCO Facility #07037	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N

104822	Jacksons Food Stores, Inc. DBA Extra Mile #297	Cotati	Sonoma	Intermediate	NA	NA	NA	NA	N
104887	H&S Energy Products, LLC #2046 - Chevron	Petaluma	Sonoma	Intermediate	NA	NA	NA	NA	N
105493	BX Service Station (BLDG 171, Travis AFB)	Fairfield	Solano	Intermediate	NA	NA	NA	NA	Y
105566	Chevron SS #9-0103	Richmond	Contra Costa	Intermediate	NA	NA	NA	NA	Y
105954	Arco Car Wash	Concord	Contra Costa	Intermediate	NA	NA	NA	NA	N
106617	San Francisco Fire Department	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
106753	ARCO Facility #07081	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
107920	James Ranch-Juvenile Detention Facility	Morgan Hill	Santa Clara	Intermediate	NA	NA	NA	NA	N
108069	Fuel 24:7 @ Woodlands	Kentfield	Marin	Intermediate	NA	NA	NA	NA	N
108261	Palo Alto Arco	Palo Alto	Santa Clara	Intermediate	NA	NA	NA	NA	N
108549	Chevron Inc #9-4820	Napa	Napa	Intermediate	NA	NA	NA	NA	N
108613	ARCO Facility #04495	San Mateo	San Mateo	Intermediate	NA	NA	NA	NA	N
108634	Westlake Chevron	Daly City	San Mateo	Intermediate	NA	NA	NA	NA	N
108707	Rotten Robbie #33	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N

109057	ARCO Facility #06059	Pleasant Hill	Contra Costa	Intermediate	NA	NA	NA	NA	N
109383	Redwood Rd Chevron	Napa	Napa	Intermediate	NA	NA	NA	NA	N
109419	A & A Gas & Mart	Burlingame	San Mateo	Intermediate	NA	NA	NA	NA	N
109480	Gas & Shop	Morgan Hill	Santa Clara	Intermediate	NA	NA	NA	NA	Y
109515	Chevron Station #90787	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
109588	Rocket #5418	Benicia	Solano	Intermediate	NA	NA	NA	NA	N
109614	Costco Wholesale #129	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
109714	Fairfield Chevron	Fairfield	Solano	Intermediate	NA	NA	NA	NA	Y
109717	Byron Airport-CCC Public Works Dept	Byron	Contra Costa	Intermediate	NA	NA	NA	NA	N
109748	Costco Wholesale #41	Santa Rosa	Sonoma	Intermediate	NA	NA	NA	NA	Y
109899	Costco Wholesale #423	Sunnyvale	Santa Clara	Intermediate	2019	2.8	0	NA	N
109990	Chevron Station #20-7010	Richmond	Contra Costa	Intermediate	NA	NA	NA	NA	N
110033	CHEVRON SS #9-1081	East Palo Alto	San Mateo	Intermediate	NA	NA	NA	NA	Y
110354	7- Eleven Inc. #37948	Richmond	Contra Costa	Intermediate	NA	NA	NA	NA	N

110386	7- Eleven Inc. #37994	Pinole	Contra Costa	Intermediate	NA	NA	NA	NA	N
110458	Auto Pride Car Wash	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
110513	Fuel 24:7 @ Westborough	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	N
110597	Safeway Fuel Center #1257	Livermore	Alameda	Intermediate	NA	NA	NA	NA	N
110598	Safeway Store # 1917 Fuel Center	Byron	Contra Costa	Intermediate	NA	NA	NA	NA	N
110611	Ishaq Trading Corp	Napa	Napa	Intermediate	NA	NA	NA	NA	N
110662	ARCO Facility #00524	Mill Valley	Marin	Intermediate	NA	NA	NA	NA	N
110664	ARCO Facility #00566	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
110669	ARCO Facility #02074	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
110677	ARCO Facility #02152	Castro Valley	Alameda	Intermediate	NA	NA	NA	NA	N
110698	Costco Fuel Facility (Loc. 659)	Rohnert Park	Sonoma	Intermediate	NA	NA	NA	NA	N
110709	Costco Wholesale #453	Fairfield	Solano	Intermediate	NA	NA	NA	NA	N
110732	Costco Wholesale #422	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
110758	Costco Gasoline #760	Gilroy	Santa Clara	Intermediate	NA	NA	NA	NA	Y

110848	Safeway Fuel Center #1891	Morgan Hill	Santa Clara	Intermediate	NA	NA	NA	NA	Y
110970	RAT OIL INC. DBA GAS STOP	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	Y
111101	ARCO Facility #00428	Richmond	Contra Costa	Intermediate	NA	NA	NA	NA	Y
111185	Costco Gasoline #778	Fremont	Alameda	Intermediate	2024	1.2	0.04	0.1	N
111256	ARCO AMPM of Gilroy	Gilroy	Santa Clara	Intermediate	NA	NA	NA	NA	Y
111347	GO! Gas & Food	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
111349	Moe's Stop	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
111411	Chevron	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	N
111432	Safeway Fuel Center #1576	Santa Rosa	Sonoma	Intermediate	NA	NA	NA	NA	N
111574	Clayton Valley Shell	Concord	Contra Costa	Intermediate	NA	NA	NA	NA	N
111606	Milpitas Union 76	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
111609	GO! Gas & Food #2	Oakland	Alameda	Intermediate	NA	NA	NA	NA	N
111624	ARCO Facility #00608	San Lorenzo	Alameda	Intermediate	NA	NA	NA	NA	N
111677	Chevron Station #305013	Santa Rosa	Sonoma	Intermediate	NA	NA	NA	NA	Y

111713	Costco Gasoline #1004	San Jose	Santa Clara	Intermediate	2006	2.7	0.01	NA	N
111751	ARCO	Santa Rosa	Sonoma	Intermediate	NA	NA	NA	NA	N
111771	A & A Gas Inc., dba A & A Gas and Food Mart	Fairfield	Solano	Intermediate	NA	NA	NA	NA	Y
111809	Black Diamond Vista	Concord	Contra Costa	Intermediate	NA	NA	NA	NA	Y
111814	Jacksons Food Stores #204	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
111815	Shell SS#68149	Livermore	Alameda	Intermediate	NA	NA	NA	NA	N
111880	Safeway Fuel Center #2828	Novato	Marin	Intermediate	NA	NA	NA	NA	N
111894	Chevron Products	Pittsburg	Contra Costa	Intermediate	NA	NA	NA	NA	Y
111903	Safeway Fuel Center #2708	Alameda	Alameda	Intermediate	NA	NA	NA	NA	N
111933	Costco Gasoline #1042	Redwood City	San Mateo	Intermediate	2008	3.9	0	NA	Y
111939	ARCO Facility #07026	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
111945	Strawberry Food Mart	Mill Valley	Marin	Intermediate	NA	NA	NA	NA	N
111956	Poppy Old SF Road	Sunnyvale	Santa Clara	Intermediate	2023	1.7	0.01	0.39	N
111968	ARCO Facility #07119	Millbrae	San Mateo	Intermediate	NA	NA	NA	NA	N

112024	Sunol Super Stop	Sunol	Alameda	Intermediate	NA	NA	NA	NA	N
112047	Strauch & Compnay	Brentwood	Contra Costa	Intermediate	NA	NA	NA	NA	N
112056	Diamond Petroleum Inc	Concord	Contra Costa	Intermediate	NA	NA	NA	NA	Y
112081	Travis Blvd	Fairfield	Solano	Intermediate	NA	NA	NA	NA	Y
112082	Shell at Hacienda Crossings #165112	Dublin	Alameda	Intermediate	NA	NA	NA	NA	N
112124	Costco Wholesale # 1061	Hayward	Alameda	Intermediate	2009	8	0.02	NA	Y
112143	Diamond Petroleum Inc dba Marina Arco	Suisun City	Solano	Intermediate	NA	NA	NA	NA	N
112145	ARCO Facility #07126	Oakley	Contra Costa	Intermediate	NA	NA	NA	NA	Y
112165	ARCO Facility #00230	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
112167	ARCO Facility #07133	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
112225	Safeway Fuel Center #2941	Pleasant Hill	Contra Costa	Intermediate	NA	NA	NA	NA	Y
112236	A & A Gas and Food Mart	San Leandro	Alameda	Intermediate	NA	NA	NA	NA	N
112243	Capital Shell	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
112273	Potrero Shell	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N

112299	Marine World Shell	Vallejo	Solano	Intermediate	NA	NA	NA	NA	Y
112300	Admiral Shell	Vallejo	Solano	Intermediate	NA	NA	NA	NA	N
112310	El Portal Shell	San Pablo	Contra Costa	Intermediate	NA	NA	NA	NA	Y
112325	Shell	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	Y
112330	Safeway Fuel Center #3241	Campbell	Santa Clara	Intermediate	NA	NA	NA	NA	N
112368	Arco AMPM #83817	Fairfield	Solano	Intermediate	NA	NA	NA	NA	N
112388	AM/PM Mini Mart - Manohar Vasudeva	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
112389	ARCO Facility #07097	Morgan Hill	Santa Clara	Intermediate	NA	NA	NA	NA	N
112396	De Anza Car Wash & Gas	Cupertino	Santa Clara	Intermediate	NA	NA	NA	NA	N
112436	Heather Farm Shell	Walnut Creek	Contra Costa	Intermediate	NA	NA	NA	NA	N
112443	ARCO Facility #02184	Fairfield	Solano	Intermediate	NA	NA	NA	NA	N
112497	Mash Gas & Food Orinda	Orinda	Contra Costa	Intermediate	2021	3.84	0.03	NA	N
112502	Marin Gas & Auto Services	Larkspur	Marin	Intermediate	NA	NA	NA	NA	N
112558	Hegenberger Fuel and Food	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y

