



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

BOARD OF DIRECTORS

MEETING

May 1, 2024

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 St.
San Francisco, CA 94105**

**Office of Contra Costa County
Supervisor John Gioia
Conference Room
11780 San Pablo Ave., Suite D
El Cerrito, CA 94530**

**Napa County Administration Building
Crystal Conference Room
1195 Third St., Suite 310
Napa, CA 94559**

**City of Palo Alto City Hall
Community Meeting Room
250 Hamilton Ave.
Palo Alto, CA 94301**

**Office of Alameda County
Supervisor David Haubert
4501 Pleasanton Ave.
Pleasanton, CA 94566**

**Office of Santa Clara County
Supervisor Otto Lee
East Wing, 10th Floor
70 W Hedding St.
San Jose, CA 95110**

**Santa Rosa Junior College Campus
Doyle Library, Room 148
1501 Mendocino Ave.
Santa Rosa, CA 95401**

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 www.baaqmd.gov/bodagendas.

Members of the public may participate remotely via Zoom at <https://bayareametro.zoom.us/j/89465089508>, or may join Zoom by phone by dialing (669) 900-6833 or (408) 638-0968. The Webinar ID for this meeting is: 894 6508 9508

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.

The Board welcomes comments, including criticism, about the policies, procedures, programs, or services of the 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 District is committed to maintaining a workplace free of unlawful harassment and is mindful that 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, MAY 1, 2024

10:00 AM

Chairperson, Davina Hurt

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

CONSENT CALENDAR (Items 4 - 14)

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.

4. Approval of the Draft Minutes of the Board of Directors Meeting of April 3, 2024

The Board of Directors will consider approving the draft minutes of the Board of Directors meeting of April 3, 2024.

5. Board Communications Received from April 3, 2024 to April 30, 2024

A copy of communications directed to the Board of Directors received by the Air District from April 3, 2024, through April 30, 2024, if any, will be distributed to the Board Members by way of email.

6. Notices of Violations Issued and Settlements in Excess of \$10,000 in the Month of March 2024

In accordance with Resolution No. 2012-08 the Board of Directors will receive a list of all Notices of Violations issued, and all settlements for amounts in excess of \$10,000, during the month of March 2024.

7. Transportation Fund for Clean Air 40% Fund Expenditure Plans for Fiscal Year Ending 2025

The Board of Directors will (i) consider approving the proposed allocation of the estimated new Transportation Fund for Clean Air (TFCA) revenue to each of the nine Administering Agencies for Fiscal Year Ending 2025 that will be funded by the 40% portion of the TFCA and (ii) consider authorizing the Executive Officer/APCO to enter into funding agreements with the Administering Agencies for these funds. Allocations are based on each county's proportionate share of vehicle registration fees collected and are passed through the Air District from the DMV to the Administering Agencies, to be used at their discretion within the bounds of the TFCA authorizing legislation.

8. Selection of Vehicle Buy Back Program Contractors

The Board of Directors will (i) consider approving contractors for the Air District's Vehicle Buy Back Program to provide vehicle dismantling services and direct mail services, and (ii) consider authorizing the Executive Officer/APCO to execute contracts with the vendors not to exceed a combined \$11.2 million per year. Over 90% of these funds will go to vehicle owners scrapping their 1998 and older vehicles (\$1,500 per vehicle). In 2023, nearly 80% of the vehicles scrapped were in the Air District's priority communities. The Vehicle Buy Back program remains highly popular among the public and is the most cost-effective incentive program at the Air District. In FYE 2025, it will be funded by the Transportation Fund for Clean Air, as approved by the Board in April, 2024.

9. Acceptance of Federal Highway Administration Funding

The Board of Directors will consider adopting a resolution accepting up to \$15 million from the Federal Highway Administration in Charging & Fueling Infrastructure program funding and authorizing the Executive Officer/APCO to expend those funds.

10. Authorization to Purchase Equipment from Sonoma Technology, Incorporated

The Board of Directors will consider authorizing the Executive Officer/APCO to procure an organic carbon/elemental carbon analyzer from Sonoma Technology, Incorporated (STI) for an amount not to exceed \$170,000, to be used for analyzing air monitoring and source-oriented samples.

11. Authorization to Execute a Contract Amendment with Kearns & West, Inc.

The Board of Directors will consider authorizing the Executive Officer/APCO to amend the contract with Kearns & West, Inc. for the Bay Air Center extending the term from June 30, 2024 to June 30, 2025, and increasing the maximum dollar amount of the contract by \$1,500,000, from \$1,013,000 to \$2,513,000 for services related to technical support for community organizations conducting air quality monitoring and data projects, and implementing the new refinery corridor particulate monitoring program.

12. Adoption of a Revised Reserves Policy

The Board of Directors will consider adopting a Revised Reserves Policy increasing economic contingency reserves to an allocation between a minimum of 25 percent and maximum of 35 percent of the General Fund Budget. The Finance and Administration Committee considered the Revised Reserves Policy on March 20, 2024 and recommended that the Board adopt the Revised Reserves Policy.

13. Report of the Finance and Administration Committee Meeting of April 17, 2024

The Board of Directors will receive a report of the Finance and Administration Committee meeting of April 17, 2024.

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

14. Report of the Community Equity, Health and Justice Committee Special Meeting of April 22, 2024

The Board of Directors will receive a report of the Community Equity, Health and Justice Committee Special meeting of April 22, 2024.

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

PUBLIC HEARING(S)

15. Public Hearing to Receive Testimony on Proposed Amendments to Air District Regulation 3: Fees

The Board of Directors will hold a public hearing to receive testimony on proposed amendments to the Air District's fee regulation, Regulation 3, that would apply beginning July 1, 2024. This will be the first of two public hearings before the Board considers adoption of the proposed amendments to Regulation 3; the second public hearing is scheduled for June 5, 2024. This item will be presented by Fred Tanaka, Manager, Engineering Division.

ACTION ITEM(S)

16. Community Emissions Reduction Plan for the Richmond, North Richmond, and San Pablo Path to Clean Air (PTCA) Area

The Board of Directors will consider adopting the PTCA Plan and approving the determination that adoption of the PTCA Plan is exempt from the California Environmental Quality Act (CEQA). This item will be presented by Diana Ruiz, Community Engagement Manager, and Wendy Goodfriend, Planning and Climate Protection Division Director.

17. Funding Community Benefits from Penalty Funds

The Board of Directors will consider adopting the Community Benefits Penalty Funds Policy. This policy is to allocate penalty funds for community benefits that would take effect upon adoption and be retroactive to the beginning of this fiscal year. This item will be presented by Greg Nudd, Deputy Executive Officer, Science and Policy.

18. State Legislative Bills Update

The Board of Directors will consider adopting the following position on a pending legislative bill, as recommended by staff.

- *Support Assembly Bill (AB) 2851 (Bonta) - Metal shredding facilities: fence-line air quality monitoring.*

This item will be presented by Alan Abbs, Legislative Officer.

OTHER BUSINESS

19. 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 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 District is committed to maintaining a workplace free of unlawful harassment and is mindful that 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.

20. Board Member Comments

Any member of the Board, or its staff, on his or her own initiative or in response to questions posed by the public, may: ask a question for clarification, make a brief announcement or report on his or her 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)

21. Report of the Executive Officer/APCO

22. Chairperson's Report

23. Time and Place of Next Meeting

Wednesday, June 5, 2024, at 10:00 a.m. at 375 Beale Street, San Francisco, CA 94105. The meeting will be in-person for the Board of Directors members and members of the public will be able to either join in-person or via webcast.

24. Adjournment

The Board meeting shall be adjourned by the Board Chair.

CONTACT:

MANAGER, EXECUTIVE OPERATIONS
375 BEALE STREET, SAN FRANCISCO, CA 94105
vjohnson@baaqmd.gov

(415) 749-4941
FAX: (415) 928-8560
BAAQMD 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 to which this Agenda relates 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, Suma Peesapati, at (415) 749-4967 or by email at spesapati@baaqmd.gov.

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

**EXECUTIVE OFFICE:
MONTHLY CALENDAR OF AIR DISTRICT MEETINGS**

MAY 2024

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Budget Hearing	Wednesday	1	9:00 a.m.	1st Floor Board 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, Temazcal Room
Board of Directors Community Equity, Health and Justice Committee	Wednesday	8	1:00 p.m.	1st Floor, Temazcal Room
Board of Directors Finance and Administration Committee	Wednesday	15	10:00 a.m.	1st Floor Board Room
Board of Directors Policy, Grants and Technology Committee	Wednesday	15	1:00 p.m.	1st Floor Board Room
Board of Directors Community Advisory Council Meeting	Thursday	16	6:00 p.m.	California State University East Bay Oakland Professional & Conference Center Trans Pacific Center 1000 Broadway, Suite 109 Oakland, CA 94607

MV 4/22/2024 – 6:51 p.m.

G/Board/Executive Office/Moncal

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Davina Hurt and Members
of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: May 1, 2024

Re: Approval of the Draft Minutes of the Board of Directors Meeting of April 3, 2024

RECOMMENDED ACTION

Approve the Draft Minutes of the Board of Directors Meeting of April 3, 2024.

BACKGROUND

None.

DISCUSSION

Attached for your review and approval are the Draft Minutes of the Board of Directors Meeting of April 3, 2024.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Marcy Hiratzka
Reviewed by: Vanessa Johnson

ATTACHMENTS:

1. Draft Minutes of the Board of Directors Meeting of April 3, 2024

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

Board of Directors Regular Meeting
Wednesday, April 3, 2024

DRAFT MINUTES

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

CALL TO ORDER

1. **Opening Comments:** Board of Directors (Board) Chairperson, Davina Hurt, called the meeting to order at 10:01 a.m.

Roll Call:

Present, In-Person (Bay Area Metro Center, 375 Beale Street, 1st Floor Board Room, San Francisco, California, 94105): Chairperson Davina Hurt; Vice Chairperson Lynda Hopkins; and Directors Margaret Abe-Koga, Ken Carlson, Noelia Corzo, Juan González III, Sergio Lopez, Katie Rice, and Shamann Walton.

Present, In-Person Satellite Location: (Palo Alto City Hall, 250 Hamilton Ave., Palo Alto, California, 94301): Directors Ray Mueller and Vicki Veenker.

Present, In-Person Satellite Location: (Office of Santa Clara County Supervisor Otto Lee, 70 W Hedding St, East Wing, 10th Fl., San Jose, California, 95110): Director Otto Lee.

Present, In-Person Satellite Location: (Office of Contra Costa County Supervisor John Gioia, 11780 San Pablo Ave., Suite D, Conference Room, El Cerrito, California, 94530): Directors John Gioia, Erin Hannigan, Mark Ross, and Steve Young.

Present, In-Person Satellite Location: (Napa County Administration Building, 1195 Third Street, Suite 310, Crystal Conference Room, Napa, California, 94559): Director Joelle Gallagher.

Present, In-Person Satellite Location: (San Ramon City Hall, 7000 Bollinger Canyon Rd., 2nd Floor Community Conference Room, San Ramon, California, 94583): Director David Hudson.

Present, In-Person Satellite Location: (Offices of Husch Blackwell Strategies, 733 10th Street, NW, Suite 900, Washington, DC, 20001): Director John J. Bauters.

Present, In-Person Satellite Location: (Santa Rosa Junior College, Doyle Library, 1501 Mendocino Avenue, Room 148, Santa Rosa, California, 95401): Director Brian Barnacle.

Absent: Directors David Haubert, Tyrone Jue, and Nate Miley.

2. **PLEDGE OF ALLEGIANCE**

3. **SPECIAL ORDERS OF THE DAY**

Chair Hurt welcomed the following new employees: Evelyn Romero, Assistant Air Quality Specialist II in Compliance & Enforcement; Benjamin Minkowski, Senior Staff Specialist in Finance; and Richard Chien, Advanced Projects Advisor in Planning and Climate Protection. Chair Hurt also announced that Aleah Zapf and Leif Halvorson were promoted to the role of Senior Air Quality Specialist in Compliance & Enforcement.

NOTED PRESENT: Director González was noted present at 10:05 a.m.; Directors Hannigan and Ross were noted present at 10:06 a.m.; and Director Mueller was noted present at 10:13 a.m.

CONSENT CALENDAR (ITEMS 4 – 17)

4. Approval of the Draft Minutes of the Board of Directors Meeting of March 6, 2024
5. Board Communications Received from March 6, 2024 through April 2, 2024
6. Notices of Violations Issued and Settlements in Excess of \$10,000 in the Month of February 2024
7. Quarterly Report of the Executive Office and Division Activities for the Months of October 2023 - December 2023
8. Public Hearing on Transportation Fund for Clean Air (TFCA) Projects Expenditures and Effectiveness for Fiscal Year Ending 2023
9. Authorization to Execute a Contract Amendment with Metropolitan Group, LLC
10. Authorization to Execute a Contract Amendment with Trinity Consultants for BioWatch Maintenance and Operations
11. Authorization to Execute IT Design Services Contracts with ePlus Technology, Inc. and CipherEx, Inc.
12. Report of the Advisory Council Meeting of March 1, 2024
13. Report of the Stationary Source Committee Meeting of March 13, 2024
14. Report of the Community Equity, Health, and Justice Committee Meeting of March 13, 2024
15. Report of the Finance and Administration Committee Meeting of March 20, 2024
16. Report of the Policy, Grants, and Technology Committee Meeting of March 20, 2024
17. Report of the Community Advisory Council Meeting of March 21, 2024

Public Comments

No requests received.

Board Comments

Chair Hurt gave an opportunity for the Board to discuss Item 8 (Public Hearing on Transportation Fund for Clean Air Projects Expenditures and Effectiveness for Fiscal Year Ending 2023), as it involved a public hearing that is legislative in nature. No Board members had comments regarding Item 8.

Board Action

Director González made a motion, seconded by Director Carlson, to **approve** Consent Calendar Items 4 – 17, inclusive; and the motion **carried** by the following vote of the Board:

AYES: Abe-Koga, Barnacle, Bauters, Carlson, Gallagher, Gioia, González, Hannigan, Hopkins, Hudson, Hurt, Lee, Lopez, Mueller, Rice, Ross, Veenker, Walton, Young.
NOES: None.
ABSTAIN: None.
ABSENT: Corzo, Haubert, Jue, Miley.

ACTION ITEMS

18. STATE LEGISLATIVE BILLS UPDATE

Alan Abbs, Legislative Officer, gave the staff presentation *State Legislative Bills Update*, including: outcome; outline; requested action; Policy, Grants, and Technology Committee recommendation and recent updates; Assembly Bill (AB) 2958 (Calderon); Senate Bill (SB) 1298 (Cortese); and requested action.

Public Comments

Public comments were given by Tim McRae, Silicon Valley Leadership Group; and Matt Regan, Bay Area Council.

Board Comments

The Board and staff discussed reasons not to oppose the bill, and the Air District’s concerns about the bill; whether the Air District has analyzed environmental impacts of renewable alternatives versus diesel generators, battery production and anticipated demand, whether natural gas is favorable over diesel fuel, and clean energy transition costs; the desire to adopt the position of “Oppose Unless Amended” and what the associated amendments might be; health impacts of emergency backup diesel generators, especially in addition to pre-existing (non-backup) diesel generators; whether an Air District regulation should be developed to prevent diesel fuel usage for this type of application; what outcomes could be anticipated from environmental reviews of backup power sources, without the proposed exemption, and the roles of jurisdictions with land use authority and the California Energy Commission; whether other public agencies given their positions on SB 1298; whether there is an anticipated number of data center projects in the pipeline, or just a general trend expectation regarding the expansion of data center infrastructure; whether there would be enough time for the Board to discuss this issue again in May 2024, given legislative deadlines; and Bay Area geographic distribution of data centers and trends.

NOTED PRESENT: Director Corzo was noted present at 11:00 a.m.

Board Action

Director Gioia made a motion, seconded by Director Young, to **adopt** the position of OPPOSE UNLESS AMENDED for Senate Bill 1298 (Cortese), unless the following amendments noted in the bill text below in **bold** is accepted by the author:

SECTION 1. Section 25541 of the Public Resources Code is amended to read:

25541. The commission may exempt from this chapter ~~thermal~~ both of the following:

(a) Thermal powerplants with a generating capacity of up to 100 megawatts and modifications to existing generating facilities that do not add capacity in excess of 100 megawatts, if the commission finds that no substantial adverse impact on the environment or energy resources will result from the construction or operation of the proposed facility or from the modifications.

*(b) Thermal powerplants, **except for thermal powerplants using diesel generators**, with a generating capacity of up to 200 megawatts that are used solely as emergency backup generating facilities for a data center and that are not interconnected with the electrical transmission grid for purposes of exporting electricity, if the commission finds that no substantial adverse impact on the environment or energy resources will result from the construction or operation of the proposed data center.*

The motion **carried** by the following vote of the Board:

AYES: Abe-Koga, Barnacle, Corzo, Gallagher, Gioia, González, Hannigan, Hopkins, Hurt, Lopez, Rice, Ross, Veenker, Walton, Young.
NOES: Carlson, Hudson, Mueller.
ABSTAIN: Bauters, Lee.
ABSENT: Haubert, Jue, Miley.

Director Carlson made a motion, seconded by Director Gioia, to **adopt** the position of SUPPORT for Assembly Bill 2958 (Calderon); and the motion **carried** by the following vote of the Board:

AYES: Abe-Koga, Barnacle, Bauters, Carlson, Corzo, Gallagher, Gioia, González, Hannigan, Hopkins, Hudson, Lee, Lopez, Rice, Ross, Veenker, Walton, Young.
NOES: Mueller.
ABSTAIN: Hurt.
ABSENT: Haubert, Jue, Miley.

19. **AIR DISTRICT BOARD MEMBER COMPENSATION POLICY DISCUSSION**

Mr. Abbs gave the staff presentation *Air District Board Member Compensation Policy Discussion*, including: outcome; outline; requested action; AB 2522 (Carrillo); current statute (Health and Safety Code §40227); Recommended Action #1; Recommended Action #2; and recap of requested action.

Public Comments

No requests received.

Board Comments

The Board and staff discussed the differences between the current compensation structures of the Board members of the South Coast and Bay Area Air Quality Management Districts; whether the term “equity considerations” refers to pay disparity between county supervisors and city councilmembers; whether Board member compensation should be increased while Air District fees are being increased, and given the status of the anticipated 2024 California budget deficit; challenges with the “per day” model; the reason that Air District staff is seeking the Board’s input on the compensation of another air district’s Board; and whether the Board may change the Board member compensation policy in the Air District’s Administrative Code, should the bill be amended to include the Bay Area Air Quality Management District’s Board compensation, and be passed.

Board Action

Director Veenker made a motion, seconded by Director Walton, to do the following:

- a) **Approve** the Air District's participation in AB 2522 (Carrillo), to provide amendments to that bill that would align the Air District's board member compensation provisions in the Health and Safety Code with the bill's proposed amendments to the South Coast Air Quality Management District's board member compensation provisions.
- b) **Direct staff to** initiate a review of the Air District's Administrative Code provisions on Board Member compensation to evaluate equity considerations with respect to how Board members are compensated for their service on the Board of Directors.

The motion **carried** by the following vote of the Board:

AYES: Barnacle, Carlson, Corzo, González, Hannigan, Hopkins, Hudson, Lopez, Rice, Ross, Veenker, Walton, Young.
NOES: Bauters, Gallagher, Gioia, Hurt, Lee, Mueller.
ABSTAIN: None.
ABSENT: Abe-Koga, Jue, Haubert, Miley.

20. UPDATES TO THE AIR DISTRICT'S INCIDENT RESPONSE PROGRAM

Dr. Meredith Bauer, Deputy Executive Officer of Engineering and Compliance, and Dr. Kate Hoag, Assistant Meteorology and Measurement Manager, gave the staff presentation *Updates to the Air District's Incident Response Program and Recommended Action to Fund Enhanced Monitoring*, including: outcome; outline; requested action; Incident Response Program scope; recap of Incident Response Ad Hoc Committee; improving coordination; improving communications; improving air monitoring: new program (Proposed Refinery Corridor Particulate Monitoring Program); additional monitoring measures to prioritize; future directions; and recommended action.

Public Comments

Public comments were given by Sara Theiss, Richmond resident; Jan Warren, Interfaith Climate Action Network of Contra Costa County; Kathy Kerridge, Benecia resident; Marilyn Bardet, Benecia resident; Ken Szutu, Citizen Air Monitoring Network of Vallejo; Heidi Taylor, Healthy Martinez: A Refinery Accountability Group; and Jan Callaghan, Rodeo Citizens Association.

Board Comments

The Board and staff discussed the Board and community's desire for more adequate incident monitoring; fenceline communities' appreciation for this program, and hope that it is effective; appreciation for the Board's Incident Response Ad Hoc Committee for its involvement in this program; and the fact that county warning and notification systems may be better suited to alert the public of incidents than the Air District.

Board Action

Director Gioia made a motion, seconded by Director Hannigan, to **approve** the the Incident Response, Coordination, and Communications Framework and **approve** the proposed Refinery Corridor Particulate Monitoring Program, using funding from budget reserves that were designated for enhanced incident response in the Fiscal Year Ending 2024 Board approved budget; the motion **carried** by the following vote of the Board:

- AYES: Barnacle, Bauters, Carlson, Corzo, Gallagher, Gioia, González, Hannigan, Hopkins, Hudson, Hurt, Lee, Lopez, Mueller, Rice, Ross, Veenker, Walton, Young.
- NOES: None.
- ABSTAIN: None.
- ABSENT: Abe-Koga, Haubert, Jue, Miley.

OTHER BUSINESS (OUT OF ORDER)

21. PUBLIC COMMENT ON NON-AGENDA MATTERS (ITEM 22)

Public comments were given by Sara Theiss, Richmond resident.

22. BOARD MEMBER COMMENTS (ITEM 23)

Director Hudson requested that the Air District monitor the required electrification of Newport Beach’s Balboa Island Ferry fleet, which has been granted \$7.9 million. The California Air Resource Board (CARB) passed regulations that require the Ferry to renovate all three of its vessels with electric motors by 2026. For the past year, the ferry has applied for multiple sources of funding offered by grant programs through CARB, including the Advanced Technology Demonstration and Pilot Project Program, in order to accomplish electrification goals. The Ferry worked through the South Coast Air Quality Management District (SCAQMD) to submit the application.

Director Bauters announced that he will be departing from the Board, effective April 13, 2024, and he thanked the Board and staff for their work and support since he joined six years ago.

23. REPORT OF THE EXECUTIVE OFFICER / AIR POLLUTION CONTROL OFFICER (APCO) ITEM 24)

Dr. Philip M. Fine, Executive Officer/APCO, announced that Miram Torres, Senior Advanced Projects Advisor in the Executive Office, will be serving as Acting Deputy Executive Officer of Equity and Community Programs until that position is permanently filled (anticipated to occur in June 2024.) He also thanked Marcia Raymond, Assistant Counsel, for having taken on that role for several months, prior to Ms. Torres assuming the role.

24. CHAIRPERSON’S REPORT (ITEM 25)

Chair Hurt made the following announcements:

- On January 22, 2024, San Francisco Mayor London Breed reappointed herself and Tyrone Jue to serve another two-year term on the Air District’s Board, expiring January 22, 2026.

- City of Hayward Mayor, Mark Salinas, will join the Board, effective April 13, 2024, and will attend his first Board meeting on May 1, 2024.
- Young Black Climate Leaders is launching a funding opportunity that supports Black youth as leaders contributing to climate justice and innovation. Applications are available through April 5, 2024 at <https://www.climateinnovation.net/ybcl>
- Chair Hurt attended Acterra’s community-building event, “Promise to Our Planet,” on March 21, centered around a call to action for changemakers who play a part in reaching the positive tipping point in climate change.
- Chair Hurt attended the 3rd Annual California Climate Policy Summit in Sacramento on March 19, as a panelist regarding California Refineries: Obstacles and Challenges to Full Decommissioning.

25. TIME AND PLACE OF NEXT MEETING (ITEM 26)

Wednesday, May 1, 2024, at 10:00 a.m. at 375 Beale Street, San Francisco, CA 94105. The meeting will be in-person for the Board of Directors members and members of the public will be able to either join in-person or via webcast.

CLOSED SESSION (12:25 p.m.)

26. CONFERENCE WITH LEGAL COUNSEL RE ANTICIPATED LITIGATION (GOVERNMENT CODE SECTIONS 54956.9(a) AND (d)(2)) (ITEM 21)

Pursuant to Government Code sections 54956.9(a) and (d)(2), the Board of Directors met in Closed Session with Legal Counsel to discuss significant exposure to litigation regarding a claim of Environmental Democracy Project.

Reportable Action: Alexander Crockett, General Counsel, had nothing to report.

OPEN SESSION (12:44 p.m.)

At 12:44 p.m., the Board returned from Closed Session, but the remote teleconferencing location of 7000 Bollinger Canyon Rd., 2nd Floor Community Conference Room, San Ramon, California, 94583 was no longer open to the public, requiring adjournment of the meeting.

27. ADJOURNMENT

The meeting was adjourned at 12:57 p.m.

Marcy Hiratzka
Clerk of the Boards

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Davina Hurt and Members
of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: May 1, 2024

Re: Board Communications Received from April 3, 2024 to April 30, 2024

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

None.

DISCUSSION

Copies of communications directed to the Board of Directors received by the Air District from April 3, 2024, through April 30, 2024, 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: Michelle Beteta
Reviewed by: Vanessa Johnson

ATTACHMENTS:

None

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Davina Hurt and Members
of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: May 1, 2024

Re: Notices of Violations Issued and Settlements in Excess of \$10,000 in the Month of
March 2024

RECOMMENDED ACTION

None; receive and file.

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 amounts of civil penalties are collected and recorded in the Air District's General Fund.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Alexander G. Crockett

ATTACHMENTS:

1. Notices of Violations Issued and Settlements in Excess of \$10,000 in the Month of March 2024

NOTICES OF VIOLATION(S) ISSUED

The following Notice(s) of Violation(s) were issued in March 2024:

Alameda						
Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comment
Tesla, Inc.	A1438	Fremont	A63041A	3/7/24	2-6-307	Title V Requirement/Permit Condition Violation
Tesla, Inc.	A1438	Fremont	A63042A	3/7/24	2-6-307	Title V Requirement/Permit Condition Violation
Tesla, Inc.	A1438	Fremont	A63043A	3/7/24	2-6-307	Title V Requirement/Permit Condition Violation
Tesla, Inc.	A1438	Fremont	A63044A	3/7/24	2-6-307	Title V Requirement/Permit Condition Violation
Tesla, Inc.	A1438	Fremont	A63045A	3/14/24	2-6-307	Title V Requirement/Permit Condition Violation
Tesla, Inc.	E2881	Fremont	A63046A	3/21/24	2-1-307	Permit Requirement/Condition Violation
Tesla, Inc.	A1438	Fremont	A63048A	3/27/24	2-6-307	Title V Requirement/Permit Condition Violation
Vasco Road Landfill	A5095	Livermore	A59766A	3/28/24	2-6-307	Title V Requirement/Permit Condition Violation

Contra Costa						
Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comment
Chevron Products Company	A0010	Richmond	A56297A	3/21/24	8-8-315	Wastewater Collection and Separation Systems Violation
FTG Construction Materials, Inc	S756109	Antioch	A60764A	3/6/24	2-1-301	No Authority to Construct and No Permit to Operate
FTG Construction Materials, Inc.	S756109	Antioch	A60764B	3/6/24	2-1-302	No Authority to Construct and No Permit to Operate
Future Ford of Concord	C0352	Concord	A60693A	3/5/24	8-7-302.5	Gas Dispensing Facility Violation
Future Ford of Concord	S756447	Concord	A60694A	3/14/24	8-7-301.1	Gas Dispensing Facility Violation
Green Waste Recycle Yard	E4037	Richmond	A62691A	3/18/24	2-1-301	No Authority to Construct and No Permit to Operate
Green Waste Recycle Yard	E4037	Richmond	A62691B	3/18/24	2-1-302	No Authority to Construct and No Permit to Operate
Holland Brooks Builders Inc.	S757219	Concord	A62660A	3/29/24	11-2-401.5	Asbestos Violation
Martinez Refining Company LLC	A0011	Martinez	A58116A	3/27/24	8-5-305.5	Storage Tank Violation
Martinez Refining Company LLC	A0011	Martinez	A63158A	3/18/24	10	Code of Federal Regulation Violation
Oak Grove Shell	C9851	Concord	A60695A	3/19/24	8-7-301.5	Gas Dispensing Facility Violation
Oak Grove Shell	C9851	Concord	A60696A	3/28/24	8-7-301.5	Gas Dispensing Facility Violation
Phillips 66 Company - San Francisco Refinery	A0016	Rodeo	A61539A	3/18/24	2-6-307	Title V Requirement/Permit Condition Violation
Phillips 66 Company - San Francisco Refinery	A0016	Rodeo	A62214A	3/11/24	9-9-301.3	Turbine NOx or CO Violation

Phillips 66 Company - San Francisco Refinery	A0016	Rodeo	A62215A	3/11/24	9-9-301.3	Turbine NOx or CO Violation
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San Francisco						
Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comment
San Francisco International Airport	A1784	San Francisco	A62890A	3/12/24	2-6-307	Title V Requirement/Permit Condition Violation

San Mateo						
Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comment
Car Max #6080 - Colma	S700446	Colma	A62272A	3/7/24	2-1-307	Permit Requirement/Condition Violation
Cypress Amloc Land Co. Inc.	A1364	Colma	A60962A	3/14/24	8-34-301.1	Landfill Violation
Cyress Lawn Memorial Park	C9040	Colma	A62273A	3/21/24	8-7-301.2	Gas Dispensing Facility Violation

Santa Clara						
Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comment
City of Santa Clara	A3464	Santa Clara	A64208A	3/7/24	8-34-301.1	Landfill Violation
F & F Steel & Stairway Inc.	A5149	San Jose	A64209A	3/14/24	2-1-307	Permit Requirement/Condition Violation
Kirby Canyon Recycling and Disposal Facility	A1812	Morgan Hill	A59799A	3/20/24	8-34-301.1	Landfill Violation
Reco Gas and Minimart	C6186	San Jose	A63134A	3/26/24	2-1-307	Permit Requirement/Condition Violation

Spartan Station	C4239	San Jose	A62911A	3/25/24	2-1-307	Permit Requirement/Condition Violation
USA Touch Up Auto Body Inc.	E1834	San Jose	A64210A	3/28/24	2-1-307	Permit Requirement/Condition Violation
USA Touch Up Auto Body Inc.	E1834	San Jose	A64211A	3/28/24	2-1-307	Permit Requirement/Condition Violation

Solano						
Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comment
Valero Refining Company - California	B2626	Benicia	A57835A	3/20/24	8-5-304.4	Storage Tank Violation
Valero Refining Company - California	B2626	Benicia	A57836A	3/20/24	8-5-322.5	Storage Tank Violation
Valero Refining Company - California	B2626	Benicia	A57836B	3/20/24	8-5-320.5	Storage Tank Violation
Valero Refining Company - California	B2626	Benicia	A62805A	3/12/24	1-301	Public Nuisance Violation
Valero Refining Company - California	B2626	Benicia	A62806A	3/12/24	1-522.4	Continuous Emissions Monitor Violation

Sonoma						
Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comment
Republic Services of Sonoma County, Inc.	A2254	Petaluma	A62480A	3/6/24	2-6-307	Title V Requirement/Permit Condition Violation

SETTLEMENTS FOR \$10,000 OR MORE REACHED

There were 4 settlements for \$10,000 or more completed in March 2024.

- 1) On March 7, 2024, the Air District reached a settlement with AAK USA Richmond for \$99,535, regarding the allegations contained in the following 5 Notices of Violations:

NOV #	Issuance Date	Occurrence Date	Regulation	Comments from Enforcement
A58799A	3/29/2022	1/1/2020	9-7-307	Boiler Emissions Violation
A58799B	3/29/2022	1/1/2020	9-7-506	Boiler Emissions Violation
A58800A	3/29/2022	1/1/2020	9-7-307	Boiler Emissions Violation
A61732A	7/5/2022	8/24/2021	2-1-307	Permit Requirement/Condition Violation
A61746A	2/16/2023	10/5/2022	2-1-307	Permit Requirement/Condition Violation
A61747A	2/16/2023	10/6/2022	2-1-307	Permit Requirement/Condition Violation

- 2) On March 11, 2024, the District reached settlement with City of Sunnyvale Water Pollution Control for \$30,000, regarding the allegations contained in the following 1 Notice of Violation:

NOV #	Issuance Date	Occurrence Date	Regulation	Comments from Enforcement
A58384A	7/16/2021	1/11/2021	8-34-301.4	Landfill Violation
A58384B	7/16/2021	1/11/2021	2-6-307	Title V Requirement/Condition Violation

- 3) On March 11, 2024, the District reached settlement with Los Gatos Memorial Park for \$30,000, regarding the allegations contained in the following 1 Notice of Violation:

NOV #	Issuance Date	Occurrence Date	Regulation	Comments from Enforcement
A61634A	9/29/2022	12/1/2020	2-1-307	Permit Requirement/Condition Violation

4) On March 15, 2024, the District reached settlement with Contra Costa County for \$15,000, regarding the allegations contained in the following 3 Notices of Violations:

NOV #	Issuance Date	Occurrence Date	Regulation	Comments from Enforcement
A60786A	7/27/2022	7/30/2020	2-1-307	Permit Requirement/Condition Violation
A60787A	7/27/2022	7/31/2020	2-1-307	Permit Requirement/Condition Violation
A60788A	7/27/2022	7/30/2020	2-1-307	Permit Requirement/Condition Violation

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Davina Hurt and Members
of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: May 1, 2024

Re: Transportation Fund for Clean Air 40% Fund Expenditure Plans for Fiscal Year
Ending 2025

RECOMMENDED ACTION

1. Approve the proposed allocation of the estimated new Transportation Fund for Clean Air (TFCA) revenue to each of the nine Administering Agencies for Fiscal Year Ending (FYE) 2025 that will be funded by the 40% portion of the TFCA, as listed in Column A of Table 1; and
2. Authorize the Executive Officer/APCO to enter into funding agreements with the Administering Agencies for TFCA revenues that will be paid for by the 40% portion of the TFCA to be programmed in FYE 2025 as listed in Column C of Table 1.

BACKGROUND

In 1991, the California State Legislature authorized the California Department of Motor Vehicles (DMV) to impose a \$4 surcharge on motor vehicles registered within the nine-county Bay Area to fund projects that reduce on-road motor vehicle emissions within the Air District’s jurisdiction. The legislative requirements that enable the use of the funds are codified in California Health and Safety Code (HSC) Sections 44241 through 44242.

Forty percent (40%) of new TFCA revenue is passed through to the designated Administering Agency in each of the nine counties within the Air District’s jurisdiction based on each county’s proportionate share of vehicle registration fees collected. As these are pass-through funds, the county Administering Agencies have discretion over these funds within the bounds set by the TFCA authorizing legislation. The Air District’s role is to calculate and pass through the funds, and later to coordinate an audit of funds expended. The Air District awards the remaining sixty percent (60%) to eligible projects and programs it implements directly (e.g., Spare the Air) and to the TFCA Regional Fund program.

Pursuant to HSC Section 44241, Administering Agencies must award TFCA funds to eligible projects within six months of the Air District Board of Directors’ approval of their expenditure plans. Annually, Administering Agencies submit expenditure plans to the Air District specifying the status of their prior-year funding that is available for reprogramming and interest accrued. The Board adopted the policies and cost-effectiveness criteria for expenditure of the TFCA 40% Fund for FYE 2025 on November 1, 2023.

DISCUSSION

The Air District received the proposed expenditure plans from all nine Administering Agencies. Table 1 shows the TFCA monies that are estimated to be available to the Administering Agencies in FYE 2025.

- Column A shows the new revenue projected to accrue from the DMV revenue from each county’s proportionate share of vehicle registration fees.
- Column B shows the reconciliation of the difference between prior-year estimate and actual revenue, and TFCA carry-over funds available for reprogramming as reported by Administering Agencies in their expenditure plans. Carry-over funds include TFCA monies from projects that were recently completed under budget and/or canceled, and any interest earned.
- Column C shows total amount of TFCA funds that are estimated to be available to Administering Agencies in FYE 2025 (sum of values in columns A and B).

	A	B	C
Administering Agency	Estimated New TFCA Revenue	Reconciliation & Reprogrammed TFCA Funds	Estimated Total FYE 2025 TFCA Funds
Alameda County Transportation Commission	\$1,953,500	\$1,251,212	\$3,204,712
Contra Costa Transportation Authority	\$1,555,700	\$285,590	\$1,841,290
Transportation Authority of Marin	\$353,300	\$19,487	\$372,787
Napa Valley Transportation Authority	\$200,700	\$5,466	\$206,166
San Francisco County Transportation Authority	\$708,500	(\$18,276)	\$690,224
San Mateo City/County Association of Governments	\$1,044,800	\$647,681	\$1,692,481

Santa Clara Valley Transportation Authority	\$2,437,700	\$122,613	\$2,560,313
Solano Transportation Authority	\$340,500	(\$11,722)	\$328,778
Sonoma County Transportation Authority	\$631,500	\$33,638	\$665,138
TOTAL	\$9,226,200	\$2,335,689	\$11,561,889

BUDGET CONSIDERATION/FINANCIAL IMPACT

TFCA revenue is generated from DMV registration fees collected and 40% of the TFCA funds are passed through to the Administering Agencies. Administrative costs for the Administering Agencies and the Air District are reimbursed by TFCA program revenue.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Hannah Cha
Reviewed by: Linda Hui, Minda Berbeco, and Karen Schkolnick

ATTACHMENTS:

None.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Davina Hurt and Members
of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: May 1, 2024

Re: Selection of Vehicle Buy Back Program Contractors

RECOMMENDED ACTION

The Board of Directors will consider:

1. Approving the selection of Environmental Engineering Studies, Inc. (EES) and Pick-N-Pull Auto Dismantlers (Pick-N-Pull) as the vehicle retirement contractors, and Lineage Connect as the direct mail service contractor for the Vehicle Buy Back Program (VBB); and
2. Authorizing the Executive Officer/APCO to execute contracts for a three-year term (evaluated annually), contingent upon available budgeted funds and contractor's performance for:
 - a. Vehicle scrapping and related services with EES and Pick-N-Pull, for a combined total cost not to exceed \$11 million per year; and
 - b. Direct mail services with Lineage Connect, for a total cost not to exceed \$200,000 per year.

BACKGROUND

The Vehicle Buy Back (VBB) program is one of the Air District's most cost-effective incentive programs for reducing air pollution emitted from mobile sources. This voluntary vehicle retirement program works by taking the oldest, most high-polluting vehicles permanently off Bay Area roads. For a vehicle to be eligible for the program, it must meet operability and registration requirements – including a passed smog check – to establish that the vehicle, if not scrapped, could continue to operate, and pollute. By providing vehicle owners with a financial incentive to scrap the vehicle before it would otherwise be retired, the program captures what would have been the remaining life of the vehicle as excess emissions.

Since beginning operation in 1996, the Air District's VBB program has retired over 95,000 vehicles and reduced over 5,000 tons of reactive organic gas (ROG), over 4,300 tons of nitrogen oxide (NOx), and over 39 tons of particulate matter (PM). Currently, the VBB program offers \$1,200 to Bay Area vehicle owners to scrap their operable, registered model year 1998 or older motor vehicles.

The incentive paid to participants in the VBB program historically has been supported by funding sources including the Carl Moyer Program, Mobile Source Incentive Fund (MSIF), and Transportation Fund for Clean Air (TFCA). Participation rates have fluctuated over the years with a high of approximately 7,000 cars scrapped annually and a more recent low of just over 1,200. In 2012, the program was temporarily paused to not compete with the federal program, Cash for Clunkers. In the past few years, the participation rate has been hampered by limits in the Carl Moyer guidelines that have been used to determine model year eligibility and the amount of money that can be paid as an incentive to participants. Participation also varies by county proportional to the number of cars registered in that county, except San Francisco, Alameda and Santa Clara Counties, which all have slightly higher levels of participation.

To implement the program, the Air District contracts with vehicle dismantlers who conduct outreach, pay eligible participating vehicle owners at the time the vehicle is surrendered, and scrap (crush and recycle) vehicles. The Air District also contracts with a mail house that provides direct mail services to inform potentially eligible vehicle owners about the program. The mail house uses information from the California Department of Motor Vehicles' (DMV) database to contact the owners of older light-duty vehicles that may be eligible for the program. Based on the number of vehicles that are potentially eligible, up to 120,000 letters are mailed out each year. Mailings are conducted bi-monthly, with potentially eligible vehicle owners receiving notice of the program approximately three months prior to the expiration of their DMV registration. In addition, Air District staff also promote the program annually via radio and TV spots and social media ads such as Facebook and LinkedIn.

DISCUSSION

The Air District issued two Requests for Proposals (RFP): a non-competitive RFP on February 9, 2024, seeking vehicle retirement contractors, and a competitive RFP on December 8, 2023, seeking a direct mail service provider. Responses to the RFPs were due to the Air District on March 1, 2024, for the vehicle retirement contractors, and February 6, 2024, for the direct mail services.

Non-Competitive RFP for Vehicle Retirement Contractors

The RFP was sent to over 100 companies from a list of general contacts and to 34 California dismantlers. The RFP was also posted on the Air District's website. The Air District sought to contract with all vendors who met the basic eligibility requirements in order to provide the maximum coverage and opportunities for Bay Area residents to participate in this program. Therefore, this RFP was non-competitive, allowing for all eligible vendors to apply and participate. The Air District received two proposals in response to the RFP: one from Environmental Engineering Studies, Inc. (EES) and the other from Pick-N-Pull. Each of these companies is associated with multiple dismantling yards. Pick-N-Pull has seven dismantling yards in the following Bay Area cities: American Canyon, Fairfield, Newark, Oakland, Richmond, San Jose, Windsor. EES subcontracts with eight independent vehicle dismantlers in the Bay Area with dismantling yards in the following eight cities: East Palo Alto, Pittsburg, Richmond, San Francisco, San Leandro, Santa Clara, San Jose, and Santa Rosa.

A three-person panel of Air District staff was convened to review the responses and evaluate proposals using the seven criteria set forth in the RFP: past experience; resources available to assist prospective participants; geographic distribution of scrapping sites; overhead price; effectiveness of their advertising plan; understanding of the VBB program and responsiveness of the proposal; and whether the dismantler is a local or certified green business. The results of the Air District staff's scoring of the proposals are summarized in Table 1 below.

Table 1 – Scoring of Vehicle Retirement Contractor Proposals

Name	Total (100)	Experience (25)	Resources (25)	Coverage (10)	Price (20)	Advertising (5)	Compre- hension (10)	Local/ Green (5)
Pick-N-Pull	96.3	24	25	10	20	5	9.3	3
EES	85.7	22.3	21.7	9	16	3.7	10	3

EES scored lower primarily due to its higher overhead cost and fewer staff available to devote to the VBB program. Factors contributing to the higher overhead cost are: 1) record low scrap metal prices, 2) increased vehicle processing fees, and 3) fees it pays to its subcontractors (participating dismantling yards).

Both EES and Pick-N-Pull have experience successfully operating and providing dismantler services for the Air District's VBB program. To maximize the number of available locations and geographical distribution of vehicle buy-back sites in the Bay Area, staff recommends the approval of both EES and Pick-N-Pull as contractors for this program.

Direct mail service contractor RFP

Direct mail service for the VBB program involves mailing vehicle owners bi-monthly to inform them of the program in advance of the date their annual smog check is due. The RFP was sent to over 100 companies from a list of general contacts and to 14 direct mail service providers. It was also posted on the Air District website. The Air District received nine proposals in response to the RFP. One proposal was rejected based on their failure to submit their proposal in the required format.

The remaining eight proposals were reviewed and scored by a three-person panel. The panel evaluated the proposals using five criteria set forth in the RFP: expertise to complete the work, past experience, responsiveness of the proposal/approach, cost, and whether the company is a local or certified green business. Evaluation of costs involved a review of quotes for data management, letter and envelope production, and standard mail bulk-rate postage fees.

Lineage Connect’s proposal scored the highest (See Table 2). Although Lineage Connect is located in Kansas City, Missouri, it has the lowest cost, has previously worked with governmental agencies, and has demonstrated expertise and skills to successfully perform this work.

Table 2 – Scoring of Direct Mail Services Proposals

Name	Total* (100)	Expertise (30)	Experience (10)	Approach (10)	Cost (40)	Local/ Green (10)
Lineage Connect	87	27.7	9.3	10	40	0
Direct Mail Center	85.3	30	10	9	31.3	5
KP LLC	85	30	9.3	6.3	29.3	10
Pro Document Solutions	80.7	30	10	7.3	33.3	0
We Mail For You Inc	75.3	25.7	9	8	32.7	0
AFTS	68	19	5	8.7	35.3	0
Doxim	68	30	9.3	7.3	21.3	0
Advantage Mailing LLC	61	23.3	8	8.3	21.3	0

*Totals may vary due to rounding.

Program Enhancements

The VBB program currently offers participants \$1,200 to early-retire their 1998 and older light-duty cars and trucks. This is the maximum amount that is allowed by the Carl Moyer guidelines. On April 3, 2024, the Air District Board of Directors approved a recommendation to set a maximum cost-effectiveness limit of \$50,000/ton of emissions reduced for this program and increase the amount of TFCA funds up to \$11.36 million in FYE 2025. Based on these Board-adopted limits, the incentive amount may be raised to up to \$2,000/per vehicle and pending the Board’s approval of the new contracts with vehicle dismantlers would be effective July 1, 2024.

With this change, staff are anticipating an increase in participation. Staff will also be monitoring the results monthly and evaluating options for expanding the eligible model year to include newer vehicles and for adding motorcycles to the program. Alongside these changes, staff will work to broadcast the program more widely through television, radio, and social media and conventional advertising to increase participation.

Staff will also be working over the coming year with CARB to make updates to the Carl Moyer Guidelines, with the hope of being able to later shift costs back to Carl Moyer and/or MSIF.

BUDGET CONSIDERATION/FINANCIAL IMPACT

The costs associated with the FYE 2025 VBB program in the amount of up to \$11 million for dismantling services by EES and Pick-N-Pull, and up to \$200,000 for mail services by Lineage Connect, are included in the Air District's FYE 2025 budget. Future service costs will be budgeted appropriately in the ordinary course of the Air District's annual budget process.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Jason Newman
Reviewed by: Minda Berbeco and Linda Hui

ATTACHMENTS:

1. Original Executed Contract No. 2020.121: Environmental Engineering Studies, Inc.
2. Contract No. 2020.121 - Amendment 4: Environmental Engineering Studies, Inc.
3. Original Executed Contract No. 2020.120: Pick n Pull Auto Dismantlers
4. Contract No. 2020.120 - Amendment 4: Pick n Pull Auto Dismantlers
5. Original Executed Contract No. 2020.119: Direct Mail Center, Inc.
6. Contract No. 2020.119 - Amendment 3: Direct Mail Center, Inc.
7. Draft Proposed Contract No. 2024.069: Pick n Pull Auto Dismantlers
8. Draft Proposed Contract No. 2024.071: Environmental Engineering Studies, Inc.
9. Draft Proposed Contract No. 2024.074: Lineage Connect

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

PROFESSIONAL SERVICES CONTRACT

CONTRACT NO. 2020.121

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 **Environmental Engineering Studies, Inc.** (“CONTRACTOR”) whose address is 310 Via Vera Cruz, Suite 203, San Marcos, CA 92078.

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. CONTRACTOR has been selected as one of two contractors authorized to scrap vehicles under the DISTRICT’s Vehicle Buy Back (VBB) Program beginning fiscal year 2021. The DISTRICT’s Board of Directors has authorized DISTRICT to spend up to \$7 million to scrap vehicles using funds from the Carl Moyer Program, Mobile Source Incentive Fund, and Transportation Fund for Clean Air.
 - C. DISTRICT has not allocated specific amounts separately to each contractor and will expend funds for scrapping as invoices are received under this Contract and under contracts with other authorized VBB contractors.
 - D. 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 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 paragraph D

above.

4. TERM – The term of this Contract is from July 1, 2020 to June 30, 2021, unless further extended by amendment of this Contract in writing, 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, 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 termination date.

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 to deduct the cost thereof from any payments owed to CONTRACTOR or to terminate this Contract for breach.

7. INDEMNIFICATION

- A. CONTRACTOR agrees to indemnify, defend, and hold harmless DISTRICT, its officers, employees, agents, representatives, and successors-in-interest against any and all liability, demands, claims, costs, losses, damages, recoveries, settlements, and expenses (including reasonable attorney fees) that DISTRICT, its officers, employees, agents, representatives, and successors-in-interest may incur or be required to pay arising from the death or injury of any person or persons (including employees of CONTRACTOR), or from destruction of or damage to any property or properties, caused by or connected with the performance of this Contract by CONTRACTOR, its employees, subcontractors, or agents.

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 the CONTRACTOR's Social Security Number or Federal Employer Identification Number; and shall be submitted to: Bay Area Air Quality Management District, 375 Beale Street, Suite 600, San Francisco, CA 94105, Attn: Mae Go, or via e-

mail to mgo@baaqmd.gov.

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 the sum derived by multiplying the number of vehicles scrapped under this Contract by the per vehicle price specified in Attachment B.

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 the sum derived by multiplying the number of vehicles scrapped under this Contract by the per vehicle price specified in Attachment B. 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. PST. 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: Damian Breen

CONTRACTOR: Environmental Engineering Studies, Inc.

310 Via Vera Cruz, Suite 203
San Marcos, CA 92078
Attn: Antoine Assioun

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. Future revisions to Appendix A, Vehicle Functional and Equipment Eligibility Inspection Form, Appendix B, Emission-Drive Train Related Parts List, and Appendix C, Quality Control Check List, adopted by the California Air Resources Board under the Voluntary Accelerated Vehicle Retirement regulations, California Code of Regulations, Title 13, Section 2601 et seq., shall supersede the Attachments C, D, and E in this Contract.
12. EMPLOYEES OF CONTRACTOR
- A. CONTRACTOR shall be responsible for the cost of regular pay to its employees, as well as cost of vacation, 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.
13. CONFIDENTIALITY – In order to carry out the purposes of this Contract, CONTRACTOR may require access to certain of DISTRICT’s confidential information (including information or data that identifies or describes an individual; 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 the above.

16. 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, Executive Order No. 11246 (30 Federal Register 12319), and all administrative rules and regulations issued pursuant to said Acts and Order. 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.

17. 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.
18. 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.
19. 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.
20. 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.
21. 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.
22. 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.
23. 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.
24. COUNTERPARTS/FACSIMILES/SCANS – This Contract may be executed and delivered in any

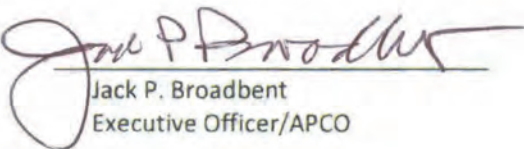
number of counterparts, each of which, when executed and delivered, shall be deemed an original, and all of which together shall constitute the same contract. The parties may rely upon a facsimile copy or scanned copy of any party's signature as an original for all purposes.