112565	APRO, LLC dba United Pacific #5671	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
112612	Cal Petroleum Inc	Fairfield	Solano	Intermediate	NA	NA	NA	NA	Y
200004	Safeway Fuel Center #2856	Pleasanton	Alameda	Intermediate	NA	NA	NA	NA	N
200018	ARCO Facility #07090	Vallejo	Solano	Intermediate	NA	NA	NA	NA	Y
200037	Safeway Fuel Center #2900	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
200043	CJC Fallon Gateway, LLC	Dublin	Alameda	Intermediate	NA	NA	NA	NA	N
200045	Walters Road Arco	Fairfield	Solano	Intermediate	NA	NA	NA	NA	N
200048	Safeway Fuel Center #3281	Alameda	Alameda	Intermediate	NA	NA	NA	NA	Y
200070	ARCO Facility #07144	Pittsburg	Contra Costa	Intermediate	NA	NA	NA	NA	Y
200240	Costco Gasoline #1267	San Jose	Santa Clara	Intermediate	2014	9.9	0.9	NA	N
200347	1500 N California Blvd LLC	Walnut Creek	Contra Costa	Intermediate	2016	0.4	0	NA	N
200357	Silver Creek Valley Shell	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
200359	O'Farrell Senior Housing Inc	San Francisco	San Francisco	Intermediate	2016	9.9	0	NA	Y
200369	Sand Hill Construction Management	Cupertino	Santa Clara	Intermediate	NA	NA	NA	NA	N

200373	Calico Laboratories	South San Francisco	San Mateo	Intermediate	2016	0.66	0	NA	Y
200383	39888 Eureka, LLC	Newark	Alameda	Intermediate	NA	NA	NA	NA	N
200384	CMK, LLC	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
200388	Sunrise of Pleasanton	Pleasanton	Alameda	Intermediate	NA	NA	NA	NA	N
200389	Gateway 80 Owner LP	Fairfield	Solano	Intermediate	2016	9.9	0	NA	N
200394	1450 Franklin Street Owners Association	San Francisco	San Francisco	Intermediate	2016	9.9	0	NA	N
200403	San Jose Water Company	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
200404	Rolling Frito-Lay Sales, LP	Fairfield	Solano	Intermediate	NA	NA	NA	NA	N
200438	162 Jefferson	Menlo Park	San Mateo	Intermediate	NA	NA	NA	NA	N
200441	KQED, Inc.	Brisbane	San Mateo	Intermediate	NA	NA	NA	NA	N
200446	Zayo Group, LLC	Martinez	Contra Costa	Intermediate	NA	NA	NA	NA	N
200462	Prologis	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
200466	Google LLC	Mountain View	Santa Clara	Intermediate	NA	NA	NA	NA	N
200477	T8 Urban Housing Associates, LLC, c/o Related Companies	San Francisco	San Francisco	Intermediate	2017	8.8	0	NA	N

200481	Moraga-Orinda Fire District	Orinda	Contra Costa	Intermediate	NA	NA	NA	NA	N
200483	Frito-Lay, Inc.	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
200492	Workday	Pleasanton	Alameda	Intermediate	NA	NA	NA	NA	N
200493	CCSF - OCME	San Francisco	San Francisco	Intermediate	2017	3.8	0	NA	Y
200500	Alta Waverly	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
200501	Manganese Development LLC	Walnut Creek	Contra Costa	Intermediate	NA	NA	NA	NA	N
200512	City Of Oakland Public Works	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
200515	Apple, Inc.	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
200527	Mumm Napa	Napa	Napa	Intermediate	2024	9.9	0.1	NA	N
200549	Alameda County Fire Department #23	Hayward	Alameda	Intermediate	NA	NA	NA	NA	N
200581	Kenwood Vineyards Winery	Kenwood	Sonoma	Intermediate	NA	NA	NA	NA	N
200601	GI ETS Shoreline LLC - 7000 Shoreline Ct	South San Francisco	San Mateo	Intermediate	2017	1.35	0	NA	Y
200608	City of Menlo Park	Menlo Park	San Mateo	Intermediate	NA	NA	NA	NA	N
200623	Stonefire Apartments	Berkeley	Alameda	Intermediate	2017	2.1	0	NA	N

200627	First Community Housing	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
200646	EGP 5855 San Jose LLC	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
200662	Shafer Vineyards	Napa	Napa	Intermediate	2020	9.9	0	NA	N
200664	MTII LLC	Sunnyvale	Santa Clara	Intermediate	2018	4.2	0	NA	N
200679	Stanford Redwood City Operations	Redwood City	San Mateo	Intermediate	2018	7.8	0	NA	Y
200688	Raymond Vineyards & Cellars	Saint Helena	Napa	Intermediate	NA	NA	NA	NA	N
200693	Amtrak	Oakland	Alameda	Intermediate	2023	0.54	0	NA	Y
200719	Federal Express - ZHAY	Hayward	Alameda	Intermediate	NA	NA	NA	NA	Y
200730	Penske Logistics LLC- Union City	Union City	Alameda	Intermediate	NA	NA	NA	NA	N
200736	Galleron Residences, LLC	Saint Helena	Napa	Intermediate	NA	NA	NA	NA	N
200737	JC Paper Co.	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
200741	425 Eccles	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
200746	Aubert Wines	Calistoga	Napa	Intermediate	NA	NA	NA	NA	N
200747	100 Independence	Menlo Park	San Mateo	Intermediate	NA	NA	NA	NA	N

200758	Federal Realty Investment Trust	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
200760	Golden Cajun, LLC	Santa Clara	Santa Clara	Intermediate	2018	9.4	0.01	NA	N
200761	Contra Costa County Fire Station #6	Concord	Contra Costa	Intermediate	NA	NA	NA	NA	N
200764	Bancross Development, LLC	Tiburon	Marin	Intermediate	NA	NA	NA	NA	N
200776	Kodiak Sciences, Inc.	Palo Alto	Santa Clara	Intermediate	2017	6.8	0	NA	N
200777	Cupertino Sanitary District	Saratoga	Santa Clara	Intermediate	NA	NA	NA	NA	N
200783	Prime Now LLC-USF4	Brisbane	San Mateo	Intermediate	2017	4.6	0	NA	N
200784	FN Cellars, Inc.	Oakville	Napa	Intermediate	2019	9.9	0.9	NA	N
200785	FN Cellars, LLC dba Far Niente Winery	Oakville	Napa	Intermediate	NA	NA	NA	NA	N
200786	Bit MacArthur Commons Investors, LLC	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
200795	San Rafael Fire Department - Station 52	San Rafael	Marin	Intermediate	NA	NA	NA	NA	Y
200803	Dalla Valle Vineyards	Napa	Napa	Intermediate	NA	NA	NA	NA	N
200806	ACC OP (Bancroft Way) LP	Berkeley	Alameda	Intermediate	NA	NA	NA	NA	N
200812	ARINC Livermore	Livermore	Alameda	Intermediate	NA	NA	NA	NA	N

200818	McCarthy Blvd Chevron	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
200819	Google LLC	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
200822	Tech Corners Campus LLC	Sunnyvale	Santa Clara	Intermediate	2018	1.2	0	NA	N
200825	Alere Home Monitoring, Inc.	Livermore	Alameda	Intermediate	NA	NA	NA	NA	N
200828	Peninsula Health Care District	Burlingame	San Mateo	Intermediate	NA	NA	NA	NA	N
200829	City Center Plaza Apartments	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
200845	IKEA	American Canyon	Napa	Intermediate	2018	0.7	0	NA	N
200847	City of Sunnyvale	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
200865	Lake Merritt Apartments dba Lake Merritt II Prsrvtn Ltd P'ship	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
200871	Town of Discovery Bay	Discovery Bay	Contra Costa	Intermediate	NA	NA	NA	NA	N
200886	Britannia Pointe Grand, LP	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
200889	The Ranch Winery	Saint Helena	Napa	Intermediate	NA	NA	NA	NA	N
200903	Center Street Parking Garage	Berkeley	Alameda	Intermediate	NA	NA	NA	NA	N
200915	Hillsdale Shopping Center- North Block	San Mateo	San Mateo	Intermediate	2018	2.3	0	NA	N

200947	SFO Millbrae, LLC d/b/a Aloft SFO	Millbrae	San Mateo	Intermediate	NA	NA	NA	NA	N
200949	HPE	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
200987	Meritage Commons	Napa	Napa	Intermediate	NA	NA	NA	NA	N
201021	Groth Vineyards	Napa	Napa	Intermediate	2019	9.9	0	NA	N
201031	Public Safety Complex - Police Services Building	Dublin	Alameda	Intermediate	2019	9.9	0.9	NA	N
201049	Boehringer-Ingelheim, Fremont	Fremont	Alameda	Intermediate	2020	3.7	0	NA	N
201056	San Francisco Municipal Transportation Agency	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
201086	Roche Molecular Systems, Inc	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
201090	Creekside Milpitas, LLC	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
201120	Pump Station 13	Greenbrae	Marin	Intermediate	NA	NA	NA	NA	N
201159	Holden of San Jose, LLC	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
201166	Branagh Development	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
201179	DPIF2 CA 23 Goodrick Avenue, LLC	Richmond	Contra Costa	Intermediate	NA	NA	NA	NA	Y
201187	Coolport LLC.	Oakland	Alameda	Intermediate	NA	NA	NA	NA	N

201220	ARCO Facility #07034	Antioch	Contra Costa	Intermediate	NA	NA	NA	NA	Y
201246	Amazon.com Services LLC - SCA3	Richmond	Contra Costa	Intermediate	2025	1.5	0	NA	Y
201305	Fire Station 31	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
201310	Verizon Wireless - Hwy 152 Santa Teresa	Gilroy	Santa Clara	Intermediate	NA	NA	NA	NA	N
201314	Theorem Winery	Calistoga	Napa	Intermediate	2018	9.9	0	NA	N
201340	Sangamo Therapeutics, Inc.	Brisbane	San Mateo	Intermediate	NA	NA	NA	NA	N
201377	Broadway-Webster Medical Plaza	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
201382	4401 - 4457 Park Rd.	Benicia	Solano	Intermediate	NA	NA	NA	NA	N
201384	Pure Storage, Inc.	Santa Clara	Santa Clara	Intermediate	2018	3	0	NA	N
201399	ARCO Laurel and Empire	Oakley	Contra Costa	Intermediate	NA	NA	NA	NA	N
201406	Residence Inn Berkeley	Berkeley	Alameda	Intermediate	2021	2.7	0	NA	N
201419	East Bay Regional Park District	Oakland	Alameda	Intermediate	2025	0.91	0	0	N
201422	ALOM Diesel Packaged Pump House	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
201428	Alviso Storm Pump Station	San Jose	Santa Clara	Intermediate	2018	1.2	0	NA	N