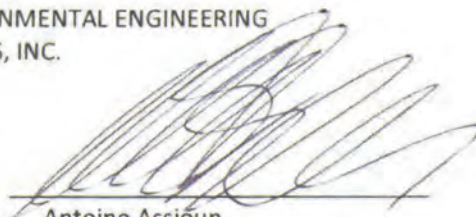
- 25. GOVERNING LAW – Any dispute that arises under or relates to this Contract shall be governed by California law, excluding any laws that direct the application of another jurisdiction's laws. Venue for resolution of any dispute that arises under or relates to this Contract, including mediation, shall be San Francisco, California.
- 26. 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.
- 27. 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.

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

ENVIRONMENTAL ENGINEERING
STUDIES, INC.

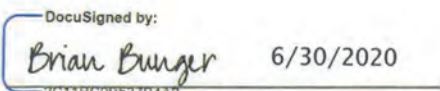
By: 
Jack P. Broadbent
Executive Officer/APCO

By: 
Antoine Assioun
Project Manager

Date: 7/1/20

Date: 6-26-2020

Approved as to form:
District Counsel

By: 
6/30/2020
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Brian C. Bungler
District Counsel

ATTACHMENT A

SCOPE OF WORK

The Scope of Work outlined in this section complies with the Voluntary Accelerated Light-Duty Vehicle Retirement (VAVR) Regulations adopted by the California Air Resources Board (ARB). Light-duty vehicle retirement projects are subject to the requirements of the Voluntary Accelerated Vehicle Retirement Regulation (VAVR Regulation), Cal. Code Regs., tit. 13, § 2601 et seq. Light and medium-duty vehicle projects funded through Assembly Bill (AB) 923 (2004) are authorized by Health and Safety Code Section 44229 (b)(4). CONTRACTOR's VAVR projects must be in compliance with all the applicable guidelines adopted by ARB. The ARB Carl Moyer Program Guidelines chapter on VAVR constitutes ARB's adopted guidelines for light-duty projects.

CONTRACTOR will solicit, purchase, and scrap eligible vehicles in compliance with the following requirements and procedures, and in compliance with the VAVR Regulations. DISTRICT will not reimburse CONTRACTOR for the purchase of a vehicle, or the overhead costs associated with that purchase, if such vehicle fails to meet the following requirements:

A. Vehicle Eligibility Requirements

1. Participation shall be entirely voluntary for vehicle owners.
2. The vehicle must meet the following criteria:
 - a. 1997 model year or older diesel or gasoline-powered passenger car or light-duty truck up to 10,000 pounds gross vehicle weight or less.
3. The vehicle must be currently registered with the California Department of Motor Vehicles (DMV) as an operating vehicle and must have been registered for at least 24 consecutive months prior to the date of the sale to CONTRACTOR as well as be registered to an address, or addresses, within the DISTRICT's jurisdiction. Smog Checks must be performed as required by DMV in order for the vehicle to be considered registered.
 - a. A vehicle may also be eligible if the owner of the vehicle placed the vehicle into planned non-operational status per Vehicle Code sections 4604 et seq., for up to two months during the 24-month registration period and occurring at least three months immediately prior to its sale to CONTRACTOR.
 - b. A vehicle may also be eligible if the registration has lapsed for a period of less than 181 days during the previous 24 months and all appropriate registration fees and late penalties have been paid to DMV, provided that the vehicle is registered for at least 90 days immediately prior to its sale date to CONTRACTOR.
4. The vehicle shall be driven to the CONTRACTOR's purchase site to be retired under its own power.
5. Vehicles whose emission control systems have been tampered with as defined in Cal Code Regs., tit. 16, § 3340.41.5. are not eligible until such tampering has been completely corrected.
6. The vehicle shall not be operating under a Smog Check repair cost waiver or economic hardship extension, as referenced in Cal Code Regs., tit. 13, § 2603 (a)(4).
7. If a vehicle volunteered for retirement is within 60 days of its next required Smog Check inspection, the vehicle shall pass the inspection without receiving a repair cost waiver or

economic hardship extension prior to acceptance by CONTRACTOR.

8. If a vehicle volunteered for retirement is within 61-90 days of its next required Smog Check inspection, CONTRACTOR shall verify that the vehicle has not failed a Smog Check inspection during this time frame.
9. Owners of vehicles requiring Smog Check inspections pursuant to Cal Code Regs, tit. 13, § 2603(a)(5) shall be required to submit documentation issued by a Bureau of Automotive Repair (BAR) licensed Smog Check technician demonstrating compliance with Section 2603(a)(5) to the person performing the functional and equipment eligibility inspection.

B. Vehicle Functional and Equipment Eligibility Inspection

CONTRACTOR will only scrap vehicles that meet the following requirements. The vehicle function and equipment eligibility inspection must be performed by an ARB-approved inspector and conducted on-site at CONTRACTOR's yard.

1. The vehicle must have been driven to the inspection site under its own power. If CONTRACTOR has knowledge that a vehicle was towed or pushed for any portion of the trip to the inspection site, then CONTRACTOR shall not approve the vehicle for eligibility.
2. The vehicle shall pass functional and equipment eligibility inspections as specified in the VAVR Regulation. The vehicle functional and equipment eligibility inspection form is attached hereto as Attachment C.
3. Upon satisfactory completion of the inspection, CONTRACTOR will issue a certificate of functional and equipment eligibility.
4. Vehicles failing the requirements pursuant to Sections B.1 and B.3 may be retested by CONTRACTOR for compliance with these requirements and issued a certificate of functional and equipment eligibility provided the vehicle has traveled a minimum of 50 miles subsequent to the failure determination. Vehicles with inoperable vehicle odometers must have the odometer fixed prior to conducting this test. Vehicles failing the requirements pursuant to Section B.2 may be retested by CONTRACTOR for compliance with these requirements and issued a certificate of functional and equipment eligibility at any time after modifications have been made to the vehicle.

C. Offering Vehicles/Parts to the Public

1. There is a minimum waiting period of ten (10) days between the day CONTRACTOR provides a description of a vehicle to the DISTRICT and the day a DMV Registration 42 form (Notice to Dismantler) is transmitted to the DMV for the vehicle. During the 10-day waiting period, with the vehicle owner's permission, CONTRACTOR will submit to the DISTRICT a description of the vehicle in accordance with Section C.1(a) below, and the date when the vehicle is scheduled to be delivered for final sale to the VBB Program. During the 10-day waiting period, if any person contacts CONTRACTOR and indicates an interest in purchasing the vehicle, CONTRACTOR shall hold the vehicle for a minimum of an additional seven (7) days. During this extended 7-day waiting period, CONTRACTOR shall arrange for the interested party to examine the vehicle and, if appropriate, negotiate the sale of the vehicle or any of its parts. Notwithstanding the foregoing, **nothing in this section places CONTRACTOR under any obligation to hold the vehicle for an interested party that has missed two or more prior appointments to examine any vehicle, or to sell the vehicle or any of its parts if a mutually acceptable price cannot be negotiated.**
 - a. CONTRACTOR will submit to the DISTRICT, on a weekly basis, a description of the vehicles offered for sale into the VBB Program as described in Section C.1(a)(i). The

DISTRICT will, in turn, make this information available to an appropriate segment of the public. The intent is to allow interested third parties, including car collector enthusiasts and those interested in affordable transportation, an opportunity to examine the vehicle and to negotiate with CONTRACTOR to purchase the vehicle or any of its parts according to Section E, before it is otherwise sold to the VBB Program, should the vehicle be delivered as scheduled.

- i. The description of the vehicle must include, at a minimum, the vehicle make, model, model year, and first eight characters of the Vehicle Identification Number (VIN). In addition, the description of the vehicle must include, date vehicle owner contacted CONTRACTOR, date vehicle is expected to be purchased, date the vehicle will be dismantled, and location the vehicle will be stored. No information identifying the owner will be permitted. When the DISTRICT makes this information available to the public, the DISTRICT will emphasize that while a vehicle is scheduled for delivery, there is no guarantee that the vehicle will actually be delivered.
 - ii. The vehicle owner is free to accept or reject any resulting contact or purchase offer and shall be informed by CONTRACTOR explicitly and prominently of such right.
 - iii. Nothing in this section places CONTRACTOR under any obligation to provide space or facilities for such third-party contacts, inspections, or negotiations to take place.
2. Entire vehicles and/or parts may be sold prior to entry into the VBB Program; however, no compensation with VBB Program funds shall be granted for any vehicle resold to the public in this manner according to Section E.

D. Vehicle Buy Back Program Contractor Requirements

1. CONTRACTOR must either be an auto dismantler, licensed according to the requirements of the California Vehicle Code, other business codes, and the regulations of the DMV, for the purpose of vehicle disposal after purchase, or have a binding agreement with a duly authorized auto dismantler, for the purpose of vehicle disposal after purchase.
2. At least thirty (30) days prior to commencing operations as a VBB Program contractor, CONTRACTOR shall provide the DISTRICT, in writing, information demonstrating the ability to comply with all provisions of the VAVR Regulations. This information must include CONTRACTOR's name and business address; licensed auto dismantler name and business address; anticipated initiation date and duration of vehicle retirement operation; a written statement from the auto dismantler (for each program location) under penalty of perjury certifying compliance with local air quality regulations, water conservation regulations, state, county, and city energy and hazardous materials response regulations, and local water agency soil, surface, and ground water contamination regulations; and any other information requested in applicable DISTRICT rules.
3. CONTRACTOR is required to perform the vehicle functional and equipment eligibility inspection specified in Section B on-site at CONTRACTOR's locations.
4. CONTRACTOR shall verify that the vehicle meets the vehicle registration eligibility and functional test requirements. The vehicle registration eligibility will be determined by DMV registration records.
5. At time of final sale of a vehicle to CONTRACTOR, CONTRACTOR must verify that the person

delivering the vehicle for sale is the legal owner or an authorized representative of the legal owner, properly empowered to complete the sale.

6. A vehicle purchased as part of the VBB Program must be permanently destroyed by CONTRACTOR, or CONTRACTOR's duly contracted dismantler, within ninety (90) days of the date it is sold to CONTRACTOR, and may not be resold to the public or put into operation in any way, except such a vehicle may be briefly operated for purposes related to the disposal of the vehicle as part of the normal disposal procedures.
7. The vehicle will be considered destroyed when it has been crushed or shredded or otherwise rendered permanently and irreversibly incapable of functioning as originally intended, and when all appropriate records maintained by the DMV have been updated to reflect that the vehicle has been acquired by a licensed auto dismantler for the purposes of dismantling.
8. All vehicles must be confined in a holding area separate from other vehicles procured by CONTRACTOR until they are permanently destroyed.
9. All activities associated with retiring vehicles, including, but not limited to, the disposal of vehicle fluids and vehicle components, must comply with all applicable laws and regulations including, but not limited to, local water conservation regulations, state, county, and city energy and hazardous materials response regulations, and local water agency soil, surface, and ground water contamination regulations.
10. CONTRACTOR will purchase eligible vehicles at a price established by the contract between CONTRACTOR and DISTRICT.
11. CONTRACTOR will distribute a DISTRICT-designed questionnaire to all vehicle sellers, obtain the seller's completed questionnaire, and provide response data onto an electronic spreadsheet form to DISTRICT.
12. CONTRACTOR must cooperate with any inspections of the facilities, and review of the CONTRACTOR's operation of the VBB program as requested by the DISTRICT or ARB. These inspections can include audits of the required program documentation, and financial records.
13. CONTRACTOR shall be responsible for training its staff at each of its participating VBB program locations to ensure that staff demonstrate knowledge of the VBB program in order to effectively and efficiently complete all steps needed to process VBB purchases.

E. Parts Recycling and Resale

1. On vehicles used for parts recycling and resale, parts recycling and resale is limited to non-emission-related and non-drivetrain parts per the List of Emission-Drivetrain Related Parts List, attached hereto as Attachment D. Parts recycling and resale is at the sole discretion of CONTRACTOR, subject to the limitations included herein.
2. After the 10-day waiting period (and the additional 7-day waiting period if an appointment for inspection is made) and prior to offering non-emission and non-drivetrain parts for resale, the engine, emission-related parts, transmission, and drivetrain parts must be removed from the vehicle and destroyed by CONTRACTOR.
 - a. For the purpose of this regulation, a part will be considered destroyed when it has been punched, crushed, shredded, or otherwise rendered permanently and irreversibly incapable of functioning as originally intended.
 - b. A "Quality Control Checklist" with a list of emission-related and drivetrain parts that has check boxes for recording the status of parts, i.e., "removed" and "destroyed" is attached hereto as Attachment E.
 - i. CONTRACTOR must complete the checklist by adding check marks in the appropriate columns as the emission-related and drivetrain parts are

- removed and destroyed.
 - ii. For a part that appears on the checklist but is not in the original design of the vehicle, CONTRACTOR must enter "N/A" for "not applicable" in lieu of a check mark.
 - c. After all emission-related and drivetrain parts are removed and destroyed, a quality control inspector (designated by DISTRICT) must perform an inspection of the non-emission-related and non-drivetrain parts, as well as the vehicle body.
 - d. Upon verification by the quality control inspector that no emission-related parts or drivetrain parts have been exchanged with the non-emission-related, and non-drivetrain parts, the quality control inspector must sign the checklist.
 - e. After the quality control inspector signs the check list, CONTRACTOR may place the remaining non-emission parts, non-drivetrain parts and vehicle body in the yard to be available for sale to the public.
3. If CONTRACTOR does not recover parts from a vehicle, the entire vehicle must be crushed by CONTRACTOR within ninety (90) days of sale to the VBB Program.
- a. No parts may be removed, for sale or reuse, from any crushed retired vehicle that has been sold to the VBB Program. The only allowable use for any crushed retired vehicle is as a source of scrap metal and other scrap material.
 - b. CONTRACTOR may separate ferrous and non-ferrous metals from a crushed retired vehicle to sell as a source of scrap metal only.
 - c. CONTRACTOR may sell tires and batteries from a crushed retired vehicle to an intermediary tire/battery recycler only. All facilities generating or receiving waste tires must use the services of a registered tire hauler/recycler. Battery recyclers must be registered and licensed to handle batteries.
4. No compensation with VBB Program funds shall be granted for any vehicle from which emission related or drivetrain parts have been sold.
5. All activities associated with retiring vehicles for the VBB Program, including but not limited to the disposal of vehicle fluids and vehicle components, shall comply with all applicable laws and regulations including, but not limited to, local water conservation regulations, state, county, and city energy and hazardous materials response regulations, and local water agency soil, surface, and ground water contamination regulations.
6. CONTRACTOR will be subject to audits performed by the DISTRICT and its representatives.

F. Advertising

1. CONTRACTOR is encouraged to advertise for or otherwise attract voluntary sellers of vehicles meeting the eligibility requirements specified above. CONTRACTOR will submit to DISTRICT for approval a plan for implementing the advertising campaign within thirty (30) days of signing this contract. The DISTRICT will audit CONTRACTOR at the completion of the contract to verify that CONTRACTOR implemented the advertising campaign as specified in the contract.
2. CONTRACTOR will use the DISTRICT's approved logo on any printed material for public distribution. All uses of the DISTRICT's logo must be pre-approved for use by DISTRICT staff.
3. CONTRACTOR will credit the DISTRICT as the funding source for the scrapping program in any related articles, news releases, or other publicity materials. All advertising materials, information packages, and any other materials provided to media, to the public, or to vehicle sellers require prior approval by DISTRICT.
4. Any advertising conducted by CONTRACTOR for the purpose of recruiting vehicle owners to

sell their vehicles into the VBB Program shall contain clear and prominent language stating that participation in the VBB Program is completely voluntary; and shall not contain any language stating or implying that the VBB Program is anything but voluntary for the vehicle seller or that the VBB Program is affiliated with or is operated by the State of California.

5. Any contracts or agreements between a vehicle seller and CONTRACTOR relating to the sale of a vehicle to the VBB Program shall not contain any language stating that the VBB Program is anything but voluntary for the vehicle seller or that the VBB Program is affiliated with or is operated by the State of California.

G. Records, Auditing, and Enforcement

1. The following requirements for records, auditing, and enforcement shall be met:
 - a. CONTRACTOR shall be responsible for maintaining and storing the following information for each vehicle removed from operation for the VBB Program:
 - i. Vehicle Identification Number (VIN)
 - ii. Vehicle license plate number
 - iii. Vehicle make and model year
 - iv. Vehicle odometer reading
 - v. Name, address and phone number of legal owner selling vehicle to the contractor
 - vi. Name, address and phone number of registered owner if different from Section G.1(a)(v)
 - vii. Name and business address of inspector conducting the vehicle's eligibility inspection, if CONTRACTOR contracts with an ARB-approved inspection entity to perform the vehicle functional and equipment eligibility inspection
 - viii. Date of purchase of vehicle by CONTRACTOR
 - ix. Date of vehicle retirement
 - x. Reproduction of California Certificate of Title and registration, as signed-off by seller at time of final sale to the VBB Program
 - xi. Reproduction of the applicable certificate of functional and equipment eligibility
 - xii. Reproduction of the applicable Report of Vehicle to be Dismantled and Notice of Acquisition (DMV Registration 42 form)
 - xiii. Reproduction of written documentation from the DMV verifying that a vehicle meets the requirements of Section A.3
 - xiv. If applicable, reproduction of documentation issued pursuant to Section A.9
 - xv. Any other pertinent data requested by the DISTRICT (e.g. VBB Program survey)
 - b. Upon request of the DISTRICT, the data contained in records required in Section G.1(a)(i) through Section G.1(a)(xv) shall be transmitted to the DISTRICT in an electronic database format, in addition to paper copies. The electronic format will be provided by the DISTRICT.
 - c. CONTRACTOR will maintain copies, either electronic or paper, of the information listed in Section G.1(a)(i) through Section G.1(a)(xv) for a minimum period of five (5) years, and shall make those records available to DISTRICT upon request within 30 days.
 - d. The DISTRICT may conduct announced and unannounced audits and on-site inspections of the CONTRACTOR's operations to ensure operations are being

conducted according to all applicable rules and regulations. DISTRICT shall notify any noncompliant contractor of the nature of the violation and shall initiate any enforcement or remedial action necessary.

- i. CONTRACTOR and their subcontractors shall allow DISTRICT to conduct announced and unannounced audits and inspections and shall cooperate fully in such situations.
 - ii. Violation of any provision of any applicable regulation, including falsification of any information or data, shall constitute a citable violation making the violator subject to all applicable penalties specified in the California Health and Safety Code. In addition, violation of any provision of §2603 of the VAVR Regulation, 13 Cal. Code Regs., tit. 13, by CONTRACTOR or its subcontractors may result in the issuance of a Notice of Violation(s).
2. CONTRACTOR will handle all DMV paperwork associated with the purchase, dismantling, and scrapping of vehicles.
3. CONTRACTOR will provide to DISTRICT, on a weekly basis, a description of the vehicles offered for sale into the VBB Program. The description of the vehicle must include the date vehicle owner contacted the VBB program, date the vehicle will be dismantled, vehicle make, vehicle model, model year, the first eight characters of the VIN, name of dismantler, location of dismantling facility, and dismantler's phone number. No information identifying the owner will be permitted.
4. CONTRACTOR will provide monthly invoice reports to the DISTRICT on the status of the scrapping program. The reports shall be printed on CONTRACTOR's letterhead, shall list the contract number, the period covered by the invoice, CONTRACTOR's Social Security Number or Federal Employer Identification Number, and include the monthly and cumulative number of vehicles purchased.

ATTACHMENT B

COST SCHEDULE

- A. Per Vehicle Payment.** DISTRICT will pay CONTRACTOR an amount of **\$1,300** per vehicle scrapped, up to a total maximum amount of \$7 million under the VBB Program.

- B. Price Breakdown.** The rate above is based on reimbursing CONTRACTOR for the \$1,200.00 purchase price of each vehicle, plus \$100 for overhead for the VBB Program.

ATTACHMENT C



VEHICLE FUNCTIONAL AND EQUIPMENT ELIGIBILITY INSPECTION FORM

Legal Owner: _____ Phone Number: _____
 Address: _____ City: _____ Zip: _____
 VIN: _____ License Plate Number: _____
 Make: _____ Model: _____
 Model Year: _____ Odometer Reading: _____

A. VEHICLE QUALIFICATION (* Vehicle is not qualified for the VAVR program.)

- Vehicle within 61-90 days of next scheduled Smog Check: yes no 2602(c)
- If yes, vehicle failed next scheduled Smog Check: yes* no
- Vehicle registered in District for at least 24 months: yes no* 2603(a)(2)
- Vehicle on BAR repair cost waiver yes* no 2603(a)(4)
- Vehicle on BAR economic hardship extension yes* no 2603(a)(4)
- Vehicle within 60 days of next scheduled Smog Check: yes no 2603(a)(5)
- If yes, vehicle passed next scheduled Smog Check: yes no*
- The vehicle has been tampered with: yes* no 2603(a)(7)
- The vehicle has been driven to the inspection site yes no* 2603(b)(1)

EQUIPMENT ELIGIBILITY

The following shall be present and in place: 2603(b)(2)

- | | | | |
|--|---|--------------------------------|---|
| All doors | <input type="checkbox"/> yes <input type="checkbox"/> no* | Hood | <input type="checkbox"/> yes <input type="checkbox"/> no* |
| Dashboard | <input type="checkbox"/> yes <input type="checkbox"/> no* | Driver's seat | <input type="checkbox"/> yes <input type="checkbox"/> no* |
| One bumper | <input type="checkbox"/> yes <input type="checkbox"/> no* | All side and/or quarter panels | <input type="checkbox"/> yes <input type="checkbox"/> no* |
| Exhaust system | <input type="checkbox"/> yes <input type="checkbox"/> no* | One headlight | <input type="checkbox"/> yes <input type="checkbox"/> no* |
| One taillight | <input type="checkbox"/> yes <input type="checkbox"/> no* | One brake light | <input type="checkbox"/> yes <input type="checkbox"/> no* |
| One side window | <input type="checkbox"/> yes <input type="checkbox"/> no* | Interior pedals operational | <input type="checkbox"/> yes <input type="checkbox"/> no* |
| Windshield | <input type="checkbox"/> yes <input type="checkbox"/> no* | | |
| Drivability affected by body, steering, or suspension damage | <input type="checkbox"/> yes* <input type="checkbox"/> no | | |

FUNCTIONAL ELIGIBILITY

The following shall be completed: 2603(b)(3)

- Vehicle starts using keyed ignition yes no*
- Vehicle starts without the use of starting fluids or external battery yes no*
- Vehicle driven forward for a minimum of 25 feet yes no*
- Vehicle driven in reverse for a minimum of 25 feet yes no*

* Vehicle is not eligible for the VAVR program.

INSPECTOR CERTIFICATION: (Check correct boxes.) I certify that this vehicle has (passed not passed) both the functional and equipment eligibility inspections and (is is not) eligible for acceptance into the VAVR program pursuant to California Code of Regulations, Title 13, Sections 2602 and 2603.

Printed Name: _____ Date: _____

Signed: _____

The following should be completed if the vehicle is eligible for acceptance into a VAVR program.

OWNER ACCEPTANCE: I accept receipt of this CERTIFICATION of eligibility into the VAVR program. I agree not to alter the vehicle's equipment or functionality from that presented to the inspector. I agree to maintain the vehicle's condition and registration until the vehicle is retired. In accordance with Title 13, CCR, Chapter 13, Article 1, Section 2605, the vehicle will be listed and available for interested parties to purchase from the dismantler for a minimum of 10 days. If the vehicle is purchased by a third party it will not be included in the VAVR program.

Printed Name: _____ Date: _____

Signed: _____ Driver's License #: _____

ATTACHMENT D

EMISSION-DRIVETRAIN RELATED PARTS LIST

The following list of components are examples of emission related parts as shown in California Code of Regulations Title 13, Division 3, Chapter 13, Article 1, Appendix B.

I. Carburetion and Air Induction System

- A. Air Induction System:
 - 1. Temperature sensor elements
 - 2. Vacuum motor for air control
 - 3. Hot air duct & stove
 - 4. Air filter housing & element
 - 5. Turbocharger or supercharger
 - 6. Intercooler
- B. Emission Calibrated Carburetors:
 - 1. Metering jets
 - 2. Metering rods
 - 3. Needle and seat
 - 4. Power valve
 - 5. Float circuit
 - 6. Vacuum break
 - 7. Choke mechanism
 - 8. Throttle-control solenoid
 - 9. Deceleration valve
 - 10. Dashpot
 - 11. Idle stop solenoid, anti-dieseling assembly
 - 12. Accelerating pump
 - 13. Altitude compensator
- C. Mechanical Fuel Injection:
 - 1. Pressure regulator
 - 2. Fuel injection pump
 - 3. Fuel injector
 - 4. Throttle-position compensator
 - 5. Engine speed compensator
 - 6. Engine temperature compensator
 - 7. Altitude cut-off valve
 - 8. Deceleration cut-off valve
 - 9. Cold-start valve
- D. Continuous Fuel Injection:
 - 1. Fuel pump
 - 2. Pressure accumulator
 - 3. Fuel filter
 - 4. Fuel distributor
 - 5. Fuel injections
 - 6. Air-flow sensor
 - 7. Throttle-position compensator
 - 8. Warm-running compensator
 - 9. Pneumatic overrun compensator
 - 10. Cold-start valve
- E. Electronic Fuel Injection:
 - 1. Pressure regulator
 - 2. Fuel distribution manifold

- 3. Fuel injectors
- 4. Electronic control unit
- 5. Engine speed sensor
- 6. Engine temperature sensor
- 7. Throttle-position sensor
- 8. Altitude/manifold-pressure sensor
- 9. Cold-start valve
- F. Air Fuel Ratio Control:
 - 1. Frequency valve
 - 2. Oxygen sensor
 - 3. Electronic control unit
- G. Intake Manifold

II. Ignition System

- A. Distributor;
 - 1. Cam
 - 2. Points
 - 3. Rotor
 - 4. Condenser
 - 5. Distributor cap
 - 6. Breaker plate
 - 7. Electronic components (breakerless or electronic system)
- B. Spark Advance/Retard System:
 - 1. Centrifugal advance mechanism:
 - a. Weights
 - b. Springs
 - 2. Vacuum advance unit
 - 3. Transmission controlled spark system:
 - a. Vacuum solenoid
 - b. Transmission switch
 - c. Temperature switches
 - d. Time delay
 - e. CEC valve
 - f. Reversing relay
 - 4. Electronic spark control system:
 - a. Computer circuitry
 - b. Speed sensor
 - c. Temperature switches
 - d. Vacuum switching valve
 - 5. Orifice spark advance control system:
 - a. Vacuum bypass valve
 - b. OSAC (orifice spark advance control) valve
 - c. Temperature control switch
 - d. Distributor vacuum control valve
 - 6. Speed controlled spark system:
 - a. Vacuum solenoid
 - b. Speed sensor and control switch
 - c. Thermal vacuum switch
- C. Spark Plugs
- D. Ignition Coil
- E. Ignition Wires

III. Mechanical Components

- A. Valve trains:
 - 1. Intake valves
 - 2. Exhaust valves
 - 3. Valve guides
 - 4. Valve springs
 - 5. Valve seats
 - 6. Camshaft
- B. Combustion Chamber:
 - 1. Cylinder head or rotor housing¹
 - 2. Piston or rotor¹

IV. Evaporative Control System

- A. Vapor Storage Canister and Filter
- B. Vapor Liquid Separator
- C. Filler Cap
- D. Fuel Tank
- E. Canister Purge Valve

V. Positive Crankcase Ventilation System

- A. PCV Valve
- B. Oil Filler Cap
- C. Manifold PCV Connection Assembly

VI. Exhaust Gas Recirculation System

- A. EGR Valve:
 - 1. Valve body and carburetor spacer
 - 2. Internal passages and exhaust gas orifice
- B. Driving Mode Sensors:
 - 1. Speed sensor
 - 2. Solenoid vacuum valve
 - 3. Electronic amplifier
 - 4. Temperature-controlled vacuum valve
 - 5. Vacuum reducing valve
 - 6. EGR coolant override valve
 - 7. Backpressure transducer
 - 8. Vacuum amplifier
 - 9. Delay valves

VII. Air Injection System

- A. Air Supply Assembly:
 - 1. Pump
 - 2. Pressure relief valve
 - 3. Pressure-setting plug
 - 4. Pulsed air system
- B. Distribution Assembly:
 - 1. Diverter, relief, bypass, or gulp valve
 - 2. Check or anti-backfire valve
 - 3. Deceleration control part
 - 4. Flow control valve
 - 5. Distribution manifold
 - 6. Air switching valve

¹ Rotary (Wankel) engines only

- C. Temperature sensor

VIII. Catalyst, Thermal Reactor, and Exhaust System

A. Catalytic Converter:

1. Constricted fuel filler neck
2. Catalyst beads (pellet-type converter)
3. Ceramic support and monolith coating (monolith-type converter)
4. Converter body and internal supports
5. Exhaust manifold

B. Thermal Reactor:

1. Reactor casing and lining
2. Exhaust manifold and exhaust port liner

C. Exhaust System:

1. Manifold
2. Exhaust port liners
3. Double walled portion of exhaust system
4. Heat riser valve and control assembly

IX. Miscellaneous Items Used in Above Systems

1. Hoses, clamps, and pipers
2. Pulleys, belts, and idlers

X. Computer Controls

1. Electronic Control Unit (ECU)
2. Computer-coded engine operating parameter (including computer chips)
3. All sensors and actuators associated with the ECU

XI. Drive Train Parts (added to Emission-Related Parts List

1. Engine
2. Drive mechanism
3. Transmission
4. Differential
5. Axles
6. Brakes

ATTACHMENT E

QUALITY CONTROL CHECKLIST

**Emission-Related and Drivetrain Parts
Removal and Destruction - Quality Control Check List**

Date _____
 Dismantler _____
 Address _____
 Quality Control Inspector _____
 Vehicle Make _____
 Vehicle Model _____
 Vehicle Year _____
 Vehicle License Number _____
 Vehicle Odometer Mileage _____

Category	Emission-Related/Drivetrain Part	Part Removed	Part Destroyed
Air Induction System	Temperature sensor elements		
	Vacuum motor for air control		
	Hot air duct & stove		
	Air filter housing & element		
	Turbocharger or supercharger		
	Intercooler		
Emission Calibrated Carburetors	Metering jets		
	Metering rods		
	Needle and seat		
	Power valve		
	Float circuit		
	Vacuum break		
	Choke mechanism		
	Throttle-control solenoid		
	Deceleration valve		
Emission Calibrated Carburetors (continued)	Dashpot		
	Idle stop solenoid, anti-dieseling assembly		
	Accelerating pump		
	Altitude compensator		
Mechanical Fuel Injection:	Pressure regulator		
	Fuel injection pump		
	Fuel injector		
	Throttle-position compensator		
	Engine speed compensator		
	Engine temperature compensator		
	Altitude cut-off valve		
	Deceleration cut-off valve		
	Cold-start valve		
Continuous Fuel Injection:	Fuel pump		
	Pressure accumulator		
	Fuel filter		
	Fuel distributor		
	Fuel injections		
	Air-flow sensor		
	Throttle-position compensator		
	Warm-running compensator		
	Pneumatic overrun compensator		
	Cold-start valve		
Electronic Fuel Injection:	Pressure regulator		
	Fuel distribution manifold		

Category	Emission-Related/Drivetrain Part	Part Removed	Part Destroyed
	Fuel injectors		
	Electronic control unit		
	Engine speed sensor		
	Engine temperature sensor		
	Throttle-position sensor		
	Altitude/manifold-pressure sensor		
Electronic Fuel Injection:	Cold-start valve		
Air Fuel Ratio Control:	Frequency valve		
	Oxygen sensor		
Air Fuel Ratio Control:	Electronic control unit		
Intake Manifold	Intake Manifold Assembly		
Distributor	Cam		
	Points		
	Rotor		
	Condenser		
	Distributor cap		
	Breaker plate		
	Electronic components (breakerless or electronic system)		
Spark Advance/ Retard System	Centrifugal advance mechanism: weights and springs		
	Vacuum advance unit		
	Transmission controlled spark system: vacuum solenoid, transmission switch, temperature switches, time delay, CEC valve, reversing relay		
	Electronic spark control system: computer circuitry, speed sensor, temperature switches, vacuum switching valve		
	Orifice spark advance control system: vacuum bypass valve, orifice spark advance control valve, temperature control switch, distributor vacuum control switch		
Spark Advance/ Retard System (continued)	Speed controlled spark system: vacuum solenoid, speed sensor and control switch, thermal vacuum switch		
Spark Plugs	Spark Plugs		
Ignition Coil	Ignition Coil		
Ignition Wires	Ignition Wires		
Drivetrain	Engine		
	Flywheel		
	Bell Housing		
	Drive Shaft		
	Transmission		
	Differentials		
	Axles		
	Brakes		
Mechanical Components	Intake valves		
	Exhaust valves		
	Valve guides		
	Valve springs		
	Valve seats		
	Camshaft		
	Cylinder head or rotor housing		
	Piston or rotor		
Evaporative Control System	Vapor Storage Canister and Filter		
	Vapor Liquid Separator		

Category	Emission-Related/Drivetrain Part	Part Removed	Part Destroyed
	Filler Cap		
	Fuel Tank		
	Canister Purge Valve		
Positive Crankcase Ventilation System	PCV Valve		
	Oil Filler Cap		
	Manifold PCV Connection Assembly		
Exhaust Gas Recirculation System	EGR Valve: valve body and carburetor spacer,		
	EGR Valve: internal passages and exhaust gas orifice		
Driving Mode Sensors	Speed sensor		
	Solenoid vacuum valve		
	Electronic amplifier		
	Temperature-controlled vacuum valve		
	Vacuum reducing valve		
	EGR coolant override valve		
	Backpressure transducer		
	Vacuum amplifier		
Air Injection System	Delay valves		
	Pump		
	Pressure-relief valve		
	Pressure-setting plug		
	Pulsed air system		
	Diverter		
	Relief, bypass, or gulp valve		
	Check or anti-backfire valve		
	Deceleration control part		
	Flow control valve		
	Distribution manifold		
	Air switching valve		
Catalytic Converter/Thermal Reactor/exhaust	Temperature sensor		
	Constricted fuel filler neck		
	Catalyst beads (pellet-type converter),		
	Ceramic support and monolith coating (monolith-type converter),		
	Converter body and internal supports,		
	Exhaust manifold		
	Reactor casing and lining		
	Exhaust manifold and exhaust port liner		
	Manifold		
	Exhaust port liners		
	Double walled portion of exhaust system		
Miscellaneous Items Used in Above Systems	Heat riser valve and control assembly		
	Hoses, clamps, and pipers		
Computer Controls	Pulleys, belts, and idlers		
	Electronic Control Unit (ECU)		
	Computer-coded engine operating parameter (including computer chips)		
	All sensors and actuators associated with the ECU		

Quality Control Inspector Final Verification All Emission-Related and Drivetrain Parts Removed and Destroyed

Quality Control Inspector Signature: _____

Date: _____

AMENDMENT NO. 4 TO
BAY AREA AIR QUALITY MANAGEMENT DISTRICT
CONTRACT NO. 2020.121

This amendment to the above-entitled contract (“Contract Amendment”) is dated, for reference purposes only, June 12, 2023, and consists of 4 pages.

RECITALS:

1. The Bay Area Air Quality Management District (“DISTRICT”) and **Environmental Engineering Studies, Inc.** (“CONTRACTOR”) (hereinafter referred to as the “PARTIES”) entered into the above-entitled contract to solicit, purchase, and scrap eligible vehicles in compliance with the California Air Resources Board’s Voluntary Accelerated Light-Duty Vehicle Retirement Enterprises regulations (Cal. Code Regs., tit. 13, §§ 2600 et seq.) (the “Contract”), which Contract was executed on behalf of CONTRACTOR on June 26, 2020, and on behalf of DISTRICT on July 1, 2020.
2. The PARTIES entered into Amendment No. 1 to the Contract, dated April 20, 2021, for reference purposes only, to amend the term of the Contract.
3. The PARTIES entered into Amendment No. 2 to the Contract, dated June 9, 2022, for reference purposes only, to amend the term and Cost Schedule, including the total cost, of the Contract.
4. The PARTIES entered into Amendment No. 3 to the Contract, dated July 6, 2022, for reference purposes only, to amend the Scope of Work of the Contract.
5. DISTRICT entered into the Contract based on approval by DISTRICT’s Board of Directors to spend up to \$7 million per fiscal year to scrap cars using funds from the Carl Moyer Program, Mobile Source Incentive Fund, and Transportation Fund for Clean Air beginning fiscal year 2020-2021. The Board of Directors authorized DISTRICT’s Executive Officer/Air Pollution Control Officer to execute contracts to scrap cars using these funds for the 2020-2021 fiscal year, and also to renew the contracts for up to an additional three years based on contractor performance.
6. DISTRICT entered into Amendment No. 2 based on approval by DISTRICT’s Board of Directors on June 1, 2022 to spend up to an additional \$5 million per fiscal year, for a total of \$12 million per fiscal year, to scrap cars using funds from the Mobile Source Incentive Fund and/or Transportation Fund for Clean Air, beginning fiscal year 2023-2024. The Board of Directors authorized DISTRICT’s Executive Officer/Air Pollution

Control Officer to execute amendments to contracts to scrap cars using these funds for the 2023-2024 fiscal year.

7. DISTRICT seeks to enter into Amendment No. 4 based on prior approval by DISTRICT's Board of Directors on June 1, 2022 to spend \$12 million to scrap cars using funds from the Mobile Source Incentive Fund and/or Transportation Fund for Clean Air, beginning fiscal year 2023-2024.
8. The PARTIES seek to amend the term to the Contract because DISTRICT seeks to have CONTRACTOR continue to provide the services prescribed in the Contract beyond the original termination date, as authorized by DISTRICT's Board of Directors, and CONTRACTOR desires to provide those services.
9. In accordance with Section 26 of the Contract, DISTRICT and CONTRACTOR desire to amend the above-entitled Contract as follows:

TERMS AND CONDITIONS OF CONTRACT AMENDMENT:

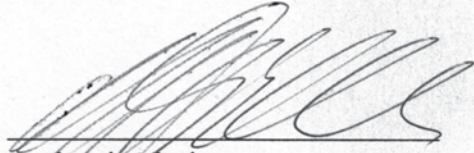
1. By this Contract Amendment, DISTRICT and CONTRACTOR amend Section 4, "Term." The term of the Contract shall be extended so that the termination date of the Contract is now July 1, 2024.
2. By this Contract Amendment, DISTRICT and CONTRACTOR replace Attachment B-1, Cost Schedule, with the attached "Attachment B-2, Cost Schedule" and agree that all references in the Contract to Attachment B-1 shall be deemed to refer to Attachment B-2, Cost Schedule.
3. DISTRICT and CONTRACTOR agree that all other terms and conditions of the Contract shall remain in full force and effect.

IN WITNESS WHEREOF, the PARTIES have caused this Contract Amendment to be duly executed on their behalf by their authorized representatives.

BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

ENVIRONMENTAL ENGINEERING
STUDIES, INC.

By: DocuSigned by:
Philip Fine _____
7314B577922A46A...
Philip M. Fine
Executive Officer/APCO

By:  _____
Antoine Assioun
Project Manager

Date: 6/26/2023

Date: 6-12-23

Approved as to form:
District Counsel

By: DocuSigned by:
Alexander Crockett 6/25/2023
6DC7110552B5451...
Alexander G. Crockett
District Counsel

ATTACHMENT B-2

COST SCHEDULE

- A. Per Vehicle Payment.** DISTRICT will pay CONTRACTOR an amount of \$1,300 per vehicle scrapped, up to a total maximum amount of \$6 million under the Vehicle Buy Back (“VBB”) Program.
- B. Price Breakdown.** The rate above is based on reimbursing CONTRACTOR for the \$1,200.00 purchase price of each vehicle, plus \$100 for overhead for the VBB Program.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

PROFESSIONAL SERVICES CONTRACT

CONTRACT NO. 2020.120

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 **Pick-n-Pull Auto Dismantlers** (“CONTRACTOR”) whose address is 10850 Gold Center Drive, Suite 325, Rancho Cordova, CA 95670.

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. CONTRACTOR has been selected as one of two contractors authorized to scrap vehicles under the DISTRICT’s Vehicle Buy Back (VBB) Program beginning fiscal year 2021. The DISTRICT’s Board of Directors has authorized DISTRICT to spend up to \$7 million to scrap vehicles using funds from the Carl Moyer Program, Mobile Source Incentive Fund, and Transportation Fund for Clean Air.
 - C. DISTRICT has not allocated specific amounts separately to each contractor and will expend funds for scrapping as invoices are received under this Contract and under contracts with other authorized VBB contractors.
 - D. 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 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 paragraph D

above.

4. TERM – The term of this Contract is from July 1, 2020 to June 30, 2021, unless further extended by amendment of this Contract in writing, 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, 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 termination date.
- 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 to deduct the cost thereof from any payments owed to CONTRACTOR or to terminate this Contract for breach.

7. INDEMNIFICATION

- A. CONTRACTOR agrees to indemnify, defend, and hold harmless DISTRICT, its officers, employees, agents, representatives, and successors-in-interest against any and all liability, demands, claims, costs, losses, damages, recoveries, settlements, and expenses (including reasonable attorney fees) that DISTRICT, its officers, employees, agents, representatives, and successors-in-interest may incur or be required to pay arising from the death or injury of any person or persons (including employees of CONTRACTOR), or from destruction of or damage to any property or properties, caused by or connected with the performance of this Contract by CONTRACTOR, its employees, subcontractors, or agents.

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 the CONTRACTOR's Social Security Number or Federal Employer Identification Number; and shall be submitted to: Bay Area Air Quality Management District, 375 Beale Street, Suite 600, San Francisco, CA 94105, Attn: Mae Go, or via e-

mail to mgo@baaqmd.gov.

- 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 the sum derived by multiplying the number of vehicles scrapped under this Contract by the per vehicle price specified in Attachment B.

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 the sum derived by multiplying the number of vehicles scrapped under this Contract by the per vehicle price specified in Attachment B. 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. PST. 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: Damian Breen

CONTRACTOR: Pick-n-Pull Auto Dismantlers

10850 Gold Center Drive, Suite 325
Rancho Cordova, CA 95670
Attn: Ronald Terry

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. Future revisions to Appendix A, Vehicle Functional and Equipment Eligibility Inspection Form, Appendix B, Emission-Drive Train Related Parts List, and Appendix C, Quality Control Check List, adopted by the California Air Resources Board under the Voluntary Accelerated Vehicle Retirement regulations, California Code of Regulations, Title 13, Section 2601 et seq., shall supersede Attachments C, D, and E in this Contract.

12. EMPLOYEES OF CONTRACTOR
 - A. CONTRACTOR shall be responsible for the cost of regular pay to its employees, as well as cost of vacation, 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.

13. CONFIDENTIALITY – In order to carry out the purposes of this Contract, CONTRACTOR may require access to certain of DISTRICT’s confidential information (including information or data that identifies or describes an individual; 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 the above.
16. 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, Executive Order No. 11246 (30 Federal Register 12319), and all administrative rules and regulations issued pursuant to said Acts and Order. 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.

17. 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.
18. 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.
19. 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.
20. 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.
21. 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.
22. 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.
23. 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.
24. COUNTERPARTS/FACSIMILES/SCANS – This Contract may be executed and delivered in any

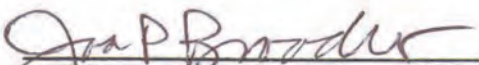
number of counterparts, each of which, when executed and delivered, shall be deemed an original, and all of which together shall constitute the same contract. The parties may rely upon a facsimile copy or scanned copy of any party's signature as an original for all purposes.

25. 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.
26. 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.
27. 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.

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

PICK-N-PULL AUTO DISMANTLERS

By: 
Jack P. Broadbent
Executive Officer/APCO

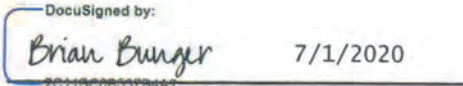
By: 
Mark Carnesecca
VP of Vehicle Purchasing



Date: 7/1/20

Date: 6/30/2020

Approved as to form:
District Counsel

By:  7/1/2020
Brian C. Bunger
District Counsel

ATTACHMENT A

SCOPE OF WORK

The Scope of Work outlined in this section complies with the Voluntary Accelerated Light-Duty Vehicle Retirement (VAVR) Regulations adopted by the California Air Resources Board (ARB). Light-duty vehicle retirement projects are subject to the requirements of the Voluntary Accelerated Vehicle Retirement Regulation (VAVR Regulation), Cal. Code Regs., tit. 13, § 2601 et seq. Light and medium-duty vehicle projects funded through Assembly Bill (AB) 923 (2004) are authorized by Health and Safety Code Section 44229 (b)(4). CONTRACTOR's VAVR projects must be in compliance with all the applicable guidelines adopted by ARB. The ARB Carl Moyer Program Guidelines chapter on VAVR constitutes ARB's adopted guidelines for light-duty projects.

CONTRACTOR will solicit, purchase, and scrap eligible vehicles in compliance with the following requirements and procedures, and in compliance with the VAVR Regulations. DISTRICT will not reimburse CONTRACTOR for the purchase of a vehicle, or the overhead costs associated with that purchase, if such vehicle fails to meet the following requirements:

A. Vehicle Eligibility Requirements

1. Participation shall be entirely voluntary for vehicle owners.
2. The vehicle must meet the following criteria:
 - a. 1997 model year or older diesel or gasoline-powered passenger car or light-duty truck up to 10,000 pounds gross vehicle weight or less.
3. The vehicle must be currently registered with the California Department of Motor Vehicles (DMV) as an operating vehicle and must have been registered for at least 24 consecutive months prior to the date of the sale to CONTRACTOR as well as be registered to an address, or addresses, within the DISTRICT's jurisdiction. Smog Checks must be performed as required by DMV in order for the vehicle to be considered registered.
 - a. A vehicle may also be eligible if the owner of the vehicle placed the vehicle into planned non-operational status per Vehicle Code sections 4604 et seq., for up to two months during the 24-month registration period and occurring at least three months immediately prior to its sale to CONTRACTOR.
 - b. A vehicle may also be eligible if the registration has lapsed for a period of less than 181 days during the previous 24 months and all appropriate registration fees and late penalties have been paid to DMV, provided that the vehicle is registered for at least 90 days immediately prior to its sale date to CONTRACTOR.
4. The vehicle shall be driven to the CONTRACTOR's purchase site to be retired under its own power.
5. Vehicles whose emission control systems have been tampered with as defined in Cal Code Regs., tit. 16, § 3340.41.5. are not eligible until such tampering has been completely corrected.
6. The vehicle shall not be operating under a Smog Check repair cost waiver or economic hardship extension, as referenced in Cal Code Regs., tit. 13, § 2603 (a)(4).
7. If a vehicle volunteered for retirement is within 60 days of its next required Smog Check inspection, the vehicle shall pass the inspection without receiving a repair cost waiver or economic hardship extension prior to acceptance by CONTRACTOR.
8. If a vehicle volunteered for retirement is within 61-90 days of its next required Smog Check

inspection, CONTRACTOR shall verify that the vehicle has not failed a Smog Check inspection during this time frame.

9. Owners of vehicles requiring Smog Check inspections pursuant to Cal Code Regs, tit. 13, § 2603(a)(5) shall be required to submit documentation issued by a Bureau of Automotive Repair (BAR) licensed Smog Check technician demonstrating compliance with Section 2603(a)(5) to the person performing the functional and equipment eligibility inspection.

B. Vehicle Functional and Equipment Eligibility Inspection

CONTRACTOR will only scrap vehicles that meet the following requirements. The vehicle function and equipment eligibility inspection must be performed by an ARB-approved inspector and conducted on-site at CONTRACTOR's yard.

1. The vehicle must have been driven to the inspection site under its own power. If CONTRACTOR has knowledge that a vehicle was towed or pushed for any portion of the trip to the inspection site, then CONTRACTOR shall not approve the vehicle for eligibility.
2. The vehicle shall pass functional and equipment eligibility inspections as specified in the VAVR Regulation. The vehicle functional and equipment eligibility inspection form is attached hereto as Attachment C.
3. Upon satisfactory completion of the inspection, CONTRACTOR will issue a certificate of functional and equipment eligibility.
4. Vehicles failing the requirements pursuant to Sections B.1 and B.3 may be retested by CONTRACTOR for compliance with these requirements and issued a certificate of functional and equipment eligibility provided the vehicle has traveled a minimum of 50 miles subsequent to the failure determination. Vehicles with inoperable vehicle odometers must have the odometer fixed prior to conducting this test. Vehicles failing the requirements pursuant to Section B.2 may be retested by CONTRACTOR for compliance with these requirements and issued a certificate of functional and equipment eligibility at any time after modifications have been made to the vehicle.

C. Offering Vehicles/Parts to the Public

1. There is a minimum waiting period of ten (10) days between the day CONTRACTOR provides a description of a vehicle to the DISTRICT and the day a DMV Registration 42 form (Notice to Dismantler) is transmitted to the DMV for the vehicle. During the 10-day waiting period, with the vehicle owner's permission, CONTRACTOR will submit to the DISTRICT a description of the vehicle in accordance with Section C.1(a) below, and the date when the vehicle is scheduled to be delivered for final sale to the VBB Program. During the 10-day waiting period, if any person contacts CONTRACTOR and indicates an interest in purchasing the vehicle, CONTRACTOR shall hold the vehicle for a minimum of an additional seven (7) days. During this extended 7-day waiting period, CONTRACTOR shall arrange for the interested party to examine the vehicle and, if appropriate, negotiate the sale of the vehicle or any of its parts. Notwithstanding the foregoing, **nothing in this section places CONTRACTOR under any obligation to hold the vehicle for an interested party that has missed two or more prior appointments to examine any vehicle, or to sell the vehicle or any of its parts if a mutually acceptable price cannot be negotiated.**
 - a. CONTRACTOR will submit to the DISTRICT, on a weekly basis, a description of the vehicles offered for sale into the VBB Program as described in Section C.1(a)(i). The DISTRICT will, in turn, make this information available to an appropriate segment of the public. The intent is to allow interested third parties, including car collector

enthusiasts and those interested in affordable transportation, an opportunity to examine the vehicle and to negotiate with CONTRACTOR to purchase the vehicle or any of its parts according to Section E, before it is otherwise sold to the VBB Program, should the vehicle be delivered as scheduled.

- i. The description of the vehicle must include, at a minimum, the vehicle make, model, model year, and first eight characters of the Vehicle Identification Number (VIN). In addition, the description of the vehicle must include, date vehicle owner contacted CONTRACTOR, date vehicle is expected to be purchased, date the vehicle will be dismantled, and location the vehicle will be stored. No information identifying the owner will be permitted. When the DISTRICT makes this information available to the public, the DISTRICT will emphasize that while a vehicle is scheduled for delivery, there is no guarantee that the vehicle will actually be delivered.
 - ii. The vehicle owner is free to accept or reject any resulting contact or purchase offer and shall be informed by CONTRACTOR explicitly and prominently of such right.
 - iii. Nothing in this section places CONTRACTOR under any obligation to provide space or facilities for such third-party contacts, inspections, or negotiations to take place.
2. Entire vehicles and/or parts may be sold prior to entry into the VBB Program; however, no compensation with VBB Program funds shall be granted for any vehicle resold to the public in this manner according to Section E.