201480	Atria Park of San Mateo	San Mateo	San Mateo	Intermediate	NA	NA	NA	NA	N
201486	HCP LS Brisbane LLC c/o CBRE	Brisbane	San Mateo	Intermediate	2018	1.4	0	NA	Y
201498	Pacific Commons Industrial	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
201499	Google LLC	Mountain View	Santa Clara	Intermediate	NA	NA	NA	NA	N
201502	ABB/Con-Cise Optical Group LLC	Alameda	Alameda	Intermediate	NA	NA	NA	NA	N
201505	ARCO Facility #07041	Concord	Contra Costa	Intermediate	NA	NA	NA	NA	Y
201512	Prologis	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
201517	South County Yard	San Martin	Santa Clara	Intermediate	NA	NA	NA	NA	Y
201532	Apple, Inc.	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
201537	Summerfield Healthcare Center	Santa Rosa	Sonoma	Intermediate	NA	NA	NA	NA	N
201544	Contra Costa County Fire District	Lafayette	Contra Costa	Intermediate	NA	NA	NA	NA	N
201549	4880 El Camino Homeowners Association	Los Altos	Santa Clara	Intermediate	NA	NA	NA	NA	N
201551	2075 Lane Broadway	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	Y
201552	Watermark at Napa Senior Living	Napa	Napa	Intermediate	NA	NA	NA	NA	N

201590	Holland Partner Group	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
201591	Vocera Communications	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
201592	Living Spaces San Jose	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
201595	California Water Services	Woodside	San Mateo	Intermediate	NA	NA	NA	NA	N
201596	Safeway Fuel Center #2874 - Hercules	Hercules	Contra Costa	Intermediate	NA	NA	NA	NA	Y
201604	Bennett Residence	Napa	Napa	Intermediate	NA	NA	NA	NA	N
201605	Duffy's Napa Valley Rehab	Calistoga	Napa	Intermediate	2019	9.9	0.01	NA	N
201610	Alameda County Community Food Bank	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
201626	Meta Platforms, Inc. - FRE-122	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
201630	Pacific Commons Owner LP	Fremont	Alameda	Intermediate	2024	0.48	0	NA	N
201631	Pacific Commons Owner LP	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
201646	Orchard Partners	American Canyon	Napa	Intermediate	NA	NA	NA	NA	N
201660	Schmitt & Company	Calistoga	Napa	Intermediate	NA	NA	NA	NA	N
201670	San Pablo Hotel Associates	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y

201679	Santa Rosa Junior College	Santa Rosa	Sonoma	Intermediate	2019	9.9	0	NA	N
201689	TA Oakland Road, LP	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	Y
201691	California Water Service	Los Altos	Santa Clara	Intermediate	NA	NA	NA	NA	N
201692	DL Falk Construction/City of Livermore	Livermore	Alameda	Intermediate	NA	NA	NA	NA	N
201695	MCM Diversified	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
201697	Alameda Municipal Power	Alameda	Alameda	Intermediate	NA	NA	NA	NA	N
201699	Microsoft Corporation	Mountain View	Santa Clara	Intermediate	2019	1	0	NA	N
201708	VERDI 1457	Palo Alto	Santa Clara	Intermediate	NA	NA	NA	NA	N
201722	Caymus Vineyards	St. Helena	Napa	Intermediate	NA	NA	NA	NA	N
201727	SFPUC - Yerba Buena Island	San Francisco	San Francisco	Intermediate	2022	1	0	NA	Y
201731	Eleanor Apartments (Milpitas)	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
201735	San Rafael Public Safety Center	San Rafael	Marin	Intermediate	2019	9.9	0.01	NA	N
201744	Anton Milpitas 730	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
201746	HPE Milpitas	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N

201747	Arroyo Green	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	Y
201748	Workday	Pleasanton	Alameda	Intermediate	NA	NA	NA	NA	N
201750	FPC Builders, Inc.	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
201755	Hourglass Winery	Calistoga	Napa	Intermediate	2019	9.9	0.9	NA	N
201756	Towers at Great America	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
201764	Brink's U.S.	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
201767	Outpost Wines	Angwin	Napa	Intermediate	2019	9.9	0	NA	N
201769	Amazon.com Service, LLC - DSJ6	Hayward	Alameda	Intermediate	NA	NA	NA	NA	Y
201771	Contra Costa County Fire Protection District	San Pablo	Contra Costa	Intermediate	NA	NA	NA	NA	Y
201780	Pope Valley Winery	Pope Valley	Napa	Intermediate	NA	NA	NA	NA	N
201783	2000 Marina LLC	San Leandro	Alameda	Intermediate	NA	NA	NA	NA	Y
201789	Auberge du Soleil	Rutherford	Napa	Intermediate	2020	9.9	0	NA	N
201791	@ Central Property Owner, LLC	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
201793	Santa Clara Valley Transportation Authority	San Jose	Santa Clara	Intermediate	2019	9.9	0.9	NA	N

201796	Prologis 6 Livermore	Livermore	Alameda	Intermediate	2019	0.28	0	NA	N
201800	City of Palo Alto	Palo Alto	Santa Clara	Intermediate	2022	2.8	0	0.01	N
201805	San Francisco Animal Care & Control	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
201807	Prime Now LLC-USF2	San Leandro	Alameda	Intermediate	2019	1.1	0	NA	Y
201816	Valent USA Lab & Headquarters	San Ramon	Contra Costa	Intermediate	NA	NA	NA	NA	N
201817	North Marin Water District	Novato	Marin	Intermediate	NA	NA	NA	NA	N
201823	Prologis	San Leandro	Alameda	Intermediate	NA	NA	NA	NA	Y
201826	Treasure Island Development Authority	Yerba Buena	San Francisco	Intermediate	NA	NA	NA	NA	Y
201844	Amazon.com Services LLC - DCX5	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	Y
201851	MILTENYI BIOTEC	San Jose	Santa Clara	Intermediate	2020	2.3	0	NA	N
201870	Adobe North Tower	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
201873	Pelican Inn	Muir Beach	Marin	Intermediate	NA	NA	NA	NA	N
201881	AUI Fine Foods, Inc.	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
201895	SeqMatic LLC	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N

201911	CATALYST PARKING STRUCTURE A	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
201913	The Mark at Berkeley, LLC	Berkeley	Alameda	Intermediate	NA	NA	NA	NA	N
201926	California Water Service Company [BG Stations 24]	Woodside	San Mateo	Intermediate	NA	NA	NA	NA	N
201927	CALIFORNIA WATER SERVICE COMPANY [BG STATION 6]	Portola Valley	San Mateo	Intermediate	NA	NA	NA	NA	N
201928	California Water Service Company [MPS Station 27]	San Mateo	San Mateo	Intermediate	NA	NA	NA	NA	N
201935	Napa Logistics Park Building 4	American Canyon	Napa	Intermediate	NA	NA	NA	NA	N
201941	Rutherford Grill	Napa	Napa	Intermediate	NA	NA	NA	NA	N
201954	Harlan Estate Winery	Napa	Napa	Intermediate	NA	NA	NA	NA	N
201962	San Rafael Sanitation District - South San Francisco Pump Station	San Rafael	Marin	Intermediate	NA	NA	NA	NA	Y
201964	Terreno Morton LLC	Newark	Alameda	Intermediate	2024	0.57	0	NA	N
201970	Fresenius Kidney Care	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
201973	Real Property Investments, LLC	Mountain View	Santa Clara	Intermediate	NA	NA	NA	NA	N
201977	Oliver's Market	Santa Rosa	Sonoma	Intermediate	NA	NA	NA	NA	N
201984	Fontanella Family Winery	Napa	Napa	Intermediate	2021	9.9	0.1	NA	N

201985	Friedman's Home Improvement	Sonoma	Sonoma	Intermediate	NA	NA	NA	NA	N
201988	Amazon.com Service, LLC - DFO9	American Canyon	Napa	Intermediate	NA	NA	NA	NA	N
201990	Gamble Residence	Saint Helena	Napa	Intermediate	NA	NA	NA	NA	N
201994	Hilton Garden Inn (Westlake SJH, LLC)	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
202000	City of Rohnert Park Fire Station #3	Rohnert Park	Sonoma	Intermediate	NA	NA	NA	NA	N
202013	Poetry Inn	Napa	Napa	Intermediate	NA	NA	NA	NA	N
202015	Holiday Inn Express & Suites San Jose Airport	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
202021	BART Berryessa Station	San Jose	Santa Clara	Intermediate	2016	9.9	0.9	NA	N
202024	Petaluma Veterans Building	Petaluma	Sonoma	Intermediate	NA	NA	NA	NA	N
202030	California Water Service LAS Station 34	Cupertino	Santa Clara	Intermediate	NA	NA	NA	NA	N
202035	Rudd Vineyards LLC	Napa	Napa	Intermediate	NA	NA	NA	NA	N
202039	Lokoya Winery	Saint Helena	Napa	Intermediate	NA	NA	NA	NA	N
202047	Humane Society of Sonoma County	Santa Rosa	Sonoma	Intermediate	NA	NA	NA	NA	N
202048	Safeway Fuel Center #2776	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	Y