D. Vehicle Buy Back Program Contractor Requirements

1. CONTRACTOR must either be an auto dismantler, licensed according to the requirements of the California Vehicle Code, other business codes, and the regulations of the DMV, for the purpose of vehicle disposal after purchase, or have a binding agreement with a duly authorized auto dismantler, for the purpose of vehicle disposal after purchase.
2. At least thirty (30) days prior to commencing operations as a VBB Program contractor, CONTRACTOR shall provide the DISTRICT, in writing, information demonstrating the ability to comply with all provisions of the VAVR Regulations. This information must include CONTRACTOR's name and business address; licensed auto dismantler name and business address; anticipated initiation date and duration of vehicle retirement operation; a written statement from the auto dismantler (for each program location) under penalty of perjury certifying compliance with local air quality regulations, water conservation regulations, state, county, and city energy and hazardous materials response regulations, and local water agency soil, surface, and ground water contamination regulations; and any other information requested in applicable DISTRICT rules.
3. CONTRACTOR is required to perform the vehicle functional and equipment eligibility inspection specified in Section B on-site at CONTRACTOR's locations.
4. CONTRACTOR shall verify that the vehicle meets the vehicle registration eligibility and functional test requirements. The vehicle registration eligibility will be determined by DMV registration records.
5. At time of final sale of a vehicle to CONTRACTOR, CONTRACTOR must verify that the person delivering the vehicle for sale is the legal owner or an authorized representative of the legal owner, properly empowered to complete the sale.

6. A vehicle purchased as part of the VBB Program must be permanently destroyed by CONTRACTOR, or CONTRACTOR's duly contracted dismantler, within ninety (90) days of the date it is sold to CONTRACTOR, and may not be resold to the public or put into operation in any way, except such a vehicle may be briefly operated for purposes related to the disposal of the vehicle as part of the normal disposal procedures.
7. The vehicle will be considered destroyed when it has been crushed or shredded or otherwise rendered permanently and irreversibly incapable of functioning as originally intended, and when all appropriate records maintained by the DMV have been updated to reflect that the vehicle has been acquired by a licensed auto dismantler for the purposes of dismantling.
8. All vehicles must be confined in a holding area separate from other vehicles procured by CONTRACTOR until they are permanently destroyed.
9. All activities associated with retiring vehicles, including, but not limited to, the disposal of vehicle fluids and vehicle components, must comply with all applicable laws and regulations including, but not limited to, local water conservation regulations, state, county, and city energy and hazardous materials response regulations, and local water agency soil, surface, and ground water contamination regulations.
10. CONTRACTOR will purchase eligible vehicles at a price established by the contract between CONTRACTOR and DISTRICT.
11. CONTRACTOR will distribute a DISTRICT-designed questionnaire to all vehicle sellers, obtain the seller's completed questionnaire, and provide response data onto an electronic spreadsheet form to DISTRICT.
12. CONTRACTOR must cooperate with any inspections of the facilities, and review of the CONTRACTOR's operation of the VBB program as requested by the DISTRICT or ARB. These inspections can include audits of the required program documentation, and financial records.
13. CONTRACTOR shall be responsible for training its staff at each of its participating VBB program locations to ensure that staff demonstrate knowledge of the VBB program in order to effectively and efficiently complete all steps needed to process VBB purchases.

E. Parts Recycling and Resale

1. On vehicles used for parts recycling and resale, parts recycling and resale is limited to non-emission-related and non-drivetrain parts per the List of Emission-Drivetrain Related Parts List, attached hereto as Attachment D. Parts recycling and resale is at the sole discretion of CONTRACTOR, subject to the limitations included herein.
2. After the 10-day waiting period (and the additional 7-day waiting period if an appointment for inspection is made) and prior to offering non-emission and non-drivetrain parts for resale, the engine, emission-related parts, transmission, and drivetrain parts must be removed from the vehicle and destroyed by CONTRACTOR.
 - a. For the purpose of this regulation, a part will be considered destroyed when it has been punched, crushed, shredded, or otherwise rendered permanently and irreversibly incapable of functioning as originally intended.
 - b. A "Quality Control Checklist" with a list of emission-related and drivetrain parts that has check boxes for recording the status of parts, i.e., "removed" and "destroyed" is attached hereto as Attachment E.
 - i. CONTRACTOR must complete the checklist by adding check marks in the appropriate columns as the emission-related and drivetrain parts are removed and destroyed.
 - ii. For a part that appears on the checklist but is not in the original design of the

- vehicle, CONTRACTOR must enter "N/A" for "not applicable" in lieu of a check mark.
- c. After all emission-related and drivetrain parts are removed and destroyed, a quality control inspector (designated by DISTRICT) must perform an inspection of the non-emission-related and non-drivetrain parts, as well as the vehicle body.
 - d. Upon verification by the quality control inspector that no emission-related parts or drivetrain parts have been exchanged with the non-emission-related, and non-drivetrain parts, the quality control inspector must sign the checklist.
 - e. After the quality control inspector signs the check list, CONTRACTOR may place the remaining non-emission parts, non-drivetrain parts and vehicle body in the yard to be available for sale to the public.
3. If CONTRACTOR does not recover parts from a vehicle, the entire vehicle must be crushed by CONTRACTOR within ninety (90) days of sale to the VBB Program.
 - a. No parts may be removed, for sale or reuse, from any crushed retired vehicle that has been sold to the VBB Program. The only allowable use for any crushed retired vehicle is as a source of scrap metal and other scrap material.
 - b. CONTRACTOR may separate ferrous and non-ferrous metals from a crushed retired vehicle to sell as a source of scrap metal only.
 - c. CONTRACTOR may sell tires and batteries from a crushed retired vehicle to an intermediary tire/battery recycler only. All facilities generating or receiving waste tires must use the services of a registered tire hauler/recycler. Battery recyclers must be registered and licensed to handle batteries.
 4. No compensation with VBB Program funds shall be granted for any vehicle from which emission related or drivetrain parts have been sold.
 5. All activities associated with retiring vehicles for the VBB Program, including but not limited to the disposal of vehicle fluids and vehicle components, shall comply with all applicable laws and regulations including, but not limited to, local water conservation regulations, state, county, and city energy and hazardous materials response regulations, and local water agency soil, surface, and ground water contamination regulations.
 6. CONTRACTOR will be subject to audits performed by the DISTRICT and its representatives.

F. Advertising

1. CONTRACTOR is encouraged to advertise for or otherwise attract voluntary sellers of vehicles meeting the eligibility requirements specified above. CONTRACTOR will submit to DISTRICT for approval a plan for implementing the advertising campaign within thirty (30) days of signing this contract. The DISTRICT will audit CONTRACTOR at the completion of the contract to verify that CONTRACTOR implemented the advertising campaign as specified in the contract.
2. CONTRACTOR will use the DISTRICT's approved logo on any printed material for public distribution. All uses of the DISTRICT's logo must be pre-approved for use by DISTRICT staff.
3. CONTRACTOR will credit the DISTRICT as the funding source for the scrapping program in any related articles, news releases, or other publicity materials. All advertising materials, information packages, and any other materials provided to media, to the public, or to vehicle sellers require prior approval by DISTRICT.
4. Any advertising conducted by CONTRACTOR for the purpose of recruiting vehicle owners to sell their vehicles into the VBB Program shall contain clear and prominent language stating that participation in the VBB Program is completely voluntary; and shall not contain any

language stating or implying that the VBB Program is anything but voluntary for the vehicle seller or that the VBB Program is affiliated with or is operated by the State of California.

5. Any contracts or agreements between a vehicle seller and CONTRACTOR relating to the sale of a vehicle to the VBB Program shall not contain any language stating that the VBB Program is anything but voluntary for the vehicle seller or that the VBB Program is affiliated with or is operated by the State of California.

G. Records, Auditing, and Enforcement

1. The following requirements for records, auditing, and enforcement shall be met:
 - a. CONTRACTOR shall be responsible for maintaining and storing the following information for each vehicle removed from operation for the VBB Program:
 - i. Vehicle Identification Number (VIN)
 - ii. Vehicle license plate number
 - iii. Vehicle make and model year
 - iv. Vehicle odometer reading
 - v. Name, address and phone number of legal owner selling vehicle to the contractor
 - vi. Name, address and phone number of registered owner if different from Section G.1(a)(v)
 - vii. Name and business address of inspector conducting the vehicle's eligibility inspection, if CONTRACTOR contracts with an ARB-approved inspection entity to perform the vehicle functional and equipment eligibility inspection
 - viii. Date of purchase of vehicle by CONTRACTOR
 - ix. Date of vehicle retirement
 - x. Reproduction of California Certificate of Title and registration, as signed-off by seller at time of final sale to the VBB Program
 - xi. Reproduction of the applicable certificate of functional and equipment eligibility
 - xii. Reproduction of the applicable Report of Vehicle to be Dismantled and Notice of Acquisition (DMV Registration 42 form)
 - xiii. Reproduction of written documentation from the DMV verifying that a vehicle meets the requirements of Section A.3
 - xiv. If applicable, reproduction of documentation issued pursuant to Section A.9
 - xv. Any other pertinent data requested by the DISTRICT (e.g. VBB Program survey)
 - b. Upon request of the DISTRICT, the data contained in records required in Section G.1(a)(i) through Section G.1(a)(xv) shall be transmitted to the DISTRICT in an electronic database format, in addition to paper copies. The electronic format will be provided by the DISTRICT.
 - c. CONTRACTOR will maintain copies, either electronic or paper, of the information listed in Section G.1(a)(i) through Section G.1(a)(xv) for a minimum period of five (5) years, and shall make those records available to DISTRICT upon request within 30 days.
 - d. The DISTRICT may conduct announced and unannounced audits and on-site inspections of the CONTRACTOR's operations to ensure operations are being conducted according to all applicable rules and regulations. DISTRICT shall notify any noncompliant contractor of the nature of the violation and shall initiate any

enforcement or remedial action necessary.

- i. CONTRACTOR and their subcontractors shall allow DISTRICT to conduct announced and unannounced audits and inspections and shall cooperate fully in such situations.
 - ii. Violation of any provision of any applicable regulation, including falsification of any information or data, shall constitute a citable violation making the violator subject to all applicable penalties specified in the California Health and Safety Code. In addition, violation of any provision of §2603 of the VAVR Regulation, 13 Cal. Code Regs., tit. 13, by CONTRACTOR or its subcontractors may result in the issuance of a Notice of Violation(s).
2. CONTRACTOR will handle all DMV paperwork associated with the purchase, dismantling, and scrapping of vehicles.
3. CONTRACTOR will provide to DISTRICT, on a weekly basis, a description of the vehicles offered for sale into the VBB Program. The description of the vehicle must include the date vehicle owner contacted the VBB program, date the vehicle will be dismantled, vehicle make, vehicle model, model year, the first eight characters of the VIN, name of dismantler, location of dismantling facility, and dismantler's phone number. No information identifying the owner will be permitted.
4. CONTRACTOR will provide monthly invoice reports to the DISTRICT on the status of the scrapping program. The reports shall be printed on CONTRACTOR's letterhead, shall list the contract number, the period covered by the invoice, CONTRACTOR's Social Security Number or Federal Employer Identification Number, and include the monthly and cumulative number of vehicles purchased.

ATTACHMENT B

COST SCHEDULE

- A. Per Vehicle Payment.** DISTRICT will pay CONTRACTOR an amount of **\$1,249.00** per vehicle scrapped, up to a total maximum amount of \$7 million under the VBB Program.

- B. Price Breakdown.** The rate above is based on reimbursing CONTRACTOR for the \$1,200.00 purchase price of each vehicle, plus \$49.00 for overhead for the VBB Program.

ATTACHMENT C



VEHICLE FUNCTIONAL AND EQUIPMENT ELIGIBILITY INSPECTION FORM

Legal Owner: _____ Phone Number: _____
 Address: _____ City: _____ Zip: _____
 VIN: _____ License Plate Number: _____
 Make: _____ Model: _____
 Model Year: _____ Odometer Reading: _____

A. VEHICLE QUALIFICATION (* Vehicle is not qualified for the VAVR program.)

- Vehicle within 61-90 days of next scheduled Smog Check: yes no 2602(c)
- If yes, vehicle failed next scheduled Smog Check: yes* no
- Vehicle registered in District for at least 24 months: yes no* 2603(a)(2)
- Vehicle on BAR repair cost waiver yes* no 2603(a)(4)
- Vehicle on BAR economic hardship extension yes* no 2603(a)(4)
- Vehicle within 60 days of next scheduled Smog Check: yes no 2603(a)(5)
- If yes, vehicle passed next scheduled Smog Check: yes no*
- The vehicle has been tampered with: yes* no 2603(a)(7)
- The vehicle has been driven to the inspection site yes no* 2603(b)(1)

EQUIPMENT ELIGIBILITY

The following shall be present and in place: 2603(b)(2)

- | | | | |
|--|---|--------------------------------|---|
| All doors | <input type="checkbox"/> yes <input type="checkbox"/> no* | Hood | <input type="checkbox"/> yes <input type="checkbox"/> no* |
| Dashboard | <input type="checkbox"/> yes <input type="checkbox"/> no* | Driver's seat | <input type="checkbox"/> yes <input type="checkbox"/> no* |
| One bumper | <input type="checkbox"/> yes <input type="checkbox"/> no* | All side and/or quarter panels | <input type="checkbox"/> yes <input type="checkbox"/> no* |
| Exhaust system | <input type="checkbox"/> yes <input type="checkbox"/> no* | One headlight | <input type="checkbox"/> yes <input type="checkbox"/> no* |
| One taillight | <input type="checkbox"/> yes <input type="checkbox"/> no* | One brake light | <input type="checkbox"/> yes <input type="checkbox"/> no* |
| One side window | <input type="checkbox"/> yes <input type="checkbox"/> no* | Interior pedals operational | <input type="checkbox"/> yes <input type="checkbox"/> no* |
| Windshield | <input type="checkbox"/> yes <input type="checkbox"/> no* | | |
| Drivability affected by body, steering, or suspension damage | <input type="checkbox"/> yes* <input type="checkbox"/> no | | |

FUNCTIONAL ELIGIBILITY

The following shall be completed: 2603(b)(3)

- Vehicle starts using keyed ignition yes no*
- Vehicle starts without the use of starting fluids or external battery yes no*
- Vehicle driven forward for a minimum of 25 feet yes no*
- Vehicle driven in reverse for a minimum of 25 feet yes no*

* Vehicle is not eligible for the VAVR program.

INSPECTOR CERTIFICATION: (Check correct boxes.) I certify that this vehicle has (passed not passed) both the functional and equipment eligibility inspections and (is is not) eligible for acceptance into the VAVR program pursuant to California Code of Regulations, Title 13, Sections 2602 and 2603.

Printed Name: _____ Date: _____

Signed: _____

The following should be completed if the vehicle is eligible for acceptance into a VAVR program.

OWNER ACCEPTANCE: I accept receipt of this CERTIFICATION of eligibility into the VAVR program. I agree not to alter the vehicle's equipment or functionality from that presented to the inspector. I agree to maintain the vehicle's condition and registration until the vehicle is retired. In accordance with Title 13, CCR, Chapter 13, Article 1, Section 2605, the vehicle will be listed and available for interested parties to purchase from the dismantler for a minimum of 10 days. If the vehicle is purchased by a third party it will not be included in the VAVR program.

Printed Name: _____ Date: _____

Signed: _____ Driver's License #: _____

ATTACHMENT D

EMISSION-DRIVETRAIN RELATED PARTS LIST

The following list of components are examples of emission related parts as shown in California Code of Regulations Title 13, Division 3, Chapter 13, Article 1, Appendix B.

I. Carburetion and Air Induction System**A. Air Induction System:**

1. Temperature sensor elements
2. Vacuum motor for air control
3. Hot air duct & stove
4. Air filter housing & element
5. Turbocharger or supercharger
6. Intercooler

B. Emission Calibrated Carburetors:

1. Metering jets
2. Metering rods
3. Needle and seat
4. Power valve
5. Float circuit
6. Vacuum break
7. Choke mechanism
8. Throttle-control solenoid
9. Deceleration valve
10. Dashpot
11. Idle stop solenoid, anti-dieseling assembly
12. Accelerating pump
13. Altitude compensator

C. Mechanical Fuel Injection:

1. Pressure regulator
2. Fuel injection pump
3. Fuel injector
4. Throttle-position compensator
5. Engine speed compensator
6. Engine temperature compensator
7. Altitude cut-off valve
8. Deceleration cut-off valve
9. Cold-start valve

D. Continuous Fuel Injection:

1. Fuel pump
2. Pressure accumulator
3. Fuel filter
4. Fuel distributor
5. Fuel injections
6. Air-flow sensor
7. Throttle-position compensator
8. Warm-running compensator
9. Pneumatic overrun compensator
10. Cold-start valve

E. Electronic Fuel Injection:

1. Pressure regulator
2. Fuel distribution manifold

- 3. Fuel injectors
- 4. Electronic control unit
- 5. Engine speed sensor
- 6. Engine temperature sensor
- 7. Throttle-position sensor
- 8. Altitude/manifold-pressure sensor
- 9. Cold-start valve
- F. Air Fuel Ratio Control:
 - 1. Frequency valve
 - 2. Oxygen sensor
 - 3. Electronic control unit
- G. Intake Manifold

II. Ignition System

- A. Distributor;
 - 1. Cam
 - 2. Points
 - 3. Rotor
 - 4. Condenser
 - 5. Distributor cap
 - 6. Breaker plate
 - 7. Electronic components (breakerless or electronic system)
- B. Spark Advance/Retard System:
 - 1. Centrifugal advance mechanism:
 - a. Weights
 - b. Springs
 - 2. Vacuum advance unit
 - 3. Transmission controlled spark system:
 - a. Vacuum solenoid
 - b. Transmission switch
 - c. Temperature switches
 - d. Time delay
 - e. CEC valve
 - f. Reversing relay
 - 4. Electronic spark control system:
 - a. Computer circuitry
 - b. Speed sensor
 - c. Temperature switches
 - d. Vacuum switching valve
 - 5. Orifice spark advance control system:
 - a. Vacuum bypass valve
 - b. OSAC (orifice spark advance control) valve
 - c. Temperature control switch
 - d. Distributor vacuum control valve
 - 6. Speed controlled spark system:
 - a. Vacuum solenoid
 - b. Speed sensor and control switch
 - c. Thermal vacuum switch
- C. Spark Plugs
- D. Ignition Coil
- E. Ignition Wires

III. Mechanical Components

- A. Valve trains:
 - 1. Intake valves
 - 2. Exhaust valves
 - 3. Valve guides
 - 4. Valve springs
 - 5. Valve seats
 - 6. Camshaft
- B. Combustion Chamber:
 - 1. Cylinder head or rotor housing¹
 - 2. Piston or rotor¹

IV. Evaporative Control System

- A. Vapor Storage Canister and Filter
- B. Vapor Liquid Separator
- C. Filler Cap
- D. Fuel Tank
- E. Canister Purge Valve

V. Positive Crankcase Ventilation System

- A. PCV Valve
- B. Oil Filler Cap
- C. Manifold PCV Connection Assembly

VI. Exhaust Gas Recirculation System

- A. EGR Valve:
 - 1. Valve body and carburetor spacer
 - 2. Internal passages and exhaust gas orifice
- B. Driving Mode Sensors:
 - 1. Speed sensor
 - 2. Solenoid vacuum valve
 - 3. Electronic amplifier
 - 4. Temperature-controlled vacuum valve
 - 5. Vacuum reducing valve
 - 6. EGR coolant override valve
 - 7. Backpressure transducer
 - 8. Vacuum amplifier
 - 9. Delay valves

VII. Air Injection System

- A. Air Supply Assembly:
 - 1. Pump
 - 2. Pressure relief valve
 - 3. Pressure-setting plug
 - 4. Pulsed air system
- B. Distribution Assembly:
 - 1. Diverter, relief, bypass, or gulp valve
 - 2. Check or anti-backfire valve
 - 3. Deceleration control part
 - 4. Flow control valve
 - 5. Distribution manifold
 - 6. Air switching valve

¹ Rotary (Wankel) engines only

- C. Temperature sensor

VIII. Catalyst, Thermal Reactor, and Exhaust System

- A. Catalytic Converter:
 - 1. Constricted fuel filler neck
 - 2. Catalyst beads (pellet-type converter)
 - 3. Ceramic support and monolith coating (monolith-type converter)
 - 4. Converter body and internal supports
 - 5. Exhaust manifold
- B. Thermal Reactor:
 - 1. Reactor casing and lining
 - 2. Exhaust manifold and exhaust port liner
- C. Exhaust System:
 - 1. Manifold
 - 2. Exhaust port liners
 - 3. Double walled portion of exhaust system
 - 4. Heat riser valve and control assembly

IX. Miscellaneous Items Used in Above Systems

- 1. Hoses, clamps, and pipers
- 2. Pulleys, belts, and idlers

X. Computer Controls

- 1. Electronic Control Unit (ECU)
- 2. Computer-coded engine operating parameter (including computer chips)
- 3. All sensors and actuators associated with the ECU

XI. Drive Train Parts (added to Emission-Related Parts List)

- 1. Engine
- 2. Drive mechanism
- 3. Transmission
- 4. Differential
- 5. Axles
- 6. Brakes

ATTACHMENT E

QUALITY CONTROL CHECKLIST

**Emission-Related and Drivetrain Parts
Removal and Destruction - Quality Control Check List**

Date _____
 Dismantler _____
 Address _____
 Quality Control Inspector _____
 Vehicle Make _____
 Vehicle Model _____
 Vehicle Year _____
 Vehicle License Number _____
 Vehicle Odometer Mileage _____

Category	Emission-Related/Drivetrain Part	Part Removed	Part Destroyed
Air Induction System	Temperature sensor elements		
	Vacuum motor for air control		
	Hot air duct & stove		
	Air filter housing & element		
	Turbocharger or supercharger		
	Intercooler		
Emission Calibrated Carburetors	Metering jets		
	Metering rods		
	Needle and seat		
	Power valve		
	Float circuit		
	Vacuum break		
	Choke mechanism		
	Throttle-control solenoid		
Emission Calibrated Carburetors (continued)	Deceleration valve		
	Dashpot		
	Idle stop solenoid, anti-dieseling assembly		
	Accelerating pump		
Mechanical Fuel Injection:	Altitude compensator		
	Pressure regulator		
	Fuel injection pump		
	Fuel injector		
	Throttle-position compensator		
	Engine speed compensator		
	Engine temperature compensator		
	Altitude cut-off valve		
	Deceleration cut-off valve		
	Cold-start valve		
Continuous Fuel Injection:	Fuel pump		
	Pressure accumulator		
	Fuel filter		
	Fuel distributor		
	Fuel injections		
	Air-flow sensor		
	Throttle-position compensator		
	Warm-running compensator		
	Pneumatic overrun compensator		
Cold-start valve			
Electronic Fuel Injection:	Pressure regulator		
	Fuel distribution manifold		

Category	Emission-Related/Drivetrain Part	Part Removed	Part Destroyed
	Fuel injectors		
	Electronic control unit		
	Engine speed sensor		
	Engine temperature sensor		
	Throttle-position sensor		
	Altitude/manifold-pressure sensor		
Electronic Fuel Injection:	Cold-start valve		
Air Fuel Ratio Control:	Frequency valve		
Air Fuel Ratio Control:	Oxygen sensor		
Air Fuel Ratio Control:	Electronic control unit		
Intake Manifold	Intake Manifold Assembly		
Distributor	Cam		
	Points		
	Rotor		
	Condenser		
	Distributor cap		
	Breaker plate		
	Electronic components (breakerless or electronic system)		
Spark Advance/ Retard System	Centrifugal advance mechanism: weights and springs		
	Vacuum advance unit		
	Transmission controlled spark system: vacuum solenoid, transmission switch, temperature switches, time delay, CEC valve, reversing relay		
	Electronic spark control system: computer circuitry, speed sensor, temperature switches, vacuum switching valve		
Spark Advance/ Retard System (continued)	Orifice spark advance control system: vacuum bypass valve, orifice spark advance control valve, temperature control switch, distributor vacuum control switch		
Spark Advance/ Retard System (continued)	Speed controlled spark system: vacuum solenoid, speed sensor and control switch, thermal vacuum switch		
Spark Plugs	Spark Plugs		
Ignition Coil	Ignition Coil		
Ignition Wires	Ignition Wires		
Drivetrain	Engine		
	Flywheel		
	Bell Housing		
	Drive Shaft		
	Transmission		
	Differentials		
	Axles		
	Brakes		
Mechanical Components	Intake valves		
	Exhaust valves		
	Valve guides		
	Valve springs		
	Valve seats		
	Camshaft		
	Cylinder head or rotor housing		
	Piston or rotor		
Evaporative Control System	Vapor Storage Canister and Filter		
	Vapor Liquid Separator		

Category	Emission-Related/Drivetrain Part	Part Removed	Part Destroyed
	Filler Cap		
	Fuel Tank		
	Canister Purge Valve		
Positive Crankcase Ventilation System	PCV Valve		
	Oil Filler Cap		
	Manifold PCV Connection Assembly		
Exhaust Gas Recirculation System	EGR Valve: valve body and carburetor spacer,		
	EGR Valve: internal passages and exhaust gas orifice		
Driving Mode Sensors	Speed sensor		
	Solenoid vacuum valve		
	Electronic amplifier		
	Temperature-controlled vacuum valve		
	Vacuum reducing valve		
	EGR coolant override valve		
	Backpressure transducer		
	Vacuum amplifier		
Air Injection System	Delay valves		
	Pump		
	Pressure-relief valve		
	Pressure-setting plug		
	Pulsed air system		
	Diverter		
	Relief, bypass, or gulp valve		
	Check or anti-backfire valve		
	Deceleration control part		
	Flow control valve		
	Distribution manifold		
	Air switching valve		
Catalytic Converter/Thermal Reactor/exhaust	Temperature sensor		
	Constricted fuel filler neck		
	Catalyst beads (pellet-type converter),		
	Ceramic support and monolith coating (monolith-type converter),		
	Converter body and internal supports,		
	Exhaust manifold		
	Reactor casing and lining		
	Exhaust manifold and exhaust port liner		
	Manifold		
	Exhaust port liners		
Miscellaneous Items Used in Above Systems	Double walled portion of exhaust system		
	Heat riser valve and control assembly		
Computer Controls	Hoses, clamps, and pipers		
	Pulleys, belts, and idlers		
	Electronic Control Unit (ECU)		
	Computer-coded engine operating parameter (including computer chips)		
	All sensors and actuators associated with the ECU		

Quality Control Inspector Final Verification All Emission-Related and Drivetrain Parts Removed and Destroyed

Quality Control Inspector Signature: _____

Date: _____

AMENDMENT NO. 4 TO
BAY AREA AIR QUALITY MANAGEMENT DISTRICT
CONTRACT NO. 2020.120

This amendment to the above-entitled contract (“Contract Amendment”) is dated, for reference purposes only, June 12, 2023 and consists of 4 pages.

RECITALS:

1. The Bay Area Air Quality Management District (“DISTRICT”) and **Pick-n-Pull Auto Dismantlers** (“CONTRACTOR”) (hereinafter referred to as the “PARTIES”) entered into the above-entitled contract to solicit, purchase, and scrap eligible vehicles in compliance with the California Air Resources Board’s Voluntary Accelerated Light-Duty Vehicle Retirement Enterprises regulations (Cal. Code Regs., tit. 13, §§ 2600 et seq.) (the “Contract”), which Contract was executed on behalf of CONTRACTOR on June 30, 2020, and on behalf of DISTRICT on July 1, 2020.
2. The PARTIES entered into Amendment No. 1 to the Contract, dated April 20, 2021, for reference purposes only, to amend the term of the Contract.
3. The PARTIES entered into Amendment No. 2 to the Contract, dated June 9, 2022, for reference purposes only, to amend the term and Cost Schedule, including the total cost, of the Contract.
4. The PARTIES entered into Amendment No. 3 to the Contract, dated July 6, 2022, for reference purposes only, to amend the Scope of Work of the Contract.
5. DISTRICT entered into the Contract based on approval by DISTRICT’s Board of Directors to spend up to \$7 million per fiscal year to scrap cars using funds from the Carl Moyer Program, Mobile Source Incentive Fund, and Transportation Fund for Clean Air beginning fiscal year 2020-2021. The Board of Directors authorized the DISTRICT Executive Officer/Air Pollution Control Officer to execute contracts to scrap cars using these funds for the 2020-2021 fiscal year, and also to renew the contracts for up to an additional three years based on contractor performance.
6. DISTRICT entered into Amendment No. 2 based on approval by DISTRICT’s Board of Directors on June 1, 2022 to spend up to an additional \$5 million per fiscal year, for a total of \$12 million per fiscal year, to scrap cars using funds from the Mobile Source Incentive Fund, and/or Transportation Fund for Clean Air, beginning fiscal year 2023-2024. The Board of Directors authorized DISTRICT’s Executive Officer/Air Pollution

Control Officer to execute amendments to contracts to scrap cars using these funds for the 2023-2024 fiscal year.

7. DISTRICT seeks to enter into Amendment No. 4 based on prior approval by DISTRICT's Board of Directors on June 1, 2022 to spend \$12 million to scrap cars using funds from the Mobile Source Incentive Fund, and/or Transportation Fund for Clean Air, beginning fiscal year 2023-2024.
8. The PARTIES seek to amend the term to the Contract because DISTRICT seeks to have CONTRACTOR continue to provide the services prescribed in the Contract beyond the original termination date, as authorized by DISTRICT's Board of Directors, and CONTRACTOR desires to provide those services.
9. In accordance with Section 26 of the Contract, DISTRICT and CONTRACTOR desire to amend the above-entitled Contract as follows:

TERMS AND CONDITIONS OF CONTRACT AMENDMENT:

1. By this Contract Amendment, DISTRICT and CONTRACTOR amend Section 4, "Term." The term of the Contract shall be extended so that the termination date of the Contract is now July 1, 2024.
2. By this Contract Amendment, DISTRICT and CONTRACTOR replace Attachment B-1, Cost Schedule, with the attached "Attachment B-2, Cost Schedule" and agree that all references in the Contract to Attachment B-1 shall be deemed to refer to Attachment B-2, Cost Schedule.
3. DISTRICT and CONTRACTOR agree that all other terms and conditions of the Contract shall remain in full force and effect.

IN WITNESS WHEREOF, the PARTIES have caused this Contract Amendment to be duly executed on their behalf by their authorized representatives.

BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

PICK-N-PULL AUTO DISMANTLERS

By: ^{DocuSigned by:}
Philip Fine
7314B577922A46A...
Philip M. Fine
Executive Officer/APCO

By: Mark Carnesecca
Mark Carnesecca
VP of Vehicle Purchasing

Date: 6/28/2023

Date: 06/15/2023

Approved as to form:
District Counsel

By: ^{DocuSigned by:}
Alexander Crockett 6/27/2023
6DC7110552B5451...
Alexander G. Crockett
District Counsel

ATTACHMENT B-2

COST SCHEDULE

A. Per Vehicle Payment. DISTRICT will pay CONTRACTOR an amount of \$1,249.00 per vehicle scrapped, up to a total maximum amount of \$6 million under the Vehicle Buy Back ("VBB") Program.

B. Price Breakdown. The rate above is based on reimbursing CONTRACTOR for the \$1,200.00 purchase price of each vehicle, plus \$49.00 for overhead for the VBB Program.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

PROFESSIONAL SERVICES CONTRACT

CONTRACT NO. 2020.119

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 Direct Mail Center, inc. (“CONTRACTOR”) whose address is 1099 Mariposa Street, San Francisco, CA 94107.
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 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 paragraph D above.
4. TERM – The term of this Contract is from July 1, 2020 to June 30, 2021, unless further extended by amendment of this Contract in writing, 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, 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 termination date.

- 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 to 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 in duplicate on CONTRACTOR's letterhead; shall list DISTRICT's contract number, the period covered by the invoice, and the CONTRACTOR's Social Security Number or Federal Employer Identification Number; and shall be submitted to: Bay Area Air Quality Management District, 375 Beale Street, Suite 600,, San Francisco, CA 94105, Attn: Mae Go.
 - 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 \$134,400.

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 \$134,400. 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. PST. 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: Damian Breen

CONTRACTOR: Direct Mail Center, Inc.
1099 Mariposa Street
San Francisco, CA 94107
Attn: Raymond Leung

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, 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. 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 the above.
16. 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.
17. 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.
18. 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.
19. 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.
20. 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.
21. 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.

22. 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.
23. 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.
24. 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.
25. 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.
26. 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.
27. 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.

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

DIRECT MAIL CENTER, INC.

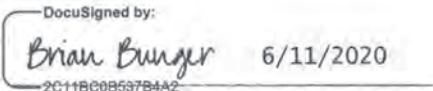
By: 
Jack P. Broadbent
Executive Officer/APCO

By: 
Raymond Leung
Account Manager

Date: 6-17-20

Date: 6-9-2020

Approved as to form:
District Counsel

By: 
2011BC0B53794A2
Brian C. Bunger
District Counsel

ATTACHMENT A

SCOPE OF WORK

CONTRACTOR shall provide direct mail services to distribute notices for the DISTRICT's Vehicle Buy Back (VBB) Program, a voluntary vehicle retirement and scrapping program that takes older, higher-polluting vehicles off Bay Area roads. The DISTRICT anticipates mailing up to 350,000 notices per fiscal year. CONTRACTOR will conduct a direct mail services campaign in compliance with the following requirements and procedures:

A. Data Management:

1. DISTRICT will provide CONTRACTOR a flat file database on a compact disc (CD-ROM), or external flash drive. The flat file database will consist of approximately 20 columns and up to 350,000 rows. CONTRACTOR shall convert the flat file database to the Microsoft Access database format. CONTRACTOR will format the information by vehicle owner address, city, state, zip code, vehicle model year, and vehicle registration due date.
2. CONTRACTOR shall suppress or otherwise modify the database to eliminate mailings to vehicle owners with 1970 and older model year vehicles and up to 150 individuals that have either requested to be removed from the mailing list or have previously participated in the VBB program. DISTRICT will provide CONTRACTOR with a Microsoft Excel spreadsheet of the names and addresses of these individuals. DISTRICT will also provide CONTRACTOR, on a monthly basis, any additions to the list.
3. CONTRACTOR shall send the database to the National Change of Address every six months to update the database. CONTRACTOR will add address changes that are no longer in the DISTRICT's jurisdiction to the suppress mail list.
4. CONTRACTOR shall provide DISTRICT with one (1) CD-ROM or external flash drive of the Microsoft Access database once tasks A.1 and A.2 have been completed initially. Each month thereafter, CONTRACTOR shall suppress from the database additional names provided by the DISTRICT and the National Change of Address. CONTRACTOR shall provide the DISTRICT with one (1) CD-ROM or flash drive which reflects the new database with the most recent suppressed names removed on a monthly basis.

B. Mailings:

1. DISTRICT will provide CONTRACTOR with twenty-four (24) mail drop dates at approximately two-week intervals to coincide with the vehicle owner's receipt of registration renewal notices from the California Department of Motor Vehicles (DMV). DISTRICT will provide CONTRACTOR the date range of addresses of vehicle owners in the Bay Area who are to receive letters on the specific mail drop dates.
2. CONTRACTOR shall merge text of one-page letter with addresses of vehicle owners and vehicle model year from the DMV database provided by the DISTRICT. DISTRICT will provide the text of the letter.
3. CONTRACTOR shall print the letter on DISTRICT's letterhead, which consists of DISTRICT's logo and contact information, on 20-pound, 8.5" x 11", white, recycled paper. The recycled paper shall contain at least 30% post-consumer material. CONTRACTOR will print a single-sided letter with black text. The DISTRICT's logo shall be printed in color (blue in two shades) with text in black ink. DISTRICT will provide CONTRACTOR logo artwork in electronic format (jpeg).

4. CONTRACTOR shall print the DISTRICT's return address and logo on #10 standard left window envelope, 24-pound, white recycled stock. The DISTRICT's logo shall be printed in black ink. The recycled envelope paper shall contain at least 30% post-consumer material. The DISTRICT will provide logo artwork in electronic format (jpeg).
5. CONTRACTOR shall fold letters to fit window envelopes and insert a one-page letter into each envelope, with the corresponding vehicle owner mailing address.
6. CONTRACTOR shall seal each envelope, provide postage (standard mail bulk rate), and deliver to the United States Post Office for mailing on the specified drop dates provided by DISTRICT.

ATTACHMENT B

COST SCHEDULE

DISTRICT will pay CONTRACTOR a fixed cost of \$42,035 for data management and letter and envelop production services for 350,000 notices. Standard mail bulk rate postage and delivery costs will be billed to DISTRICT at the actual rate charged by the United States Postal Services, up to a maximum amount of \$92,365 under this Contract. CONTRACTOR will submit monthly invoices to DISTRICT for the mail drops performed in the previous month. Payment will be made in accordance with Section 8, Payment, of this Contract.

Description	Cost
Data Management Cost	\$3,885
Letter and Envelope Production Cost	\$38,150
Standard Mail Bulk Rate Postage and Delivery Cost (not to exceed)	\$92,365
Total	\$134,400

Total cost of Contract not to exceed \$134,400.

AMENDMENT NO. 3 TO
BAY AREA AIR QUALITY MANAGEMENT DISTRICT
CONTRACT NO. 2020.119

This amendment to the above-entitled contract ("Contract Amendment") is dated, for reference purposes only, May 30, 2023.

RECITALS:

1. The Bay Area Air Quality Management District ("DISTRICT") and **Direct Mail Center, Inc.** ("CONTRACTOR") (hereinafter referred to as the "PARTIES") entered into the above-entitled contract for bulk mailing for DISTRICT's Vehicle Buy Back program (the "Contract"), which Contract was executed on behalf of CONTRACTOR on June 9, 2020, and on behalf of DISTRICT on June 17, 2020.
2. The PARTIES entered into Amendment No. 1 to the Contract, dated May 3, 2021, for reference purposes only, to amend the term and total maximum cost of the Contract.
3. The PARTIES entered into Amendment No. 2 to the Contract, dated June 1, 2022, for reference purposes only, to amend the term and total maximum cost of the Contract.
4. The PARTIES seek to amend the term and total maximum cost of the Contract because DISTRICT seeks to have CONTRACTOR continue to provide the services prescribed in the Contract, and CONTRACTOR desires to provide those services.
5. In accordance with Section 26 of the Contract, DISTRICT and CONTRACTOR desire to amend the above-entitled Contract as follows:

TERMS AND CONDITIONS OF CONTRACT AMENDMENT:

1. By this Contract Amendment, DISTRICT and CONTRACTOR amend Section 4, "Term." The term of the Contract shall be extended so that the termination date of the Contract is now June 30, 2024.
2. By this Contract Amendment, DISTRICT and CONTRACTOR amend Paragraph D of Section 8, "Payment," of the Contract to replace "\$654,300" with "\$1,038,300."
3. By this Contract Amendment, DISTRICT and CONTRACTOR amend Paragraph F of Section 9, "Dispute Resolution," of the Contract to replace "\$654,300" with "\$1,038,300."

- 4. By this Contract Amendment, DISTRICT and CONTRACTOR replace Attachment B-2, Cost Schedule, with the attached "Attachment B-3, Cost Schedule" and agree that all references in the Contract to Attachment B shall be deemed to refer to Attachment B-3, Cost Schedule.
- 5. DISTRICT and CONTRACTOR agree that all other terms and conditions of the Contract shall remain in full force and effect.

IN WITNESS WHEREOF, the PARTIES have caused this Contract Amendment to be duly executed on their behalf by their authorized representatives.

BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

DIRECT MAIL CENTER, INC.

By: DocuSigned by:
Philip Fine
7314B577922A46A... _____
Philip W. Fine
Executive Officer/APCO

By:  _____
Raymond Leung
Account Manager

Date: 6/26/2023

Date: 6-26-23

Approved as to form:
District Counsel

By: DocuSigned by:
Alexander Crockett
6DC7110552B5451... 6/25/2023
Alexander G. Crockett
District Counsel

ATTACHMENT B-3**COST SCHEDULE**

DISTRICT will pay CONTRACTOR a fixed cost for data management and letter and envelop production services for up to 600,000 notices as outlined in the table below for each fiscal year (FY). Standard mail bulk rate postage and delivery costs will be billed to DISTRICT at the actual rate charged by the United States Postal Services, up to a maximum amount of \$180,000 per FY under this Contract. CONTRACTOR will submit monthly invoices to DISTRICT for the mail drops performed in the previous month. Payment will be made in accordance with Section 8, Payment, of this Contract.

Description	Cost (FY 2020- 2021)	Cost (FY 2021- 2022)	Cost (FY 2022- 2023)	Cost (FY 2023- 2024)
Data Management Cost	\$3,885	\$3,885	\$4,000	\$4,000
Letter and Envelope Production Cost	\$38,150	\$39,650	\$200,000	\$200,000
Standard Mail Bulk Rate Postage and Delivery Cost (not to exceed)	\$92,365	\$92,365	\$180,000	\$180,000
Total	\$134,400	\$135,900	\$384,000	\$384,000

Total cost of Contract not to exceed \$1,038,300.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

PROFESSIONAL SERVICES CONTRACT

CONTRACT NO. 2024.069

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 **Pick-N-Pull Auto Dismantlers** (“CONTRACTOR”) whose address is 10850 Gold Center Drive, Suite 350, Rancho Cordova, CA 95670.

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. CONTRACTOR has been selected as one of two contractors authorized to scrap vehicles under the DISTRICT's Vehicle Buy Back (“VBB”) Program beginning fiscal year ending 2025. The DISTRICT's Board of Directors has authorized DISTRICT to spend up to \$11 million each fiscal year to scrap vehicles using funds from the Carl Moyer Program, Mobile Source Incentive Fund, and Transportation Fund for Clean Air.
 - C. DISTRICT has not allocated specific amounts separately to each contractor and will expend funds for scrapping as invoices are received under this Contract and under contracts with other authorized VBB contractors.
 - D. 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 July 1, 2024 to June 30, 2025, 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.

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 the CONTRACTOR's Social Security Number or Federal Employer Identification Number; and shall be submitted via email to grants@baaqmd.gov with the subject line: RE: Vehicle Buy Back Program.
 - 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 the sum derived by multiplying the number of vehicles scrapped under this Contract by the per vehicle price specified in Attachment B.

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 the sum derived by multiplying the number of vehicles scrapped under this Contract by the per vehicle price specified in Attachment B. 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: Director of Strategic Incentives
Project #: Vehicle Buy Back Program
grants@baaqmd.gov

CONTRACTOR: Pick-n-Pull Auto Dismantlers
10850 Gold Center Drive, Suite 350
Rancho Cordova, CA 95670
Attn: Christine Phillips, Director, Support Services
Project #: Vehicle Buy Back Program

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. Future revisions to Appendix A, Vehicle Functional and Equipment Eligibility Inspection Form, Appendix B, Emission-Drive Train Related Parts List, and Appendix C, Quality Control Check List, adopted by the California Air Resources Board under the Voluntary Accelerated Vehicle Retirement regulations, California Code of Regulations, Title 13, Section 2601 et seq., shall supersede Attachments C, D, and E in this Contract.
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.
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.

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

PICK-N-PULL AUTO DISMANTLERS

By: _____
Philip M. Fine
Executive Officer/APCO

By: _____
Mark Carnesecca
Vice President, Vehicle
Purchasing

Date: _____

Date: _____

Approved as to form:

By: _____
Alexander G. Crockett
General Counsel

DRAFT

ATTACHMENT A

SCOPE OF WORK

The Scope of Work outlined in this section complies with the Voluntary Accelerated Light-Duty Vehicle Retirement (VAVR) Regulations adopted by the California Air Resources Board (ARB). Light-duty vehicle retirement projects are subject to the requirements of the Voluntary Accelerated Vehicle Retirement Regulation (VAVR Regulation), Cal. Code Regs., tit. 13, § 2601 et seq. Light and medium-duty vehicle projects funded through Assembly Bill (AB) 923 (2004) are authorized by Health and Safety Code Section 44229 (b)(4). CONTRACTOR's VAVR projects must be in compliance with all the applicable guidelines adopted by ARB. The ARB Carl Moyer Program Guidelines chapter on VAVR constitutes ARB's adopted guidelines for light-duty projects.

CONTRACTOR will solicit, purchase, and scrap eligible vehicles in compliance with the following requirements and procedures, and in compliance with the VAVR Regulations. DISTRICT will not reimburse CONTRACTOR for the purchase of a vehicle, or the overhead costs associated with that purchase, if such vehicle fails to meet the following requirements:

A. Vehicle Eligibility Requirements

1. Participation shall be entirely voluntary for vehicle owners.
2. The vehicle must meet the following criteria:
 - a. 1998 model year or older diesel or gasoline-powered passenger car or light-duty truck up to 10,000 pounds gross vehicle weight or less.
3. The vehicle must be currently registered with the California Department of Motor Vehicles (DMV) as an operating vehicle and must have been registered for at least 24 consecutive months prior to the date of the sale to CONTRACTOR as well as be registered to an address, or addresses, within the DISTRICT's jurisdiction. Smog Checks must be performed as required by DMV in order for the vehicle to be considered registered.
 - a. A vehicle may also be eligible if the owner of the vehicle placed the vehicle into planned non-operational status per Vehicle Code sections 4604 et seq., for up to two months during the 24-month registration period and occurring at least three months immediately prior to its sale to CONTRACTOR.
 - b. A vehicle may also be eligible if the registration has lapsed for a period of less than 181 days during the previous 24 months and all appropriate registration fees and late penalties have been paid to DMV, provided that the vehicle is registered for at least 90 days immediately prior to its sale date to CONTRACTOR.
4. The vehicle shall be driven to the CONTRACTOR's purchase site to be retired under its own power.
5. Vehicles whose emission control systems have been tampered with as defined in Cal Code Regs., tit. 16, § 3340.41.5. are not eligible until such tampering has been completely corrected.
6. The vehicle shall not be operating under a Smog Check repair cost waiver or economic hardship extension, as referenced in Cal Code Regs., tit. 13, § 2603 (a)(4).
7. If a vehicle volunteered for retirement is within 60 days of its next required Smog Check inspection, the vehicle shall pass the inspection without receiving a repair cost waiver or economic hardship extension prior to acceptance by CONTRACTOR.

8. If a vehicle volunteered for retirement is within 61-90 days of its next required Smog Check inspection, CONTRACTOR shall verify that the vehicle has not failed a Smog Check inspection during this time frame.
9. Owners of vehicles requiring Smog Check inspections pursuant to Cal Code Regs, tit. 13, § 2603(a)(5) shall be required to submit documentation issued by a Bureau of Automotive Repair (BAR) licensed Smog Check technician demonstrating compliance with Section 2603(a)(5) to the person performing the functional and equipment eligibility inspection.

B. Vehicle Functional and Equipment Eligibility Inspection

CONTRACTOR will only scrap vehicles that meet the following requirements. The vehicle function and equipment eligibility inspection must be performed by an ARB-approved inspector and conducted on-site at CONTRACTOR's yard.

1. The vehicle must have been driven to the inspection site under its own power. If CONTRACTOR has knowledge that a vehicle was towed or pushed for any portion of the trip to the inspection site, then CONTRACTOR shall not approve the vehicle for eligibility.
2. The vehicle shall pass functional and equipment eligibility inspections as specified in the VAVR Regulation. The vehicle functional and equipment eligibility inspection form is attached hereto as Attachment C.
3. Upon satisfactory completion of the inspection, CONTRACTOR will issue a certificate of functional and equipment eligibility.
4. Vehicles failing the requirements pursuant to Sections B.1 and B.3 may be retested by CONTRACTOR for compliance with these requirements and issued a certificate of functional and equipment eligibility provided the vehicle has traveled a minimum of 50 miles subsequent to the failure determination. Vehicles with inoperable vehicle odometers must have the odometer fixed prior to conducting this test. Vehicles failing the requirements pursuant to Section B.2 may be retested by CONTRACTOR for compliance with these requirements and issued a certificate of functional and equipment eligibility at any time after modifications have been made to the vehicle.

C. Offering Vehicles/Parts to the Public

1. There is a minimum waiting period of ten (10) days between the day CONTRACTOR provides a description of a vehicle to the DISTRICT and the day a DMV Registration 42 form (Notice to Dismantler) is transmitted to the DMV for the vehicle. During the 10-day waiting period, with the vehicle owner's permission, CONTRACTOR will submit to the DISTRICT a description of the vehicle in accordance with Section C.1(a) below, and the date when the vehicle is scheduled to be delivered for final sale to the VBB Program. During the 10-day waiting period, if any person contacts CONTRACTOR and indicates an interest in purchasing the vehicle, CONTRACTOR shall hold the vehicle for a minimum of an additional seven (7) days. During this extended 7-day waiting period, CONTRACTOR shall arrange for the interested party to examine the vehicle and, if appropriate, negotiate the sale of the vehicle or any of its parts. Notwithstanding the foregoing, **nothing in this section places CONTRACTOR under any obligation to hold the vehicle for an interested party that has missed two or more prior appointments to examine any vehicle, or to sell the vehicle or any of its parts if a mutually acceptable price cannot be negotiated.**
 - a. CONTRACTOR will submit to the DISTRICT, on a weekly basis, a description of the vehicles offered for sale into the VBB Program as described in Section C.1(a)(i). The DISTRICT will, in turn, make this information available to an appropriate segment of

the public. The intent is to allow interested third parties, including car collector enthusiasts and those interested in affordable transportation, an opportunity to examine the vehicle and to negotiate with CONTRACTOR to purchase the vehicle or any of its parts according to Section E, before it is otherwise sold to the VBB Program, should the vehicle be delivered as scheduled.

- i. The description of the vehicle must include, at a minimum, the vehicle make, model, model year, and first eight characters of the Vehicle Identification Number (VIN). In addition, the description of the vehicle must include, date vehicle owner contacted CONTRACTOR, date vehicle is expected to be purchased, date the vehicle will be dismantled, and location the vehicle will be stored. No information identifying the owner will be permitted. When the DISTRICT makes this information available to the public, the DISTRICT will emphasize that while a vehicle is scheduled for delivery, there is no guarantee that the vehicle will actually be delivered.
 - ii. The vehicle owner is free to accept or reject any resulting contact or purchase offer and shall be informed by CONTRACTOR explicitly and prominently of such right.
 - iii. Nothing in this section places CONTRACTOR under any obligation to provide space or facilities for such third-party contacts, inspections, or negotiations to take place.
2. Entire vehicles and/or parts may be sold prior to entry into the VBB Program; however, no compensation with VBB Program funds shall be granted for any vehicle resold to the public in this manner according to Section E.

D. Vehicle Buy Back Program Contractor Requirements

1. CONTRACTOR must either be an auto dismantler, licensed according to the requirements of the California Vehicle Code, other business codes, and the regulations of the DMV, for the purpose of vehicle disposal after purchase, or have a binding agreement with a duly authorized auto dismantler, for the purpose of vehicle disposal after purchase.
2. At least thirty (30) days prior to commencing operations as a VBB Program contractor, CONTRACTOR shall provide the DISTRICT, in writing, information demonstrating the ability to comply with all provisions of the VAVR Regulations. This information must include CONTRACTOR's name and business address; licensed auto dismantler name and business address; anticipated initiation date and duration of vehicle retirement operation; a written statement from the auto dismantler (for each program location) under penalty of perjury certifying compliance with local air quality regulations, water conservation regulations, state, county, and city energy and hazardous materials response regulations, and local water agency soil, surface, and ground water contamination regulations; and any other information requested in applicable DISTRICT rules.
3. CONTRACTOR is required to perform the vehicle functional and equipment eligibility inspection specified in Section B on-site at CONTRACTOR's locations.
4. CONTRACTOR shall verify that the vehicle meets the vehicle registration eligibility and functional test requirements. The vehicle registration eligibility will be determined by DMV registration records.
5. At time of final sale of a vehicle to CONTRACTOR, CONTRACTOR must verify that the person delivering the vehicle for sale is the legal owner or an authorized representative of the legal owner, properly empowered to complete the sale.