202049	South San Francisco Sanitary Sewage Pumping Station No. 1	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
202053	Stag's Leap Wine Cellars	Saint Helena	Napa	Intermediate	NA	NA	NA	NA	N
202064	T-Mobile West, LLC - SF70430M	Fairfield	Solano	Intermediate	NA	NA	NA	NA	N
202066	T-Mobile West, LLC - SF13073B-HN	Woodside	San Mateo	Intermediate	NA	NA	NA	NA	N
202069	Williams Road Developer, LLC - MorningStar West Valley	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
202073	T-Mobile - BA02023A-HN	Oakland	Alameda	Intermediate	NA	NA	NA	NA	N
202078	LBA Reality	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	Y
202081	Google, Inc.	Palo Alto	Santa Clara	Intermediate	2020	1.4	0	NA	N
202103	St Supery Winery	Saint Helena	Napa	Intermediate	NA	NA	NA	NA	N
202107	Sagebrook Senior Living	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
202111	Circle K - Napa Junction	American Canyon	Napa	Intermediate	2021	6.8	0.04	NA	N
202115	8000 Marina Boulevard	Brisbane	San Mateo	Intermediate	NA	NA	NA	NA	N
202119	PATC 1810 Embarcadero	Palo Alto	Santa Clara	Intermediate	2021	3.7	0	NA	N
202127	T-Mobile - BA00365A-HN	Vallejo	Solano	Intermediate	NA	NA	NA	NA	Y

202133	Domaine Carneros	Napa	Napa	Intermediate	NA	NA	NA	NA	N
202138	Amazon.com Services LLC - DFO2	Oakley	Contra Costa	Intermediate	NA	NA	NA	NA	Y
202142	200 Park	San Jose	Santa Clara	Intermediate	NA	NA	NA	NA	N
202159	The Graham Apartments	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
202171	TBUSA	San Jose	Santa Clara	Intermediate	2021	1.6	0	NA	N
202174	Windy Hill Property Ventures	Redwood City	San Mateo	Intermediate	NA	NA	NA	NA	Y
202178	IF - 85th	Oakland	Alameda	Intermediate	2021	9.9	0	NA	Y
202179	Schoendorf Residence	St. Helena	Napa	Intermediate	NA	NA	NA	NA	N
202180	2012 Berkeley Way	Berkeley	Alameda	Intermediate	NA	NA	NA	NA	N
202220	SpectraSite Communications, LLC	Napa	Napa	Intermediate	NA	NA	NA	NA	N
202223	American Tower [8556] - Brentwood Oakley	Antioch	Contra Costa	Intermediate	NA	NA	NA	NA	N
202224	SpectraSite Communications, LLC	Daly City	San Mateo	Intermediate	NA	NA	NA	NA	N
202225	American Tower [414615] - La Honda	La Honda	San Mateo	Intermediate	NA	NA	NA	NA	N
202237	American Tower - PITTSBURG RELOCATION CA	Pittsburg	Contra Costa	Intermediate	NA	NA	NA	NA	Y

202249	SpectraSite Communications, LLC	Oakley	Contra Costa	Intermediate	2021	8.3	0	NA	N
202274	Rancho de Calistoga	Calistoga	Napa	Intermediate	2022	3.6	0	NA	N
202278	Santa Rosa Veterans Memorial Building	Santa Rosa	Sonoma	Intermediate	NA	NA	NA	NA	N
202283	Caymus Suisun Winery	Fairfield	Solano	Intermediate	2023	2.4	0	NA	N
202288	Carquinez Bridge Toll Plaza/Caltrans	Vallejo	Solano	Intermediate	NA	NA	NA	NA	Y
202290	California Water Service Co. BG Station 7	Portola Valley	San Mateo	Intermediate	2021	3.1	0	NA	N
202302	American Tower 301251	Albany	Alameda	Intermediate	NA	NA	NA	NA	N
202305	Guardant - East Bay	Union City	Alameda	Intermediate	NA	NA	NA	NA	N
202310	Guardant Health at 3100 Hanover Palo Alto	Palo Alto	Santa Clara	Intermediate	2021	1.5	0	NA	N
202312	Fire Station #25 San Mateo	San Mateo	San Mateo	Intermediate	NA	NA	NA	NA	N
202313	Eyelliance Eye Center	Napa	Napa	Intermediate	NA	NA	NA	NA	N
202317	Wine Service Cooperative - St. Helena Warehouse	St. Helena	Napa	Intermediate	NA	NA	NA	NA	N
202327	Longfellow Real Estate Partners	Palo Alto	Santa Clara	Intermediate	2023	2.9	0	0.9	N
202328	Napa Vault	Napa	Napa	Intermediate	NA	NA	NA	NA	N

202330	Linkedin Corporation	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
202333	300 Utah Avenue	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
202356	Pacific Research Center	Newark	Alameda	Intermediate	2023	2.1	0	NA	N
202363	Market Street Development	San Pablo	Contra Costa	Intermediate	2021	1.7	0	NA	Y
202364	The Emery (500 Apartments & Retail)	Emeryville	Alameda	Intermediate	2022	1.7	0	NA	Y
202372	Amazon.com Services LLC - TCY9	Oakley	Contra Costa	Intermediate	2023	8.4	0	NA	N
202375	WWCMC	Glen Ellen	Sonoma	Intermediate	2023	9.9	0	NA	N
202380	Jefferson Street Hotel LLC	Oakland	Alameda	Intermediate	2022	9.7	0	NA	Y
202394	6800 Dumbarton	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
202408	Cal Mart	Calistoga	Napa	Intermediate	NA	NA	NA	NA	N
202418	Stevens Creek Phase II	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
202433	Bruton Sanitary Pump Station (4th St Sewer Pump Station)	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
202450	1304 El Camino Real Apartments	Redwood City	San Mateo	Intermediate	2022	1.7	0	NA	Y
202461	Bionova Scientific, Inc.	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N

202465	Public Storage	Cupertino	Santa Clara	Intermediate	NA	NA	NA	NA	N
202466	Butterfield Tech Park	Morgan Hill	Santa Clara	Intermediate	NA	NA	NA	NA	N
202469	Gideon	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
202480	Bridge Point Silicon Valley	Milpitas	Santa Clara	Intermediate	NA	NA	NA	NA	N
202494	Parkridge Santary Sewer Pump Station	Oakland	Alameda	Intermediate	NA	NA	NA	NA	N
202495	Genesis Marina	Brisbane	San Mateo	Intermediate	2022	0.65	0	0.01	N
202496	Avirmax, Inc.	Hayward	Alameda	Intermediate	NA	NA	NA	NA	Y
202497	Rick Ali Residence	Calistoga	Napa	Intermediate	NA	NA	NA	NA	N
202501	Cade Estate Winery	Angwin	Napa	Intermediate	NA	NA	NA	NA	N
202506	Logisticenter Fairfield	Fairfield	Solano	Intermediate	2023	0.61	0	NA	Y
202511	Sunnyvale Community Services	Sunnyvale	Santa Clara	Intermediate	NA	NA	NA	NA	N
202516	The Tower Association	San Mateo	San Mateo	Intermediate	NA	NA	NA	NA	N
202519	Verizon Wireless - Hwy 580/13	Oakland	Alameda	Intermediate	NA	NA	NA	NA	N
202530	Heritage on the Marina	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N

202532	1600 Harbor Bay Parkway	Alameda	Alameda	Intermediate	2022	0.37	0	NA	Y
202536	Iron Mountain	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	Y
202537	PV LSR Cabot, LLC	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	Y
202551	Amazon.com Services LLC - DFO3	Livermore	Alameda	Intermediate	2023	0.32	0	NA	N
202559	Freewire Technologies Inc	Newark	Alameda	Intermediate	NA	NA	NA	NA	N
202565	Juliana Water	Pope Valley	Napa	Intermediate	NA	NA	NA	NA	N
202586	Bonness Ranch	Sonoma	Sonoma	Intermediate	2022	9.9	0	NA	N
202587	J Ranch	Petaluma	Sonoma	Intermediate	2022	9.9	0	NA	N
202590	Santa Rosa Hatchery	Santa Rosa	Sonoma	Intermediate	NA	NA	NA	NA	N
202591	10X Genomics	Pleasanton	Alameda	Intermediate	2022	1.4	0	0	N
202592	Ascend Clinical LLC	Sunnyvale	Santa Clara	Intermediate	2022	2.1	0	NA	N
202613	Pad D Fire Supression System	East Palo Alto	San Mateo	Intermediate	NA	NA	NA	NA	Y
202620	Sonoma County Indian Health Project, Inc.	Santa Rosa	Sonoma	Intermediate	2022	0.65	0	NA	N
202621	Pro-Form Manufacturing, LLC	Benicia	Solano	Intermediate	NA	NA	NA	NA	N

202634	Oakland GO	Oakland	Alameda	Intermediate	NA	NA	NA	NA	Y
202646	Oakland 11	Oakland	Alameda	Intermediate	2022	0.86	0	NA	Y
202649	Bret Harte Center	San Rafael	Marin	Intermediate	2022	1.4	0	NA	N
202653	Tower Road Winery Co-Op	American Canyon	Napa	Intermediate	NA	NA	NA	NA	N
202656	NASH - Holland Gateway Crossing - Lot 1	Santa Clara	Santa Clara	Intermediate	NA	NA	NA	NA	N
202661	Iron Ox GH1X	Gilroy	Santa Clara	Intermediate	2022	0.82	0	NA	N
202665	Kaiser Foundation Health Plan - Project Genetics Lab	San Jose	Santa Clara	Intermediate	2022	6	0	NA	N
202671	Rowland Plaza Pump Station	Novato	Marin	Intermediate	2022	1.7	0	NA	N
202695	Synthego Holdings, Inc.	Redwood City	San Mateo	Intermediate	2022	0.45	0	NA	Y
202697	Allston Way - Warm Shell & Core	Berkeley	Alameda	Intermediate	2022	0.54	0	NA	Y
202710	Southern Glazer's Wine & Spirits of California	Union City	Alameda	Intermediate	NA	NA	NA	NA	N
202715	Sequence Campus	Fremont	Alameda	Intermediate	2022	1.2	0	NA	N
202718	Extra Space Storage	Alameda	Alameda	Intermediate	2022	0.82	0	NA	Y
202724	San Bruno Recreation & Aquatic Center	San Bruno	San Mateo	Intermediate	2022	3.5	0	NA	N