6. A vehicle purchased as part of the VBB Program must be permanently destroyed by CONTRACTOR, or CONTRACTOR's duly contracted dismantler, within ninety (90) days of the date it is sold to CONTRACTOR, and may not be resold to the public or put into operation in any way, except such a vehicle may be briefly operated for purposes related to the disposal of the vehicle as part of the normal disposal procedures.
7. The vehicle will be considered destroyed when it has been crushed or shredded or otherwise rendered permanently and irreversibly incapable of functioning as originally intended, and when all appropriate records maintained by the DMV have been updated to reflect that the vehicle has been acquired by a licensed auto dismantler for the purposes of dismantling.
8. All vehicles must be confined in a holding area separate from other vehicles procured by CONTRACTOR until they are permanently destroyed.
9. All activities associated with retiring vehicles, including, but not limited to, the disposal of vehicle fluids and vehicle components, must comply with all applicable laws and regulations including, but not limited to, local water conservation regulations, state, county, and city energy and hazardous materials response regulations, and local water agency soil, surface, and ground water contamination regulations.
10. CONTRACTOR will purchase eligible vehicles at a price established by the contract between CONTRACTOR and DISTRICT.
11. CONTRACTOR will distribute a DISTRICT-designed questionnaire to all vehicle sellers, obtain the seller's completed questionnaire, and provide response data onto an electronic spreadsheet form to DISTRICT.
12. CONTRACTOR must cooperate with any inspections of the facilities, and review of the CONTRACTOR's operation of the VBB program as requested by the DISTRICT or ARB. These inspections can include audits of the required program documentation, and financial records.
13. CONTRACTOR shall be responsible for training its staff at each of its participating VBB program locations to ensure that staff demonstrate knowledge of the VBB program in order to effectively and efficiently complete all steps needed to process VBB purchases.

E. Parts Recycling and Resale

1. On vehicles used for parts recycling and resale, parts recycling and resale is limited to non-emission-related and non-drivetrain parts per the List of Emission-Drivetrain Related Parts List, attached hereto as Attachment D. Parts recycling and resale is at the sole discretion of CONTRACTOR, subject to the limitations included herein.
2. After the 10-day waiting period (and the additional 7-day waiting period if an appointment for inspection is made) and prior to offering non-emission and non-drivetrain parts for resale, the engine, emission-related parts, transmission, and drivetrain parts must be removed from the vehicle and destroyed by CONTRACTOR.
 - a. For the purpose of this regulation, a part will be considered destroyed when it has been punched, crushed, shredded, or otherwise rendered permanently and irreversibly incapable of functioning as originally intended.
 - b. A "Quality Control Checklist" with a list of emission-related and drivetrain parts that has check boxes for recording the status of parts, i.e., "removed" and "destroyed" is attached hereto as Attachment E.
 - i. CONTRACTOR must complete the checklist by adding check marks in the appropriate columns as the emission-related and drivetrain parts are removed and destroyed.

- ii. For a part that appears on the checklist but is not in the original design of the vehicle, CONTRACTOR must enter "N/A" for "not applicable" in lieu of a check mark.
 - c. After all emission-related and drivetrain parts are removed and destroyed, a quality control inspector (designated by DISTRICT) must perform an inspection of the non-emission-related and non-drivetrain parts, as well as the vehicle body.
 - d. Upon verification by the quality control inspector that no emission-related parts or drivetrain parts have been exchanged with the non-emission-related, and non-drivetrain parts, the quality control inspector must sign the checklist.
 - e. After the quality control inspector signs the check list, CONTRACTOR may place the remaining non-emission parts, non-drivetrain parts and vehicle body in the yard to be available for sale to the public.
3. If CONTRACTOR does not recover parts from a vehicle, the entire vehicle must be crushed by CONTRACTOR within ninety (90) days of sale to the VBB Program.
 - a. No parts may be removed, for sale or reuse, from any crushed retired vehicle that has been sold to the VBB Program. The only allowable use for any crushed retired vehicle is as a source of scrap metal and other scrap material.
 - b. CONTRACTOR may separate ferrous and non-ferrous metals from a crushed retired vehicle to sell as a source of scrap metal only.
 - c. CONTRACTOR may sell tires and batteries from a crushed retired vehicle to an intermediary tire/battery recycler only. All facilities generating or receiving waste tires must use the services of a registered tire hauler/recycler. Battery recyclers must be registered and licensed to handle batteries.
4. No compensation with VBB Program funds shall be granted for any vehicle from which emission related or drivetrain parts have been sold.
5. All activities associated with retiring vehicles for the VBB Program, including but not limited to the disposal of vehicle fluids and vehicle components, shall comply with all applicable laws and regulations including, but not limited to, local water conservation regulations, state, county, and city energy and hazardous materials response regulations, and local water agency soil, surface, and ground water contamination regulations.
6. CONTRACTOR will be subject to audits performed by the DISTRICT and its representatives.

F. Advertising

1. CONTRACTOR is encouraged to advertise for or otherwise attract voluntary sellers of vehicles meeting the eligibility requirements specified above. CONTRACTOR will submit to DISTRICT for approval a plan for implementing the advertising campaign within thirty (30) days of signing this contract. The DISTRICT will audit CONTRACTOR at the completion of the contract to verify that CONTRACTOR implemented the advertising campaign as specified in the contract.
2. CONTRACTOR will use the DISTRICT's approved logo on any printed material for public distribution. All uses of the DISTRICT's logo must be pre-approved for use by DISTRICT staff.
3. CONTRACTOR will credit the DISTRICT as the funding source for the scrapping program in any related articles, news releases, or other publicity materials. All advertising materials, information packages, and any other materials provided to media, to the public, or to vehicle sellers require prior approval by DISTRICT.
4. Any advertising conducted by CONTRACTOR for the purpose of recruiting vehicle owners to sell their vehicles into the VBB Program shall contain clear and prominent language stating

that participation in the VBB Program is completely voluntary; and shall not contain any language stating or implying that the VBB Program is anything but voluntary for the vehicle seller or that the VBB Program is affiliated with or is operated by the State of California.

5. Any contracts or agreements between a vehicle seller and CONTRACTOR relating to the sale of a vehicle to the VBB Program shall not contain any language stating that the VBB Program is anything but voluntary for the vehicle seller or that the VBB Program is affiliated with or is operated by the State of California.

G. Records, Auditing, and Enforcement

1. The following requirements for records, auditing, and enforcement shall be met:
 - a. CONTRACTOR shall be responsible for maintaining and storing the following information for each vehicle removed from operation for the VBB Program:
 - i. Vehicle Identification Number (VIN)
 - ii. Vehicle license plate number
 - iii. Vehicle make and model year
 - iv. Vehicle odometer reading
 - v. Name, address and phone number of legal owner selling vehicle to the contractor
 - vi. Name, address and phone number of registered owner if different from Section G.1(a)(v)
 - vii. Name and business address of inspector conducting the vehicle's eligibility inspection, if CONTRACTOR contracts with an ARB-approved inspection entity to perform the vehicle functional and equipment eligibility inspection
 - viii. Date of purchase of vehicle by CONTRACTOR
 - ix. Date of vehicle retirement
 - x. Reproduction of California Certificate of Title and registration, as signed-off by seller at time of final sale to the VBB Program
 - xi. Reproduction of the applicable certificate of functional and equipment eligibility
 - xii. Reproduction of the applicable Report of Vehicle to be Dismantled and Notice of Acquisition (DMV Registration 42 form)
 - xiii. Reproduction of written documentation from the DMV verifying that a vehicle meets the requirements of Section A.3
 - xiv. If applicable, reproduction of documentation issued pursuant to Section A.9
 - xv. Any other pertinent data requested by the DISTRICT (e.g. VBB Program survey)
 - b. Upon request of the DISTRICT, the data contained in records required in Section G.1(a)(i) through Section G.1(a)(xv) shall be transmitted to the DISTRICT in an electronic database format, in addition to paper copies. The electronic format will be provided by the DISTRICT.
 - c. CONTRACTOR will maintain copies, either electronic or paper, of the information listed in Section G.1(a)(i) through Section G.1(a)(xv) for a minimum period of five (5) years, and shall make those records available to DISTRICT upon request within 30 days.
 - d. The DISTRICT may conduct announced and unannounced audits and on-site inspections of the CONTRACTOR's operations to ensure operations are being conducted according to all applicable rules and regulations. DISTRICT shall notify any

noncompliant contractor of the nature of the violation and shall initiate any enforcement or remedial action necessary.

- i. CONTRACTOR and their subcontractors shall allow DISTRICT to conduct announced and unannounced audits and inspections and shall cooperate fully in such situations.
 - ii. Violation of any provision of any applicable regulation, including falsification of any information or data, shall constitute a citable violation making the violator subject to all applicable penalties specified in the California Health and Safety Code. In addition, violation of any provision of §2603 of the VAVR Regulation, 13 Cal. Code Regs., tit. 13, by CONTRACTOR or its subcontractors may result in the issuance of a Notice of Violation(s).
2. CONTRACTOR will handle all DMV paperwork associated with the purchase, dismantling, and scrapping of vehicles.
3. CONTRACTOR will provide to DISTRICT, on a weekly basis, a description of the vehicles offered for sale into the VBB Program. The description of the vehicle must include the date vehicle owner contacted the VBB program, date the vehicle will be dismantled, vehicle make, vehicle model, model year, the first eight characters of the VIN, name of dismantler, location of dismantling facility, and dismantler's phone number. No information identifying the owner will be permitted.
4. CONTRACTOR will provide monthly invoice reports to the DISTRICT on the status of the scrapping program. The reports shall be printed on CONTRACTOR's letterhead, shall list the contract number, the period covered by the invoice, CONTRACTOR's Social Security Number or Federal Employer Identification Number, and include the monthly and cumulative number of vehicles purchased.

ATTACHMENT B

COST SCHEDULE

A. Per Vehicle Payment. DISTRICT will pay CONTRACTOR an amount of **\$1,525.00** per vehicle scrapped, up to a total maximum amount of \$11 million under the VBB Program.

B. Price Breakdown. The rate above is based on reimbursing CONTRACTOR for the **\$1,500.00** purchase price of each vehicle, plus \$25 for overhead for the VBB Program.

Total Contract not to exceed \$11,000,000. This amount has NOT been allocated in any way to CONTRACTOR, or any other contractor under the VBB. The DISTRICT will expend funds as invoices are received under this Contract and under contracts with other authorized VBB contractors up to a total maximum amount of \$11,000,000.

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ATTACHMENT C



**VEHICLE FUNCTIONAL AND EQUIPMENT
ELIGIBILITY INSPECTION FORM**

Legal Owner: _____ Phone Number: _____
 Address: _____ City: _____ Zip: _____
 VIN: _____ License Plate Number: _____
 Make: _____ Model: _____
 Model Year: _____ Odometer Reading: _____

VEHICLE QUALIFICATION (* Vehicle is not qualified for the VAVR program.)

Vehicle within 61-90 days of next scheduled Smog Check: [] yes [] no 2602(c)
 If yes, vehicle failed next scheduled Smog Check: [] yes* [] no
 Vehicle registered in District for at least 24 months: [] yes [] no* 2603(a)(2)
 Vehicle on BAR repair cost waiver: [] yes* [] no 2603(a)(4)
 Vehicle on BAR economic hardship extension: [] yes* [] no 2603(a)(4)
 Vehicle within 60 days of next scheduled Smog Check: [] yes [] no 2603(a)(5)
 If yes, vehicle passed next scheduled Smog Check: [] yes [] no*
 The vehicle has been tampered with: [] yes* [] no 2603(a)(7)
 The vehicle has been driven to the inspection site: [] yes [] no* 2603(b)(1)

EQUIPMENT ELIGIBILITY

The following shall be present and in place: 2603(b)(2)

All doors	[] yes [] no*	Hood	[] yes [] no*
Dashboard	[] yes [] no*	Driver's seat	[] yes [] no*
One bumper	[] yes [] no*	All side and/or quarter panels	[] yes [] no*
Exhaust system	[] yes [] no*	One headlight	[] yes [] no*
One taillight	[] yes [] no*	One brake light	[] yes [] no*
One side window	[] yes [] no*	Interior pedals operational	[] yes [] no*
Windshield	[] yes [] no*		
Drivability affected by body, steering, or suspension damage	[] yes* [] no		

FUNCTIONAL ELIGIBILITY

The following shall be completed: 2603(b)(3)

Vehicle starts using keyed ignition [] yes [] no*
 Vehicle starts without the use of starting fluids or external battery [] yes [] no*
 Vehicle driven forward for a minimum of 25 feet [] yes [] no*
 Vehicle driven in reverse for a minimum of 25 feet [] yes [] no*

* Vehicle is not eligible for the VAVR program.

INSPECTOR CERTIFICATION: (Check correct boxes.) I certify that this vehicle has ([] passed [] not passed) both the functional and equipment eligibility inspections and ([] is [] is not) eligible for acceptance into the VAVR program pursuant to California Code of Regulations, Title 13, Sections 2602 and 2603, or as applicable to motorcycles as indicated on the checklist above.

Printed Name: _____ Date: _____
 Signed: _____

The following should be completed if the vehicle is eligible for acceptance into a VAVR program.

OWNER ACCEPTANCE: I accept receipt of this CERTIFICATION of eligibility into the VAVR program. I agree not to alter the vehicle's equipment or functionality from that presented to the inspector. I agree to maintain the vehicle's condition and registration until the vehicle is retired. In accordance with Title 13, CCR, Chapter 13, Article 1, Section 2605, the vehicle will be listed and available for interested parties to purchase from the dismantler for a minimum of 10 days. If the vehicle is purchased by a third party it will not be included in the VAVR program.

Printed Name: _____ Date: _____
Signed: _____ Driver's License #: _____

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ATTACHMENT D

EMISSION-DRIVETRAIN RELATED PARTS LIST

The following list of components are examples of emission related parts as shown in California Code of Regulations Title 13, Division 3, Chapter 13, Article 1, Appendix B.

I. Carburetion and Air Induction System

- A. Air Induction System:
 - 1. Temperature sensor elements
 - 2. Vacuum motor for air control
 - 3. Hot air duct & stove
 - 4. Air filter housing & element
 - 5. Turbocharger or supercharger
 - 6. Intercooler
- B. Emission Calibrated Carburetors:
 - 1. Metering jets
 - 2. Metering rods
 - 3. Needle and seat
 - 4. Power valve
 - 5. Float circuit
 - 6. Vacuum break
 - 7. Choke mechanism
 - 8. Throttle-control solenoid
 - 9. Deceleration valve
 - 10. Dashpot
 - 11. Idle stop solenoid, anti-dieseling assembly
 - 12. Accelerating pump
 - 13. Altitude compensator
- C. Mechanical Fuel Injection:
 - 1. Pressure regulator
 - 2. Fuel injection pump
 - 3. Fuel injector
 - 4. Throttle-position compensator
 - 5. Engine speed compensator
 - 6. Engine temperature compensator
 - 7. Altitude cut-off valve
 - 8. Deceleration cut-off valve
 - 9. Cold-start valve
- D. Continuous Fuel Injection:
 - 1. Fuel pump
 - 2. Pressure accumulator
 - 3. Fuel filter
 - 4. Fuel distributor
 - 5. Fuel injections
 - 6. Air-flow sensor
 - 7. Throttle-position compensator
 - 8. Warm-running compensator
 - 9. Pneumatic overrun compensator
 - 10. Cold-start valve
- E. Electronic Fuel Injection:
 - 1. Pressure regulator
 - 2. Fuel distribution manifold
 - 3. Fuel injectors
 - 4. Electronic control unit

- 5. Engine speed sensor
- 6. Engine temperature sensor
- 7. Throttle-position sensor
- 8. Altitude/manifold-pressure sensor
- 9. Cold-start valve
- F. Air Fuel Ratio Control:
 - 1. Frequency valve
 - 2. Oxygen sensor
 - 3. Electronic control unit
- G. Intake Manifold

II. Ignition System

- A. Distributor;
 - 1. Cam
 - 2. Points
 - 3. Rotor
 - 4. Condenser
 - 5. Distributor cap
 - 6. Breaker plate
 - 7. Electronic components (breakerless or electronic system)
- B. Spark Advance/Retard System:
 - 1. Centrifugal advance mechanism:
 - a. Weights
 - b. Springs
 - 2. Vacuum advance unit
 - 3. Transmission controlled spark system:
 - a. Vacuum solenoid
 - b. Transmission switch
 - c. Temperature switches
 - d. Time delay
 - e. CEC valve
 - f. Reversing relay
 - 4. Electronic spark control system:
 - a. Computer circuitry
 - b. Speed sensor
 - c. Temperature switches
 - d. Vacuum switching valve
 - 5. Orifice spark advance control system:
 - a. Vacuum bypass valve
 - b. OSAC (orifice spark advance control) valve
 - c. Temperature control switch
 - d. Distributor vacuum control valve
 - 6. Speed controlled spark system:
 - a. Vacuum solenoid
 - b. Speed sensor and control switch
 - c. Thermal vacuum switch
- C. Spark Plugs
- D. Ignition Coil
- E. Ignition Wires

III. Mechanical Components

- A. Valve trains:
 - 1. Intake valves
 - 2. Exhaust valves
 - 3. Valve guides

4. Valve springs
 5. Valve seats
 6. Camshaft
- B. Combustion Chamber:
1. Cylinder head or rotor housing¹
 2. Piston or rotor¹

IV. Evaporative Control System

- A. Vapor Storage Canister and Filter
- B. Vapor Liquid Separator
- C. Filler Cap
- D. Fuel Tank
- E. Canister Purge Valve

V. Positive Crankcase Ventilation System

- A. PCV Valve
- B. Oil Filler Cap
- C. Manifold PCV Connection Assembly

VI. Exhaust Gas Recirculation System

- A. EGR Valve:
 1. Valve body and carburetor spacer
 2. Internal passages and exhaust gas orifice
- B. Driving Mode Sensors:
 1. Speed sensor
 2. Solenoid vacuum valve
 3. Electronic amplifier
 4. Temperature-controlled vacuum valve
 5. Vacuum reducing valve
 6. EGR coolant override valve
 7. Backpressure transducer
 8. Vacuum amplifier
 9. Delay valves

VII. Air Injection System

- A. Air Supply Assembly:
 1. Pump
 2. Pressure relief valve
 3. Pressure-setting plug
 4. Pulsed air system
- B. Distribution Assembly:
 1. Diverter, relief, bypass, or gulp valve
 2. Check or anti-backfire valve
 3. Deceleration control part
 4. Flow control valve
 5. Distribution manifold
 6. Air switching valve
- C. Temperature sensor

VIII. Catalyst, Thermal Reactor, and Exhaust System

- A. Catalytic Converter:
 1. Constricted fuel filler neck
 2. Catalyst beads (pellet-type converter)

¹ Rotary (Wankel) engines only

3. Ceramic support and monolith coating (monolith-type converter)
 4. Converter body and internal supports
 5. Exhaust manifold
- B. Thermal Reactor:
1. Reactor casing and lining
 2. Exhaust manifold and exhaust port liner
- C. Exhaust System:
1. Manifold
 2. Exhaust port liners
 3. Double walled portion of exhaust system
 4. Heat riser valve and control assembly

IX. Miscellaneous Items Used in Above Systems

1. Hoses, clamps, and pipers
2. Pulleys, belts, and idlers

X. Computer Controls

1. Electronic Control Unit (ECU)
2. Computer-coded engine operating parameter (including computer chips)
3. All sensors and actuators associated with the ECU

XI. Drive Train Parts (added to Emission-Related Parts List

1. Engine
2. Drive mechanism
3. Transmission
4. Differential
5. Axles
6. Brakes

ATTACHMENT E

QUALITY CONTROL CHECKLIST

**Emission-Related and Drivetrain Parts
Removal and Destruction - Quality Control Check List**

Check each box indicating whether the emissions-related or drive train part has been removed or destroyed. Insert N/A where a part is not in the original vehicle design.

Date _____
 Dismantler _____
 Address _____
 Quality Control Inspector _____
 Vehicle Make _____
 Vehicle Model _____
 Vehicle Year _____
 Vehicle License Number _____
 Vehicle Odometer Mileage _____

Category	Emission-Related/Drivetrain Part	Part Removed	Part Destroyed
Air Induction System	Temperature sensor elements		
	Vacuum motor for air control		
	Hot air duct & stove		
	Air filter housing & element		
	Turbocharger or supercharger		
	Intercooler		
Emission Calibrated Carburetors	Metering jets		
	Metering rods		
	Needle and seat		
	Power valve		
	Float circuit		
	Vacuum break		
	Choke mechanism		
	Throttle-control solenoid		
Emission Calibrated Carburetors (continued)	Deceleration valve		
	Dashpot		
	Idle stop solenoid, anti-dieseling assembly		
Mechanical Fuel Injection:	Accelerating pump		
	Altitude compensator		
	Pressure regulator		
	Fuel injection pump		
	Fuel injector		
	Throttle-position compensator		
	Engine speed compensator		
	Engine temperature compensator		
	Altitude cut-off valve		
	Deceleration cut-off valve		
Continuous Fuel Injection:	Cold-start valve		
	Fuel pump		
	Pressure accumulator		
	Fuel filter		

Category	Emission-Related/Drivetrain Part	Part Removed	Part Destroyed
	Fuel distributor		
	Fuel injections		
	Air-flow sensor		
	Throttle-position compensator		
	Warm-running compensator		
	Pneumatic overrun compensator		
	Cold-start valve		
Electronic Fuel Injection:	Pressure regulator		
	Fuel distribution manifold		
	Fuel injectors		
	Electronic control unit		
	Engine speed sensor		
	Engine temperature sensor		
	Throttle-position sensor		
	Altitude/manifold-pressure sensor		
Electronic Fuel Injection:	Cold-start valve		
Air Fuel Ratio Control:	Frequency valve		
	Oxygen sensor		
Air Fuel Ratio Control:	Electronic control unit		
Intake Manifold	Intake Manifold Assembly		
Distributor	Cam		
	Points		
	Rotor		
	Condenser		
	Distributor cap		
	Breaker plate		
	Electronic components (breakerless or electronic system)		
Spark Advance/Retard System	Centrifugal advance mechanism: weights and springs		
	Vacuum advance unit		
	Transmission controlled spark system: vacuum solenoid, transmission switch, temperature switches, time delay, CEC valve, reversing relay		
	Electronic spark control system: computer circuitry, speed sensor, temperature switches, vacuum switching valve		
	Orifice spark advance control system: vacuum bypass valve, orifice spark advance control valve, temperature control switch, distributor vacuum control switch		
Spark Advance/Retard System (continued)	Speed controlled spark system: vacuum solenoid, speed sensor and control switch, thermal vacuum switch		
Spark Plugs	Spark Plugs		
Ignition Coil	Ignition Coil		
Ignition Wires	Ignition Wires		

Category	Emission-Related/Drivetrain Part	Part Removed	Part Destroyed
Drivetrain	Engine		
	Flywheel		
	Bell Housing		
	Drive Shaft		
	Transmission		
	Differentials		
	Axles		
	Brakes		
Mechanical Components	Intake valves		
	Exhaust valves		
	Valve guides		
	Valve springs		
	Valve seats		
	Camshaft		
	Cylinder head or rotor housing		
	Piston or rotor		
Evaporative Control System	Vapor Storage Canister and Filter		
	Vapor Liquid Separator		
	Filler Cap		
	Fuel Tank		
	Canister Purge Valve		
Positive Crankcase Ventilation System	PCV Valve		
	Oil Filler Cap		
	Manifold PCV Connection Assembly		
Exhaust Gas Recirculation System	EGR Valve: valve body and carburetor spacer,		
	EGR Valve: internal passages and exhaust gas orifice		
Driving Mode Sensors	Speed sensor		
	Solenoid vacuum valve		
	Electronic amplifier		
	Temperature-controlled vacuum valve		
	Vacuum reducing valve		
	EGR coolant override valve		
	Backpressure transducer		
	Vacuum amplifier		
	Delay valves		
Air Injection System	Pump		
	Pressure-relief valve		
	Pressure-setting plug		
	Pulsed air system		
	Diverter		
	Relief, bypass, or gulp valve		
	Check or anti-backfire valve		
	Deceleration control part		
	Flow control valve		
	Distribution manifold		
	Air switching valve		
Temperature sensor			
Catalytic Converter/Thermal	Constricted fuel filler neck		

Category	Emission-Related/Drivetrain Part	Part Removed	Part Destroyed
Reactor/exhaust	Catalyst beads (pellet-type converter),		
	Ceramic support and monolith coating (monolith-type converter),		
	Converter body and internal supports,		
	Exhaust manifold		
	Reactor casing and lining		
	Exhaust manifold and exhaust port liner		
	Manifold		
	Exhaust port liners,		
	Double walled portion of exhaust system,		
	Heat riser valve and control assembly		
	Miscellaneous Items Used in Above Systems	Hoses, clamps, and pipers	
Pulleys, belts, and idlers			
Computer Controls	Electronic Control Unit (ECU)		
	Computer-coded engine operating parameter (including computer chips)		
	All sensors and actuators associated with the ECU		

Quality Control Inspector Final Verification All Emission-Related and Drivetrain Parts Removed and Destroyed

Quality Control Inspector Signature: _____
Date: _____

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

PROFESSIONAL SERVICES CONTRACT

CONTRACT NO. 2024.071

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 **Environmental Engineering Studies, Inc.** (“CONTRACTOR”) whose address is 7981 Paseo Membrillo, Carlsbad, CA 92009.