202733	Costco Gasoline (Loc. No. 848)	San Jose	Santa Clara	Intermediate	2023	6.1	0.08	0.16	N
202738	Fire Station 16	Dublin	Alameda	Intermediate	2022	3.4	0	NA	N
202739	3450 Hillview	Palo Alto	Santa Clara	Intermediate	2022	0.34	0	NA	N
202749	Vaxart, Inc.	South San Francisco	San Mateo	Intermediate	2022	0.52	0	NA	Y
202776	Brittan West	San Carlos	San Mateo	Intermediate	2024	1.3	0	0	N
202780	Nkarta, Inc.	South San Francisco	San Mateo	Intermediate	2022	1.3	0	NA	Y
202784	BTC III San Jose Logistics Center LP	San Jose	Santa Clara	Intermediate	2022	0.79	0	NA	Y
202795	Bascom Assisted Living Facility	San Jose	Santa Clara	Intermediate	2023	2.1	0	NA	N
202803	GI ETS Hayward LLC	Hayward	Alameda	Intermediate	2022	0.79	0	NA	Y
202804	STC Venture Block 3RWS, LLC	Sunnyvale	Santa Clara	Intermediate	2023	0.71	0	0	N
202807	Harbor Bay Pump Station	Alameda	Alameda	Intermediate	2022	0.57	0	NA	N
202812	Fire Station 55	San Rafael	Marin	Intermediate	2023	2.3	0	NA	N
202817	Amazon.com Services LLC - SCA2	Brisbane	San Mateo	Intermediate	2023	0.41	0	NA	N
202818	Costco Gasoline	Newark	Alameda	Intermediate	2023	9.9	0.08	0.1	N

202826	Fire Station 54	San Rafael	Marin	Intermediate	2022	2.2	0	NA	Y
202835	220 Park Road	Burlingame	San Mateo	Intermediate	2022	0.39	0	NA	N
202854	Redwood Credit Union - Napa Campus	Napa	Napa	Intermediate	2023	1.1	0	NA	N
202863	U-Box Moving & Storage of Concord	Concord	Contra Costa	Intermediate	2022	5.9	0	NA	Y
202870	SJW Mann Station	Cupertino	Santa Clara	Intermediate	2023	2.7	0	NA	N
202887	Vine Transit Maintenance Facility	Napa	Napa	Intermediate	2023	0.55	0	NA	N
202895	Brentwood Monopole - BA61730S	Brentwood	Contra Costa	Intermediate	NA	NA	NA	NA	N
202896	T-Mobile - BA62012S	Oakland	Alameda	Intermediate	2023	0.63	0	NA	Y
202897	T-Mobile - BA64168S	Campbell	Santa Clara	Intermediate	2023	6.9	0	NA	N
202900	T-Mobile - BA62062S	Fremont	Alameda	Intermediate	2023	0.29	0	NA	N
202919	Zoox Inc	Fremont	Alameda	Intermediate	2022	9.9	0	NA	N
202924	Parr Blvd. & Richmond Parkway Building 1	Richmond	Contra Costa	Intermediate	2023	0.16	0	NA	Y
202931	Napa Ranch	Sonoma	Sonoma	Intermediate	2023	9.9	0	NA	N
202941	Crystal Bio Solutions	Pleasanton	Alameda	Intermediate	2023	9.9	0	NA	N

202963	AT&T - FA10095813 - East Fairfield	Suisun City	Solano	Intermediate	2023	1.7	0	NA	N
202974	24493 Clawiter Road	Hayward	Alameda	Intermediate	2023	0.14	0	NA	Y
202992	Berkeley Commons	Berkeley	Alameda	Intermediate	2023	2.3	0	NA	N
202998	1015 Atlantic Ave	Alameda	Alameda	Intermediate	2023	0.5	0	NA	N
203049	The Surgery Center	Oakland	Alameda	Intermediate	2023	0.93	0	NA	Y
203063	Red Top Pump Station (City of Fairfield)	Fairfield	Solano	Intermediate	2023	4.5	0	NA	N
203071	Morningstar DeAnza Memory Care	San Jose	Santa Clara	Intermediate	2023	0.59	0	NA	N
203097	Rubicon	San Francisco	San Francisco	Intermediate	2023	2.4	0	NA	N
203109	Dumbarton Circle Spec Suite	Fremont	Alameda	Intermediate	2023	0.59	0	NA	N
203114	Cochrane Technology Center	Morgan Hill	Santa Clara	Intermediate	2023	9.9	0	NA	N
203121	City of Antioch Water Treatment Plant	Antioch	Contra Costa	Intermediate	2023	2	0	0	Y
203161	Logisticenter At Enterprise	Hayward	Alameda	Intermediate	2023	0.25	0	NA	Y
203165	Bellara	Hayward	Alameda	Intermediate	2023	6.1	0	NA	N
203182	YWCA Apartments Inc	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N

203191	Skywalker Sound	Nicasio	Marin	Intermediate	NA	NA	NA	NA	N
203197	RK Logistics	Fremont	Alameda	Intermediate	2023	9.9	0	NA	N
203199	AbbVie, Inc.	South San Francisco	San Mateo	Intermediate	NA	NA	NA	NA	N
203201	Comfort Inn By the Bay	San Francisco	San Francisco	Intermediate	NA	NA	NA	NA	N
203237	Pimentel Place	Hayward	Alameda	Intermediate	2024	2.9	0	NA	N
203252	County of Marin/MERA-Mt. Burdell OTA	Novato	Marin	Intermediate	2023	9.9	0.9	NA	N
203320	County of Marin/MERA-Coyote Peak	Petaluma	Sonoma	Intermediate	2023	9.9	0.9	NA	N
203411	7601 Dumbarton	Fremont	Alameda	Intermediate	NA	NA	NA	NA	N
203441	The Lafayette	Santa Clara	Santa Clara	Intermediate	2024	2.1	0	NA	N
203566	X-Therma Inc - Hercules CA	Hercules	Contra Costa	Intermediate	NA	NA	NA	NA	N
203667	Spartan Village on the Paseo	San Jose	Santa Clara	Intermediate	2025	0.79	0	NA	N
203849	300 Wind River	Alameda	Alameda	Intermediate	NA	NA	NA	NA	N
210636	Constellations Brands U.S. Operations, Inc. dba Robert Mondavi Wi	Oakville	Napa	Intermediate	NA	NA	NA	NA	N
212447	Honig Vineyard & Winery	Napa	Napa	Intermediate	2023	9.9	0	NA	N

Bay Area Air District

Toxic Air Contaminant Control Annual Report

Board of Directors Meeting

June 3, 2026

Simrun Dhoot
Supervising Engineer
Engineering

Kate Hoag, Ph.D.
Manager
Measurements & Meteorology

Recommended Action

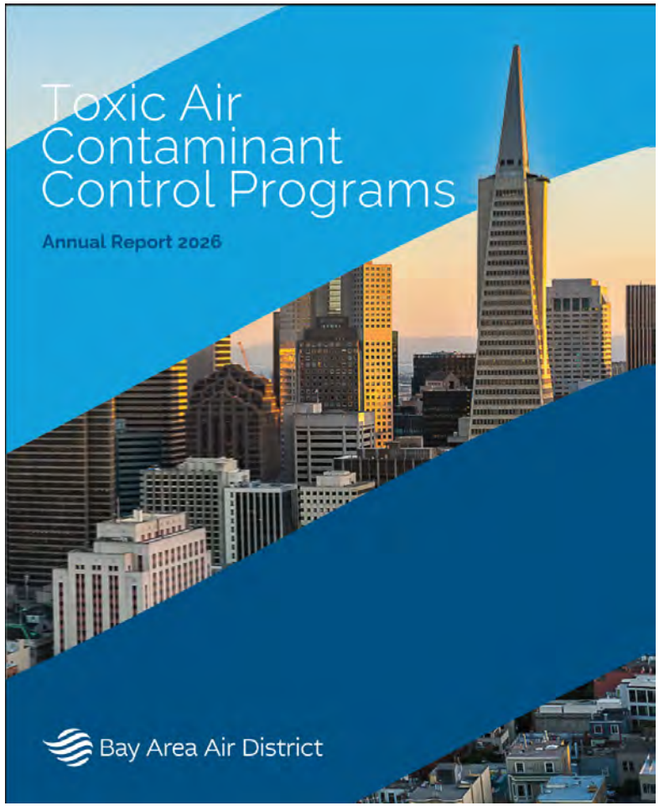
The purpose of this item is to present updates to the Air District's Toxic Air Contaminant Control Annual Report for 2026 and discuss its content and significance. No formal action by the Board of Directors is required.

Presentation Outline

- Introduction and Purpose of Report
- Overview of Toxic Control Initiatives
- Program Updates
- Conclusions
- Acknowledgments

Introduction and Purpose of Report

- Fulfills mandatory reporting requirements under Assembly Bill (AB) 2588 Air Toxics Hot Spots Program (California Health & Safety Code 44363)
- Provides consolidated, updated information on all Air District toxics air contaminant control programs



Bay Area Air District Toxic Air Contaminant Control Programs Report

Overview of Toxic Control Initiatives

Facility Risk Reduction Programs: Identification, assessment, and mitigation of health risks for existing facilities

Evaluating Air Toxics in Permitting: Preconstruction evaluation for new or modified sources emitting toxic air contaminants

Emissions Inventory: Identification and reporting of toxic air contaminants from permitted facilities

Air Toxics Ambient Air Monitoring: Assessment of concentrations through fixed monitoring stations and targeted studies including mobile monitoring campaigns

Community Health Protection Programs: Targeted initiatives to reduce air quality disparities and improve health outcomes

Program Updates

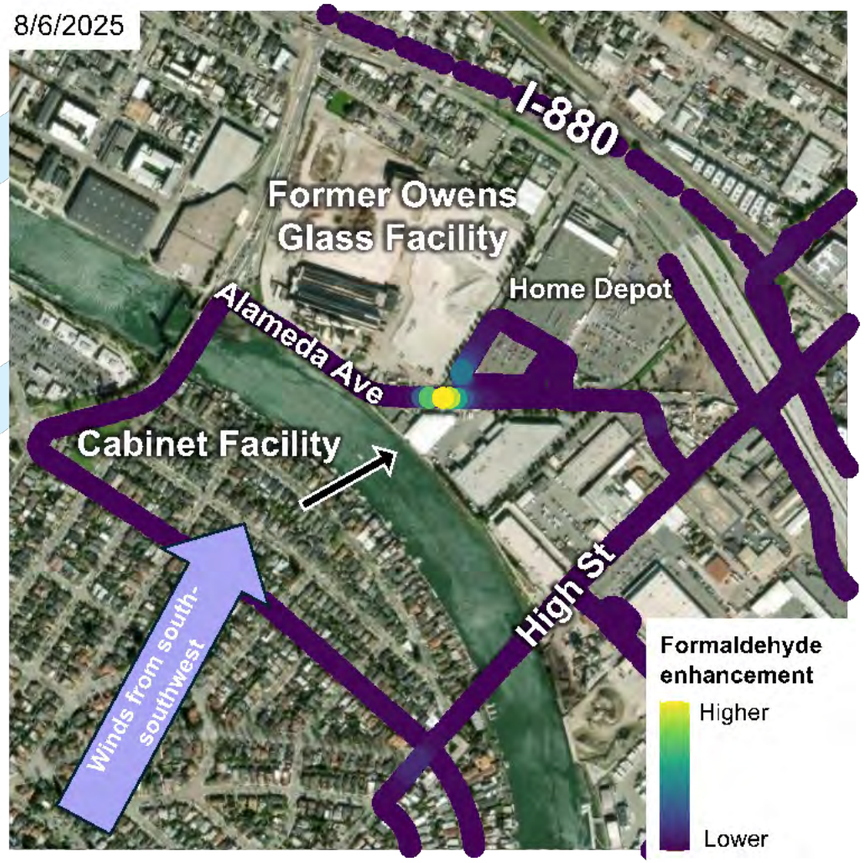
- Facility Risk Reduction Programs
- Air Toxics New Source Review
- Air Toxics Emissions Inventory
- **Air Toxics Ambient Air Monitoring**
- Community Health Protection Programs

Air Toxics Ambient Air Monitoring

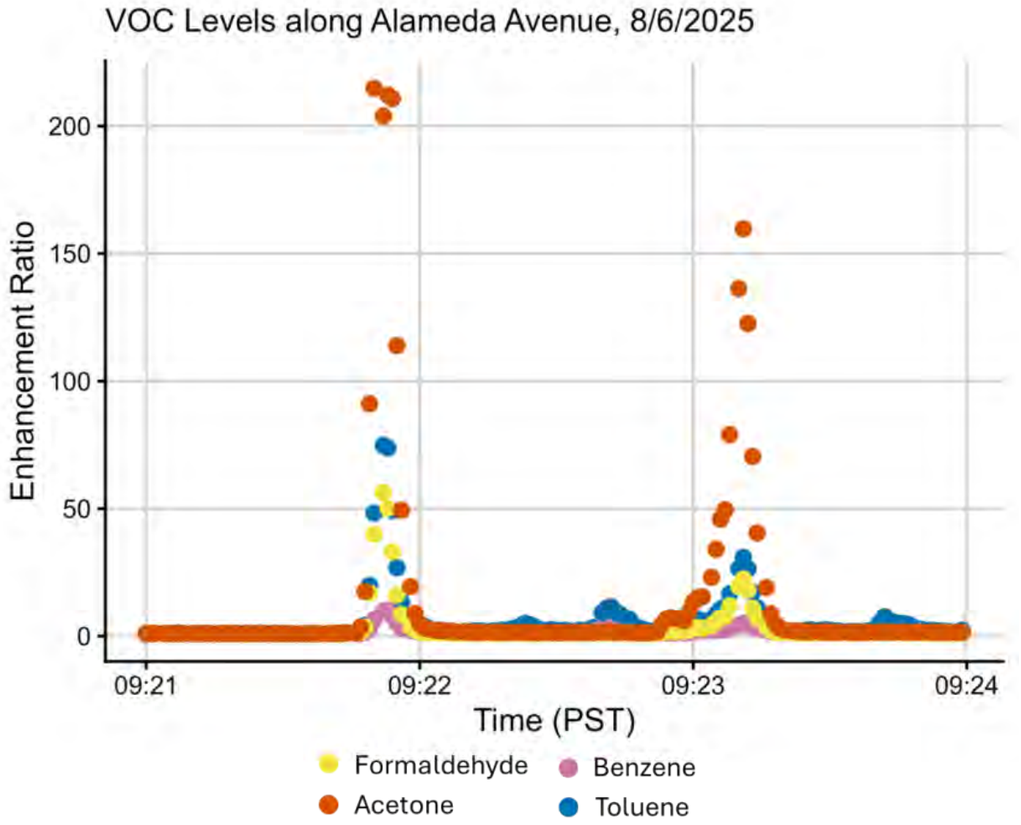
The Air District measures air toxics in ambient air as part of several air monitoring programs:

- **Region-wide air monitoring stations** measure long-term trends of several toxics at 20 monitoring stations across the Bay Area
- **Refinery Community Air Monitoring Program** includes real-time toxic emissions monitoring near refineries at new or expanded air monitoring stations
- **Community air quality investigations** using mobile air monitoring are ongoing
  - East Oakland Air Monitoring Project with Communities for a Better Environment
  - Starting an air monitoring project with Marie Harrison Community Foundation and Leaders4EARTH in Bayview-Hunters Point

Air Toxics Ambient Air Monitoring



Formaldehyde concentrations measured by air monitoring van in East Oakland



Volatile Organic Compound (VOC) Levels Along Alameda Ave.

Air Toxics Ambient Air Monitoring

Moving forward, the Air District will:

- Expand community air monitoring investigations
- Conduct multi-pollutant air monitoring in communities near refineries
- **Develop and implement the Bay Area Regional Evaluation of Air Toxics and Health Effects (B_aREATHE) study**
  - Continuous measurements of key air toxic pollutants year-round
  - Updated air toxics emissions inventory
  - Regional (basin-wide) modeling of all key air toxic pollutants
  - Exposure and health risk assessment to characterize cancer risk and chronic hazard indices
  - First comprehensive air toxics exposure study in the Bay Area

Conclusions

39 Years of Impact

- Air District has been implementing toxic control programs for 39 years
- These programs have successfully reduced public exposures to air toxics both regionally and locally

Cross-Divisional Approach

- Collaborative efforts ensure comprehensive toxics management

2024-2029 Strategic Plan: Protecting Vulnerable Communities

- Reducing disparate impacts from air pollution
- Increasing accessibility of toxic emissions and health risk information

Acknowledgements

Assessment, Inventory, and Modeling Division

- Song Bai, Ph.D., Director
- Virginia Lau, Manager
- Stephen Reid, Manager

Engineering Division

- Simrun Dhoot, Supervising Air Quality Engineer

Environmental Justice Division

- Diana Ruiz, Acting Director

Meteorology & Measurement Division

- Kate Hoag, Ph.D., Manager
- Jennifer Ofodile, Ph.D., Principal Air Quality Specialist
- Daniel Alrick, Principal Air & Meteorological Monitoring Specialist

Strategic Incentives Division

- Alona Davis, Acting Director
- Adriana Kolev, Supervising Staff Specialist

Questions & Discussion

For more information:

Simrun Dhoot | Supervising Air Quality Engineer | sdhoot@baaqmd.gov

BAY AREA AIR DISTRICT
Memorandum

To: Chairperson Lynda Hopkins and Members of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: June 3, 2026

Re: Adoption of Proposed Policy Updates to Implement Recent Brown Act Changes and Improve Language Access and Public Accessibility

RECOMMENDED ACTION

1. Adopt a Broadcast Technology Disruption Policy to implement new Brown Act requirements from Senate Bill 707 effective July 1, 2026; and
2. Amend the Board's Remote Meeting Teleconferencing Policy to implement associated language access and public accessibility improvements effective July 1, 2026.

BACKGROUND

Senate Bill (SB) 707 was signed into law on October 3, 2025 and amended the Ralph M. Brown Act. Since its adoption, Air District staff have implemented several of those key mandates in advance of the July 1, 2026 deadline for compliance. Those administrative changes include: improving the two-way video or telephonic option for public comment; refining remote participation procedures; implementing procedures to address “states of emergency” and the application of “just cause”; offering a space for interpretive services; and further developing Strategic Plan commitments geared toward improving public participation and awareness of Board meetings.

DISCUSSION

Translation of Board Agendas
SB 707 requires Board meeting agendas to be translated into all “applicable languages.” An “applicable language” is defined as one “spoken jointly by 20 percent or more of the applicable population, according to data from the most recent American Community Survey, provided that 20 percent or more of the population that speaks that language in that city or county speaks English less than ‘very well.’” For a special district, the “applicable population” is either the population of the county with the greatest population within the boundaries of the special district, or the population of the service area of the special district. Currently no languages meet this definition, whether considering our largest county, Santa Clara County alone, or all nine counties together,

and so SB 707's mandate to translate Board agendas into "applicable languages" is not triggered for the Air District. However, the Air District's current Plan for Language Services to Limited English Proficient Populations uses a lower 5% thresholds for triggering translation requirements. The Legislature encouraged local agencies to adopt public access requirements that exceed the requirements of SB 707. Air District staff have begun implementing procedures to treat Board agendas as Tier 1 documents, which pursuant to the Language Access Plan and the Legislature's findings, are critical for an informed population. Tier 1 documents are those that without translation, would seriously impact limited English proficient person's access to critical public health information, access to programs or services provided by the Air District, or affect their awareness of their legal rights, particularly rights to language assistance. While not required by SB 707, as a Tier 1 document, Board agendas will be translated into Spanish, Chinese, Tagalog, and Vietnamese, as resources allow. These languages are the top 4 most spoken non-English languages across the Air District's service area. Air District staff will begin routinely translating Board agendas and posting them online by July 2026.

Updates to the website

SB 707 also requires public bodies to maintain a dedicated public meetings webpage, accessible from the main homepage, that provides information about Brown Act meetings and opportunities for the public to participate and attend. The Air District currently maintains these informational requirements across several webpages. Staff have begun migrating this information into a single public meetings webpage accessible from the main webpage. This consolidated page will be completed and launched by July 1, 2026. This webpage will include the following:

- A general explanation of the public hearing process on the main webpage.
- Procedures for making in-person or remote oral comments and written comments on the main webpage.
- Translations of Board meeting agendas into Spanish, Chinese, Vietnamese, and Tagalog.
- Instructions for members of the public to request assistance with translating a meeting or to receive interpretation.
- Improving the functionality of the website to translate the public meeting webpage.
- Notice of a designated space for interpretation services during Board meetings.
- Procedures for the public to request interpretation services.
- Procedures for posting additional translations provided by the public.

Policy to address disruptions

SB 707 requires the Board to adopt a policy to address disruptions or telephonic and website streaming services. A proposed policy is offered in Attachment 1 to include procedures for immediate action once the disruption is identified, steps for assessing the disruption, procedures in the event the disruption continues for an extended period, and requirements for reconvening Board activities thereafter. These procedures are

intended to apply to Board meetings and Committee meetings:

- Board/Committee proceedings will be paused once the Chair is notified of the disruption by the Clerk, via Bay Area Headquarters Authority / Metropolitan Transportation Commission (BAHA/MTC).
- BAHA/MTC will assess the cause of the disruption and make efforts to resolve. All updates will be communicated to the Chair via the Clerk.
- The Board/Committee may not hear or discuss any open session items unless public telephonic and internet access has been restored or the Board/Committee has made certain findings.
- Open session may continue, after a roll call vote, if the Board/Committee finds "good faith efforts" were made to restore services, and the public interest in continuing the meeting outweighs the public interest in remote public access.

Policy amendments to require remote locations to post translated agendas and limit spaces used for teleconferencing

The Board has in place a Remote Teleconferencing Meeting Policy to ensure procedures for remote teleconferencing meetings proceed efficiently and in compliance with all Brown Act requirements. Attachment 2 offers a proposed policy to implement SB 707 requirements and to make related language access and public accessibility improvements. Under these amendments, remote locations would be required to post meeting agendas translated into additional languages (Spanish, Chinese, Vietnamese, and Tagalog) in addition to the English-language agenda. Remote locations will also be required to offer a physical space for the public to post additional translations of Board agendas pursuant to the SB 707 changes. In addition, members seeking to host a remote meeting location would be required to notify Air District staff at least 16 days in advance of the meeting, so the location can be added to the agenda before the agenda is sent for translation. Additional changes would limit remote locations to places within California, and to public buildings that are freely accessible to the public (e.g., government buildings, public libraries and community centers, etc.). Private locations, such as hotels, convention centers, and private homes, would no longer be able to be used to host remote locations as public access cannot always be guaranteed. To make it easier for Air District staff to host remote locations, the changes would require only one training for Board members and their staff (instead of annually), and photos would no longer be required to confirm posting of the agenda at the remote location (email confirmation would be acceptable).

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Kimberly Leefatt

Reviewed by: Alexander Crockett and John Chiladakis

ATTACHMENT(S):

1. Proposed Technology Disruption Policy
2. Proposed Amendments to Remote Teleconference Meeting Policy - Redline
3. Proposed Amendments to Remote Teleconference Meeting Policy - Clean
4. Adoption of Proposed Policy Updates to Implement Recent Brown Act Changes and Improve Language Access and Public Accessibility Presentation

Bay Area Air District Board Meeting
Broadcast Technology Disruption Policy

1. Purpose

The purpose of this policy is to preserve public access and participation to the extent feasible during meetings of the Board of Directors and Board committees in the event disruptions in telephonic and/or internet service occur. This policy implements the requirements of Section 54953.4(b)(1)(A)(i)(I)(ib) of the California Government Code.

2. Applicability

This Policy applies to all Board of Directors and Board committee meetings for which telephonic and/or internet access is required under Government Code Section 54953.4(b)(1)(A)(i)(I).

3. Definition of Technology Disruption

A "technology disruption" occurs when the public is unable to attend and observe a meeting remotely through the telephonic and/or internet access services provided.

4. Roles and Responsibilities

The following persons/entities have the responsibilities listed below under this policy.

4.1 BAHA/MTC Shared Services:

a. Operates all meeting technology systems.
b. Monitors system functionality in real time.
c. Leads troubleshooting and restoration efforts.
d. Maintains reasonable backup capability, such as dial-in audio redundancy or equivalent, to support timely restoration of public access.

4.2 Clerk of the Boards:

a. Confirms the existence and scope of a disruption with BAHA/MTC Shared Services.
b. Advises the Chair regarding required actions under this policy.

4.3 Board/Committee Chair:

a. Announces the disruption on the record.

b. Determines whether to recess, reconvene, continue, or adjourn the meeting based on staff input and legal requirements.

5. Procedure During a Technology Disruption

In the event of a technology disruption, the Board/Committee and supporting staff will take the following steps to preserve public access and participation to the extent feasible, consistent with the needs to complete the Board/Committee business at hand.

5.1 Immediate Action

a. Upon identification of the disruption, BAHA/MTC Shared Services shall immediately notify the Clerk.
b. Upon notification from BAHA/MTC Shared Services, or upon identification of the disruption by other means, the Clerk shall promptly inform the Chair.
c. Upon notification from the Clerk, or upon identification of the disruption by other means, the Chair shall announce the disruption on the record and shall temporarily pause the proceedings to allow for an initial assessment of the disruption.

5.2 Initial Assessment of the Disruption

a. BAHA/MTC Shared Services shall investigate the cause of the disruption to assess whether it can be promptly remedied.
b. If BAHA/MTC Shared Services can promptly remedy the disruption, it shall do so, and the meeting may continue once public telephonic and/or internet access to the meeting are restored.
c. If BAHA/MTC Shared Services determine that the disruption cannot promptly be remedied, it shall report that determination to the Clerk, who shall report it to the Chair.

5.3 Procedures in the Event of Extended Disruption

a. If public telephonic and/or internet access cannot be restored promptly, the Chair shall either (i) with the consent of the body, take up any closed session matters on the meeting agenda; or (ii) recess the meeting. The Board/Committee may not hear or discuss any open session items unless public telephonic and/or internet access have been restored or the Board/Committee has made the findings specified in Section 5.4(b) below.

b. BAHA/MTC Shared Services shall work to restore public telephonic and/or internet access to the meeting using primary and backup systems.

5.4 Reconvening After Extended Disruption:

a. If public telephonic and/or internet access has not been restored after at least one hour of restoration efforts, the Chair may call the Board/Committee back into open session to discuss whether to continue the open session meeting agenda without full telephonic and/or internet access.
b. The Board/Committee may continue the open session meeting agenda without full telephonic and/or internet access if and only if the Board/Committee adopts findings, by rollcall vote, that:
    i. Good faith efforts to restore service have been made in accordance with this policy for at least one hour; and,
    ii. The public interest in continuing the meeting outweighs the public interest in remote public access.
c. If the Board/Committee does not make the findings specified in Section 5.4(b) above, it may only (i) take up closed session items; (ii) recess to wait for public telephonic and/or internet access to be restored; or (iii) adjourn the meeting.

6. Documentation

The Clerk shall document the following information in the meeting minutes:

- The nature of the disruption.
- The time the disruption began and ended.
- The actions taken, including any recess, reconvening, rollcall vote, or adjournment.

Bay Area Air ~~Quality Management~~ District

Remote Teleconferencing Meeting Policy

This Remote Teleconferencing Meeting Policy is established by the Board of Directors of the Bay Area Air ~~Quality Management~~ District to provide meeting flexibility for members and the public while also reducing transportation related emissions and greenhouse gases.

This Policy affirms the rules by which Air District Remote Teleconferencing locations can be used by the Board of Directors and Board committees to ensure they fulfill Ralph M. Brown Act requirements and conform to requirements adopted by the Board of Directors.

Any member of the Board of Directors who wishes to host a remote teleconferencing location for a Board or committee meeting must comply with the following requirements:

~~1.~~ Board members and their staff are required to receive mandatory training ~~at least once per year~~ with the Air District Executive Office prior to hosting a remote teleconferencing meeting.

1.

2. Board members are required to designate at least one~~two~~ staff member~~members~~ as an on-site point~~points~~ of contact for each meeting with the ability to connect on Wi-Fi, access the Zoom platform, re-establish a connection via speakerphone if Wi-Fi goes out, and ~~to~~ provide technical assistance to attendees.
3. At least 72 hours prior to the start of the meeting (or other relevant Brown Act deadline in the case of a special meeting or emergency meeting), ~~,~~ Board members or their staff are required to:
    a. Post the meeting agenda (including the English version and all translated versions provided by Air District staff) in a publicly accessible location that is open to the public 24 hours a day in accordance with Brown Act requirements; ~~and~~
    b. Make available ~~Email~~ a physical location that is freely accessible to the public in reasonable proximity to the physical location in which the agenda and translations are posted under subparagraph 3.b. above, and allow members~~photo~~ of the public to post additional translations of the agenda in that location;

b.c. Email confirmation of posting by the Brown Act deadline ~~posted agenda~~ to the Manager of the Executive Office; and.

d. Maintain the posting of the agendas continually until the conclusion of the meeting.

4. If the posting of the agenda at a remote teleconferencing location does~~did~~ not meet the 72- hour notice requirement, Board members may not participate in the meeting~~meting~~ from that location, but the location must still be open to the public in accordance with all other provisions of this Policy.

5. Each remote meeting location must be open to the public throughout the entirety of the meeting and must comply with all ADA accessibility requirements. It is strongly recommended that remote teleconferencing locations be opened to the public 30 minutes before the scheduled start of the meeting but, at a minimum, the location must be opened no less than 10 minutes before the scheduled start of the meeting.

6. If a Board member agrees to serve as a remote teleconferencing location host, and must leave the meeting prior to adjournment, the location must remain open and available to the public for the remainder of the meeting. A location that cannot remain open for the duration of the meeting cannot be used as a remote location.

~~6.~~ Board members must submit requests to host a remote teleconferencing location by email to the Manager of the Executive Office, with a copy to the Executive Officer/APCO, a

~~7.~~ minimum of 168~~8~~ days prior to the meeting.

7.

~~8.~~ To cancel a request to host a remote teleconferencing location, Board members must notify the Manager of the Executive Office by email, with a copy to the Executive Officer

8. ~~Officer~~/APCO, a minimum of 8 days prior to the meeting to ensure that the location is removed from the agenda before it is circulated and made available to the public. If the cancellation is not timely and the published agenda includes the location, the location must be open to the public in accordance with all other provisions of this Policy, even if the Board member who originally requested the location will not be present at that location.

9. Remote teleconferencing locations must be within California, and must be in a public building that is freely accessible to the public. Locations that are not freely accessible to the public, such as hotels and convention centers, may not be used as remote conferencing locations.
~~location.~~

~~9.~~10. The only location that can be used for regular Board or committee meetings in San Francisco is the Air District's Beale Street location.

~~10.~~ Security shall be provided at remote teleconferencing locations in a manner consistent with existing security policies at those locations. In the event that special circumstances may arise requiring additional security, Board members requesting to host remote

11. teleconferencing locations and/or staff at those locations will confer with the Chair and Vice Chair and Air District staff about any special arrangements that may be required to facilitate an effective meeting.

~~11.~~12. Board members must sign a written agreement committing to complying with all requirements established by the Board of Directors in this Remote Teleconferencing Meeting Policy.

This policy applies only to remote teleconferencing from noticed locations under Brown Act Section 54953(b). It does not apply to any members participating in a meeting remotely under the "just cause" exception or other similar provisions authorizing participation from non-noticed locations under Brown Act Sections 54953.8 *et seq.*

This policy may be reviewed by the Finance and Administration Committee periodically including the addition of procedures to address violations of the policy. The Committee may

make recommendations to the Board of Directors to update or revise this policy as necessary to ensure the work of the Air District continues and statutory deadlines are met.

Bay Area Air District

Remote Teleconferencing Meeting Policy

This Remote Teleconferencing Meeting Policy is established by the Board of Directors of the Bay Area Air District to provide meeting flexibility for members and the public while also reducing transportation related emissions and greenhouse gases.

This Policy affirms the rules by which Air District Remote Teleconferencing locations can be used by the Board of Directors and Board committees to ensure they fulfill Ralph M. Brown Act requirements and conform to requirements adopted by the Board of Directors.

Any member of the Board of Directors who wishes to host a remote teleconferencing location for a Board or committee meeting must comply with the following requirements:

1. Board members and their staff are required to receive mandatory training with the Air District Executive Office prior to hosting a remote teleconferencing meeting.
2. Board members are required to designate at least one staff member as an on-site point of contact for each meeting with the ability to connect on Wi-Fi, access the Zoom platform, re-establish a connection via speakerphone if Wi-Fi goes out, and provide technical assistance to attendees.
3. At least 72 hours prior to the start of the meeting (or other relevant Brown Act deadline in the case of a special meeting or emergency meeting), Board members or their staff are required to:
    a. Post the meeting agenda (including the English version and all translated versions provided by Air District staff) in a publicly accessible location that is open to the public 24 hours a day in accordance with Brown Act requirements;
    b. Make available a physical location that is freely accessible to the public in reasonable proximity to the physical location in which the agenda and translations are posted under subparagraph 3.a. above, and allow members of the public to post additional translations of the agenda in that location;
    c. Email confirmation of posting by the Brown Act deadline to the Manager of the Executive Office; and
    d. Maintain the posting of the agendas continually until the conclusion of the meeting.

4. If the posting of the agenda at a remote teleconferencing location does not meet the 72-hour notice requirement, Board members may not participate in the meeting from that location, but the location must still be open to the public in accordance with all other provisions of this Policy.
5. Each remote meeting location must be open to the public throughout the entirety of the meeting (including during closed session, if any) and must comply with all ADA accessibility requirements. It is strongly recommended that remote teleconferencing locations be opened to the public 30 minutes before the scheduled start of the meeting but, at a minimum, the location must be opened no less than 10 minutes before the scheduled start of the meeting.
6. If a Board member agrees to serve as a remote teleconferencing location host, and must leave the meeting prior to adjournment, the location must remain open and available to the public for the remainder of the meeting. A location that cannot remain open for the duration of the meeting cannot be used as a remote location.
7. Board members must submit requests to host a remote teleconferencing location by email to the Manager of the Executive Office, with a copy to the Executive Officer/APCO, a minimum of 16 days prior to the meeting.
8. To cancel a request to host a remote teleconferencing location, Board members must notify the Manager of the Executive Office by email, with a copy to the Executive Officer/APCO, a minimum of 8 days prior to the meeting to ensure that the location is removed from the agenda before it is circulated and made available to the public. If the cancellation is not timely and the published agenda includes the location, the location must be open to the public in accordance with all other provisions of this Policy, even if the Board member who originally requested the location will not be present at that location.
9. Remote teleconferencing locations must be within California, and must be in a public building that is freely accessible to the public. Locations that are not in public buildings and/or that are not freely accessible to the public, such as hotels and convention centers, may not be used as remote conferencing locations.
10. The only location that can be used for regular Board or committee meetings in San Francisco is the Air District's Beale Street location.
11. Security shall be provided at remote teleconferencing locations in a manner consistent with existing security policies at those locations. In the event that special circumstances may arise requiring additional security, Board members requesting to host remote teleconferencing locations and/or staff at those

locations will confer with the Chair and Vice Chair and Air District staff about any special arrangements that may be required to facilitate an effective meeting.

12. Board members must sign a written agreement committing to complying with all requirements established by the Board of Directors in this Remote Teleconferencing Meeting Policy.

This policy applies only to remote teleconferencing from noticed locations under Brown Act section 54953(b). It does not apply to any members participating in a meeting remotely under the "just cause" exception or other similar provisions authorizing participation from non-noticed locations under Brown Act sections 54953.8 *et seq*.

This policy may be reviewed by the Finance and Administration Committee periodically including the addition of procedures to address violations of the policy. The Committee may make recommendations to the Board of Directors to update or revise this policy as necessary to ensure the work of the Air District continues and statutory deadlines are met.

Bay Area Air District

Adoption of Proposed Policy Updates to Implement Recent Brown Act Changes and Improve Language Access and Public Accessibility

Board of Directors Meeting

June 3, 2026

Kimberly Leefatt, Civil Rights Officer
Alexander Crockett, General Counsel

Recommended Action

1. Adopt the proposed Broadcast Technology Disruption Policy effective July 1, 2026
2. Amend the Remote Teleconferencing Meeting Policy effective July 1, 2026

Summary of Relevant Senate Bill 707 Mandates

1. Translation Requirements

- The Board must translate agendas into languages where ≥20% of the "applicable population" speaks that language and speaks English less than “very well.”

  - ➢ No individual language group makes up ≥20% of Santa Clara County's population or the District's service area population

Summary of Relevant Senate Bill 707 mandates (cont.)

1. Translation Requirements

- The Air District's current *Plan for Language Services to Limited English Proficient Populations* uses lower thresholds for triggering translation requirements, making it exceed Senate Bill (SB) 707's requirements.

- Applying the language access plan, and based on the Legislature's findings that agendas are critical for an informed population, Board agendas can be considered Tier 1 documents (i.e. critical for access to public health information or access to programs or services)

    - Translate into Spanish, Chinese, Tagalog, Vietnamese, as resources allow

Summary of Relevant Senate Bill 707 mandates (cont.)

2. **Public Access Requirements**
   - Centralized public meetings webpage

3. **Webcasting Requirements**
   - Policy to address disruptions

Amendments to Remote Teleconferencing Meeting Policy

- Require remote locations to post all translated agendas, and provide space for public to post additional translations
- Requests to host remote locations must be made 16 days before meeting
  - Need additional time for translations
  - Cancellations must be made 8 days before meeting
- Remote locations must be in publicly accessible areas in public buildings
- Remote meetings must be within California
- Only one training required for remote location hosts (not annual)
- Photos of agenda postings not required – email confirmation only

New Broadcast Technology Disruption Policy

Disruption Procedures:

- Bay Area Headquarters Authority / Metropolitan Transportation Commission (BAHA/MTC) → notifies Clerk → notifies Chair
- BAHA/MTC assesses the cause of the disruption and makes efforts to resolve
- No open session items during disruption
- After 1 hour, open session items may be heard if Board/Committee finds:
  - "Good faith efforts" were made to restore services; and
  - The public interest in continuing the meeting outweighs the public interest in remote public access.
- If the Board/Committee does not make the findings specified in Section 5.4.2 above, it may only (i) take up closed session items; (ii) recess to wait for public telephonic and internet access to be restored; or (iii) adjourn the meeting

Summary of Changes & Next Steps

Administratively

- Begin translating Board meeting agendas consistent with language access plan as a Tier 1 document (Spanish, Chinese, Vietnamese, Tagalog, as resources allow)

Creation of Public Meetings Webpage

- Consolidate public participation procedures and notices here
- Include links to all agendas and relevant calendars
- Post procedures for making in-person or remote oral comments and written comments
- Post procedures for the public to request assistance with translating a meeting, and facilitating interpretation services
- Post procedures for posting additional translations provided by the public

Requires Board Action

- Adopt Broadcast Technology Disruption Policy
- Adopt Remote Teleconferencing Meeting Policy amendments

Recommended Action

1. Adopt the proposed Broadcast Technology Disruption Policy effective July 1, 2026
2. Amend the Remote Teleconferencing Meeting Policy effective July 1, 2026

Questions & Discussion

For more information:

Kimberly Leefatt | Civil Rights Officer | KLeefatt@baaqmd.gov