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. CONTRACTOR has been selected as one of two contractors authorized to scrap vehicles under the DISTRICT's Vehicle Buy Back (“VBB”) Program beginning fiscal year ending 2025. The DISTRICT's Board of Directors has authorized DISTRICT to spend up to \$11 million each fiscal year to scrap vehicles using funds from the Carl Moyer Program, Mobile Source Incentive Fund, and Transportation Fund for Clean Air.
 - C. DISTRICT has not allocated specific amounts separately to each contractor and will expend funds for scrapping as invoices are received under this Contract and under contracts with other authorized VBB contractors.
 - D. 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 July 1, 2024 to June 30, 2025, 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.

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 the CONTRACTOR's Social Security Number or Federal Employer Identification Number; and shall be submitted via email to grants@baaqmd.gov with the subject line: RE: Vehicle Buy Back Program.
 - 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 the sum derived by multiplying the number of vehicles scrapped under this Contract by the per vehicle price specified in Attachment B.

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 the sum derived by multiplying the number of vehicles scrapped under this Contract by the per vehicle price specified in Attachment B. 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: Director of Strategic Incentives
Project #: Vehicle Buy Back Program
grants@baaqmd.gov

CONTRACTOR: Environmental Engineering Studies, Inc.
7981 Paseo Membrillo
Carlsbad, CA 92009
Attn: Antoine Assioun, Program Manager
Project #: Vehicle Buy Back Program

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. Future revisions to Appendix A, Vehicle Functional and Equipment Eligibility Inspection Form, Appendix B, Emission-Drive Train Related Parts List, and Appendix C, Quality Control Check List, adopted by the California Air Resources Board under the Voluntary Accelerated Vehicle Retirement regulations, California Code of Regulations, Title 13, Section 2601 et seq., shall supersede Attachments C, D, and E in this Contract.
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.
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.

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

ENVIRONMENTAL ENGINEERING STUDIES,
INC.

By: _____
Philip M. Fine
Executive Officer/APCO

By: _____
Antoine Assioun
Program Manager

Date: _____

Date: _____

Approved as to form:

By: _____
Alexander G. Crockett
General Counsel

DRAFT

ATTACHMENT A

SCOPE OF WORK

The Scope of Work outlined in this section complies with the Voluntary Accelerated Light-Duty Vehicle Retirement (VAVR) Regulations adopted by the California Air Resources Board (ARB). Light-duty vehicle retirement projects are subject to the requirements of the Voluntary Accelerated Vehicle Retirement Regulation (VAVR Regulation), Cal. Code Regs., tit. 13, § 2601 et seq. Light and medium-duty vehicle projects funded through Assembly Bill (AB) 923 (2004) are authorized by Health and Safety Code Section 44229 (b)(4). CONTRACTOR's VAVR projects must be in compliance with all the applicable guidelines adopted by ARB. The ARB Carl Moyer Program Guidelines chapter on VAVR constitutes ARB's adopted guidelines for light-duty projects.

CONTRACTOR will solicit, purchase, and scrap eligible vehicles in compliance with the following requirements and procedures, and in compliance with the VAVR Regulations. DISTRICT will not reimburse CONTRACTOR for the purchase of a vehicle, or the overhead costs associated with that purchase, if such vehicle fails to meet the following requirements:

A. Vehicle Eligibility Requirements

1. Participation shall be entirely voluntary for vehicle owners.
2. The vehicle must meet the following criteria:
 - a. 1998 model year or older diesel or gasoline-powered passenger car or light-duty truck up to 10,000 pounds gross vehicle weight or less.
3. The vehicle must be currently registered with the California Department of Motor Vehicles (DMV) as an operating vehicle and must have been registered for at least 24 consecutive months prior to the date of the sale to CONTRACTOR as well as be registered to an address, or addresses, within the DISTRICT's jurisdiction. Smog Checks must be performed as required by DMV in order to be considered registered.
 - a. A vehicle may also be eligible if the owner of the vehicle placed the vehicle into planned non-operational status per Vehicle Code sections 4604 et seq., for up to two months during the 24-month registration period and occurring at least three months immediately prior to its sale to CONTRACTOR.
 - b. A vehicle may also be eligible if the registration has lapsed for a period of less than 181 days during the previous 24 months and all appropriate registration fees and late penalties have been paid to DMV, provided that the vehicle is registered for at least 90 days immediately prior to its sale date to CONTRACTOR.
4. The vehicle shall be driven to the CONTRACTOR's purchase site to be retired under its own power.
5. Vehicles whose emission control systems have been tampered with as defined in Cal Code Regs., tit. 16, § 3340.41.5. are not eligible until such tampering has been completely corrected.
6. The vehicle shall not be operating under a Smog Check repair cost waiver or economic hardship extension, as referenced in Cal Code Regs., tit. 13, § 2603 (a)(4).
7. If a vehicle volunteered for retirement is within 60 days of its next required Smog Check inspection, the vehicle shall pass the inspection without receiving a repair cost waiver or economic hardship extension prior to acceptance by CONTRACTOR.

8. If a vehicle volunteered for retirement is within 61-90 days of its next required Smog Check inspection, CONTRACTOR shall verify that the vehicle has not failed a Smog Check inspection during this time frame.
9. Owners of vehicles requiring Smog Check inspections pursuant to Cal Code Regs, tit. 13, § 2603(a)(5) shall be required to submit documentation issued by a Bureau of Automotive Repair (BAR) licensed Smog Check technician demonstrating compliance with Section 2603(a)(5) to the person performing the functional and equipment eligibility inspection.

B. Vehicle Functional and Equipment Eligibility Inspection

CONTRACTOR will only scrap vehicles that meet the following requirements. The vehicle function and equipment eligibility inspection must be performed by an ARB-approved inspector and conducted on-site at CONTRACTOR's yard.

1. The vehicle must have been driven to the inspection site under its own power. If CONTRACTOR has knowledge that a vehicle was towed or pushed for any portion of the trip to the inspection site, then CONTRACTOR shall not approve the vehicle for eligibility.
2. The vehicle shall pass functional and equipment eligibility inspections as specified in the VAVR Regulation. The vehicle functional and equipment eligibility inspection form is attached hereto as Attachment C.
3. Upon satisfactory completion of the inspection, CONTRACTOR will issue a certificate of functional and equipment eligibility.
4. Vehicles failing the requirements pursuant to Sections B.1 and B.3 may be retested by CONTRACTOR for compliance with these requirements and issued a certificate of functional and equipment eligibility provided the vehicle has traveled a minimum of 50 miles subsequent to the failure determination. Vehicles with inoperable vehicle odometers must have the odometer fixed prior to conducting this test. Vehicles failing the requirements pursuant to Section B.2 may be retested by CONTRACTOR for compliance with for compliance with these requirements and issued a certificate of functional and equipment eligibility at any time after modifications have been made to the vehicle.

C. Offering Vehicles/Parts to the Public

1. There is a minimum waiting period of ten (10) days between the day CONTRACTOR provides a description of a vehicle to the DISTRICT and the day a DMV Registration 42 form (Notice to Dismantler) is transmitted to the DMV for the vehicle. During the 10-day waiting period, with the vehicle owner's permission, CONTRACTOR will submit to the DISTRICT a description of the vehicle in accordance with Section C.1(a) below, and the date when the vehicle is scheduled to be delivered for final sale to the VBB Program. During the 10-day waiting period, if any person contacts CONTRACTOR and indicates an interest in purchasing the vehicle, CONTRACTOR shall hold the vehicle for a minimum of an additional seven (7) days. During this extended 7-day waiting period, CONTRACTOR shall arrange for the interested party to examine the vehicle and, if appropriate, negotiate the sale of the vehicle or any of its parts. Notwithstanding the foregoing, **nothing in this section places CONTRACTOR under any obligation to hold the vehicle for an interested party that has missed two or more prior appointments to examine any vehicle, or to sell the vehicle or any of its parts if a mutually acceptable price cannot be negotiated.**
 - a. CONTRACTOR will submit to the DISTRICT, on a weekly basis, a description of the vehicles offered for sale into the VBB Program as described in Section C.1(a)(i). The DISTRICT will, in turn, make this information available to an appropriate segment of

the public. The intent is to allow interested third parties, including car collector enthusiasts and those interested in affordable transportation, an opportunity to examine the vehicle and to negotiate with CONTRACTOR to purchase the vehicle or any of its parts according to Section E, before it is otherwise sold to the VBB Program, should the vehicle be delivered as scheduled.

- i. The description of the vehicle must include, at a minimum, the vehicle make, model, model year, and first eight characters of the Vehicle Identification Number (VIN). In addition, the description of the vehicle must include, date vehicle owner contacted CONTRACTOR, date vehicle is expected to be purchased, date the vehicle will be dismantled, and location the vehicle will be stored. No information identifying the owner will be permitted. When the DISTRICT makes this information available to the public, the DISTRICT will emphasize that while a vehicle is scheduled for delivery, there is no guarantee that the vehicle will actually be delivered.
 - ii. The vehicle owner is free to accept or reject any resulting contact or purchase offer and shall be informed by CONTRACTOR explicitly and prominently of such right.
 - iii. Nothing in this section places CONTRACTOR under any obligation to provide space or facilities for such third-party contacts, inspections, or negotiations to take place.
2. Entire vehicles and/or parts may be sold prior to entry into the VBB Program; however, no compensation with VBB Program funds shall be granted for any vehicle resold to the public in this manner according to Section E.

D. Vehicle Buy Back Program Contractor Requirements

1. CONTRACTOR must either be an auto dismantler, licensed according to the requirements of the California Vehicle Code, other business codes, and the regulations of the DMV, for the purpose of vehicle disposal after purchase, or have a binding agreement with a duly authorized auto dismantler, for the purpose of vehicle disposal after purchase.
2. At least thirty (30) days prior to commencing operations as a VBB Program contractor, CONTRACTOR shall provide the DISTRICT, in writing, information demonstrating the ability to comply with all provisions of the VAVR Regulations. This information must include CONTRACTOR's name and business address; licensed auto dismantler name and business address; anticipated initiation date and duration of vehicle retirement operation; a written statement from the auto dismantler (for each program location) under penalty of perjury certifying compliance with local air quality regulations, water conservation regulations, state, county, and city energy and hazardous materials response regulations, and local water agency soil, surface, and ground water contamination regulations; and any other information requested in applicable DISTRICT rules.
3. CONTRACTOR is required to perform the vehicle functional and equipment eligibility inspection specified in Section B on-site at CONTRACTOR's locations.
4. CONTRACTOR shall verify that the vehicle meets the vehicle registration eligibility and functional test requirements. The vehicle registration eligibility will be determined by DMV registration records.
5. At time of final sale of a vehicle to CONTRACTOR, CONTRACTOR must verify that the person delivering the vehicle for sale is the legal owner or an authorized representative of the legal owner, properly empowered to complete the sale.

6. A vehicle purchased as part of the VBB Program must be permanently destroyed by CONTRACTOR, or CONTRACTOR's duly contracted dismantler, within ninety (90) days of the date it is sold to CONTRACTOR, and may not be resold to the public or put into operation in any way, except such a vehicle may be briefly operated for purposes related to the disposal of the vehicle as part of the normal disposal procedures.
7. The vehicle will be considered destroyed when it has been crushed or shredded or otherwise rendered permanently and irreversibly incapable of functioning as originally intended, and when all appropriate records maintained by the DMV have been updated to reflect that the vehicle has been acquired by a licensed auto dismantler for the purposes of dismantling.
8. All vehicles must be confined in a holding area separate from other vehicles procured by CONTRACTOR until they are permanently destroyed.
9. All activities associated with retiring vehicles, including, but not limited to, the disposal of vehicle fluids and vehicle components, must comply with all applicable laws and regulations including, but not limited to, local water conservation regulations, state, county, and city energy and hazardous materials response regulations, and local water agency soil, surface, and ground water contamination regulations.
10. CONTRACTOR will purchase eligible vehicles at a price established by the contract between CONTRACTOR and DISTRICT.
11. CONTRACTOR will distribute a DISTRICT-designed questionnaire to all vehicle sellers, obtain the seller's completed questionnaire, and provide response data onto an electronic spreadsheet form to DISTRICT.
12. CONTRACTOR must cooperate with any inspections of the facilities, and review of the CONTRACTOR's operation of the VBB program as requested by the DISTRICT or ARB. These inspections can include audits of the required program documentation, and financial records.
13. CONTRACTOR shall be responsible for training its staff at each of its participating VBB program locations to ensure that staff demonstrate knowledge of the VBB program in order to effectively and efficiently complete all steps needed to process VBB purchases.

E. Parts Recycling and Resale

1. On vehicles used for parts recycling and resale, parts recycling and resale is limited to non-emission-related and non-drivetrain parts per the List of Emission-Drivetrain Related Parts List, attached hereto as Attachment D. Parts recycling and resale is at the sole discretion of CONTRACTOR, subject to the limitations included herein.
2. After the 10-day waiting period (and the additional 7-day waiting period if an appointment for inspection is made) and prior to offering non-emission and non-drivetrain parts for resale, the engine, emission-related parts, transmission, and drivetrain parts must be removed from the vehicle and destroyed by CONTRACTOR.
 - a. For the purpose of this regulation, a part will be considered destroyed when it has been punched, crushed, shredded, or otherwise rendered permanently and irreversibly incapable of functioning as originally intended.
 - b. A "Quality Control Checklist" with a list of emission-related and drivetrain parts that has check boxes for recording the status of parts, i.e., "removed" and "destroyed" is attached hereto as Attachment E.
 - i. CONTRACTOR must complete the checklist by adding check marks in the appropriate columns as the emission-related and drivetrain parts are removed and destroyed.

- ii. For a part that appears on the checklist but is not in the original design of the vehicle, CONTRACTOR must enter "N/A" for "not applicable" in lieu of a check mark.
 - c. After all emission-related and drivetrain parts are removed and destroyed, a quality control inspector (designated by DISTRICT) must perform an inspection of the non-emission-related and non-drivetrain parts, as well as the vehicle body.
 - d. Upon verification by the quality control inspector that no emission-related parts or drivetrain parts have been exchanged with the non-emission-related, and non-drivetrain parts, the quality control inspector must sign the checklist.
 - e. After the quality control inspector signs the check list, CONTRACTOR may place the remaining non-emission parts, non-drivetrain parts and vehicle body in the yard to be available for sale to the public.
3. If CONTRACTOR does not recover parts from a vehicle, the entire vehicle must be crushed by CONTRACTOR within ninety (90) days of sale to the VBB Program.
 - a. No parts may be removed, for sale or reuse, from any crushed retired vehicle that has been sold to the VBB Program. The only allowable use for any crushed retired vehicle is as a source of scrap metal and other scrap material.
 - b. CONTRACTOR may separate ferrous and non-ferrous metals from a crushed retired vehicle to sell as a source of scrap metal only.
 - c. CONTRACTOR may sell tires and batteries from a crushed retired vehicle to an intermediary tire/battery recycler only. All facilities generating or receiving waste tires must use the services of a registered tire hauler/recycler. Battery recyclers must be registered and licensed to handle batteries.
4. No compensation with VBB Program funds shall be granted for any vehicle from which emission related or drivetrain parts have been sold.
5. All activities associated with retiring vehicles for the VBB Program, including but not limited to the disposal of vehicle fluids and vehicle components, shall comply with all applicable laws and regulations including, but not limited to, local water conservation regulations, state, county, and city energy and hazardous materials response regulations, and local water agency soil, surface, and ground water contamination regulations.
6. CONTRACTOR will be subject to audits performed by the DISTRICT and its representatives.

F. Advertising

1. CONTRACTOR is encouraged to advertise for or otherwise attract voluntary sellers of vehicles meeting the eligibility requirements specified above. CONTRACTOR will submit to DISTRICT for approval a plan for implementing the advertising campaign within thirty (30) days of signing this contract. The DISTRICT will audit CONTRACTOR at the completion of the contract to verify that CONTRACTOR implemented the advertising campaign as specified in the contract.
2. CONTRACTOR will use the DISTRICT's approved logo on any printed material for public distribution. All uses of the DISTRICT's logo must be pre-approved for use by DISTRICT staff.
3. CONTRACTOR will credit the DISTRICT as the funding source for the scrapping program in any related articles, news releases, or other publicity materials. All advertising materials, information packages, and any other materials provided to media, to the public, or to vehicle sellers require prior approval by DISTRICT.
4. Any advertising conducted by CONTRACTOR for the purpose of recruiting vehicle owners to sell their vehicles into the VBB Program shall contain clear and prominent language stating

that participation in the VBB Program is completely voluntary; and shall not contain any language stating or implying that the VBB Program is anything but voluntary for the vehicle seller or that the VBB Program is affiliated with or is operated by the State of California.

5. Any contracts or agreements between a vehicle seller and CONTRACTOR relating to the sale of a vehicle to the VBB Program shall not contain any language stating that the VBB Program is anything but voluntary for the vehicle seller or that the VBB Program is affiliated with or is operated by the State of California.

G. Records, Auditing, and Enforcement

1. The following requirements for records, auditing, and enforcement shall be met:
 - a. CONTRACTOR shall be responsible for maintaining and storing the following information for each vehicle removed from operation for the VBB Program:
 - i. Vehicle Identification Number (VIN)
 - ii. Vehicle license plate number
 - iii. Vehicle make and model year
 - iv. Vehicle odometer reading
 - v. Name, address and phone number of legal owner selling vehicle to the contractor
 - vi. Name, address and phone number of registered owner if different from Section G.1(a)(v)
 - vii. Name and business address of inspector conducting the vehicle's eligibility inspection, if CONTRACTOR contracts with an ARB-approved inspection entity to perform the vehicle functional and equipment eligibility inspection
 - viii. Date of purchase of vehicle by CONTRACTOR
 - ix. Date of vehicle retirement
 - x. Reproduction of California Certificate of Title and registration, as signed-off by seller at time of final sale to the VBB Program
 - xi. Reproduction of the applicable certificate of functional and equipment eligibility
 - xii. Reproduction of the applicable Report of Vehicle to be Dismantled and Notice of Acquisition (DMV Registration 42 form)
 - xiii. Reproduction of written documentation from the DMV verifying that a vehicle meets the requirements of Section A.3
 - xiv. If applicable, reproduction of documentation issued pursuant to Section A.9
 - xv. Any other pertinent data requested by the DISTRICT (e.g. VBB Program survey)
 - b. Upon request of the DISTRICT, the data contained in records required in Section G.1(a)(i) through Section G.1(a)(xv) shall be transmitted to the DISTRICT in an electronic database format, in addition to paper copies. The electronic format will be provided by the DISTRICT.
 - c. CONTRACTOR will maintain copies, either electronic or paper, of the information listed in Section G.1(a)(i) through Section G.1(a)(xv) for a minimum period of five (5) years, and shall make those records available to DISTRICT upon request within 30 days.
 - d. The DISTRICT may conduct announced and unannounced audits and on-site inspections of the CONTRACTOR's operations to ensure operations are being conducted according to all applicable rules and regulations. DISTRICT shall notify any

noncompliant contractor of the nature of the violation and shall initiate any enforcement or remedial action necessary.

- i. CONTRACTOR and their subcontractors shall allow DISTRICT to conduct announced and unannounced audits and inspections and shall cooperate fully in such situations.
 - ii. Violation of any provision of any applicable regulation, including falsification of any information or data, shall constitute a citable violation making the violator subject to all applicable penalties specified in the California Health and Safety Code. In addition, violation of any provision of §2603 of the VAVR Regulation, 13 Cal. Code Regs., tit. 13, by CONTRACTOR or its subcontractors may result in the issuance of a Notice of Violation(s).
2. CONTRACTOR will handle all DMV paperwork associated with the purchase, dismantling, and scrapping of vehicles.
3. CONTRACTOR will provide to DISTRICT, on a weekly basis, a description of the vehicles offered for sale into the VBB Program. The description of the vehicle must include the date vehicle owner contacted the VBB program, date the vehicle will be dismantled, vehicle make, vehicle model, model year, the first eight characters of the VIN, name of dismantler, location of dismantling facility, and dismantler's phone number. No information identifying the owner will be permitted.
4. CONTRACTOR will provide monthly invoice reports to the DISTRICT on the status of the scrapping program. The reports shall be printed on CONTRACTOR's letterhead, shall list the contract number, the period covered by the invoice, CONTRACTOR's Social Security Number or Federal Employer Identification Number, and include the monthly and cumulative number of vehicles purchased.

ATTACHMENT B

COST SCHEDULE

A. Per Vehicle Payment. DISTRICT will pay CONTRACTOR an amount of **\$1,620.00** per vehicle scrapped, up to a total maximum amount of \$11 million under the VBB Program.

B. Price Breakdown. The rate above is based on reimbursing CONTRACTOR for the **\$1,500.00** purchase price of each vehicle, plus \$120 for overhead for the VBB Program.

Total Contract not to exceed \$11,000,000. This amount has NOT been allocated in any way to CONTRACTOR, or any other contractor under the VBB. The DISTRICT will expend funds as invoices are received under this Contract and under contracts with other authorized VBB contractors up to a total maximum amount of \$11,000,000.

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ATTACHMENT C



**VEHICLE FUNCTIONAL AND EQUIPMENT
ELIGIBILITY INSPECTION FORM**

Legal Owner: _____ Phone Number: _____
 Address: _____ City: _____ Zip: _____
 VIN: _____ License Plate Number: _____
 Make: _____ Model: _____
 Model Year: _____ Odometer Reading: _____

VEHICLE QUALIFICATION (* Vehicle is not qualified for the VAVR program.)

Vehicle within 61-90 days of next scheduled Smog Check: [] yes [] no 2602(c)
 If yes, vehicle failed next scheduled Smog Check: [] yes* [] no
 Vehicle registered in District for at least 24 months: [] yes [] no* 2603(a)(2)
 Vehicle on BAR repair cost waiver: [] yes* [] no 2603(a)(4)
 Vehicle on BAR economic hardship extension: [] yes* [] no 2603(a)(4)
 Vehicle within 60 days of next scheduled Smog Check: [] yes [] no 2603(a)(5)
 If yes, vehicle passed next scheduled Smog Check: [] yes [] no*
 The vehicle has been tampered with: [] yes* [] no 2603(a)(7)
 The vehicle has been driven to the inspection site: [] yes [] no* 2603(b)(1)

EQUIPMENT ELIGIBILITY

The following shall be present and in place: 2603(b)(2)

All doors	[] yes [] no*	Hood	[] yes [] no*
Dashboard	[] yes [] no*	Driver's seat	[] yes [] no*
One bumper	[] yes [] no*	All side and/or quarter panels	[] yes [] no*
Exhaust system	[] yes [] no*	One headlight	[] yes [] no*
One taillight	[] yes [] no*	One brake light	[] yes [] no*
One side window	[] yes [] no*	Interior pedals operational	[] yes [] no*
Windshield	[] yes [] no*		
Drivability affected by body, steering, or suspension damage	[] yes* [] no		

FUNCTIONAL ELIGIBILITY

The following shall be completed: 2603(b)(3)

Vehicle starts using keyed ignition [] yes [] no*
 Vehicle starts without the use of starting fluids or external battery [] yes [] no*
 Vehicle driven forward for a minimum of 25 feet [] yes [] no*
 Vehicle driven in reverse for a minimum of 25 feet [] yes [] no*

* Vehicle is not eligible for the VAVR program.

INSPECTOR CERTIFICATION: (Check correct boxes.) I certify that this vehicle has ([] passed [] not passed) both the functional and equipment eligibility inspections and ([] is [] is not) eligible for acceptance into the VAVR program pursuant to California Code of Regulations, Title 13, Sections 2602 and 2603, or as applicable to motorcycles as indicated on the checklist above.

Printed Name: _____ Date: _____
 Signed: _____

The following should be completed if the vehicle is eligible for acceptance into a VAVR program.

OWNER ACCEPTANCE: I accept receipt of this CERTIFICATION of eligibility into the VAVR program. I agree not to alter the vehicle's equipment or functionality from that presented to the inspector. I agree to maintain the vehicle's condition and registration until the vehicle is retired. In accordance with Title 13, CCR, Chapter 13, Article 1, Section 2605, the vehicle will be listed and available for interested parties to purchase from the dismantler for a minimum of 10 days. If the vehicle is purchased by a third party it will not be included in the VAVR program.

Printed Name: _____ Date: _____
Signed: _____ Driver's License #: _____

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ATTACHMENT D

EMISSION-DRIVETRAIN RELATED PARTS LIST

The following list of components are examples of emission related parts as shown in California Code of Regulations Title 13, Division 3, Chapter 13, Article 1, Appendix B.

I. Carburetion and Air Induction System

- A. Air Induction System:
 - 1. Temperature sensor elements
 - 2. Vacuum motor for air control
 - 3. Hot air duct & stove
 - 4. Air filter housing & element
 - 5. Turbocharger or supercharger
 - 6. Intercooler
- B. Emission Calibrated Carburetors:
 - 1. Metering jets
 - 2. Metering rods
 - 3. Needle and seat
 - 4. Power valve
 - 5. Float circuit
 - 6. Vacuum break
 - 7. Choke mechanism
 - 8. Throttle-control solenoid
 - 9. Deceleration valve
 - 10. Dashpot
 - 11. Idle stop solenoid, anti-dieseling assembly
 - 12. Accelerating pump
 - 13. Altitude compensator
- C. Mechanical Fuel Injection:
 - 1. Pressure regulator
 - 2. Fuel injection pump
 - 3. Fuel injector
 - 4. Throttle-position compensator
 - 5. Engine speed compensator
 - 6. Engine temperature compensator
 - 7. Altitude cut-off valve
 - 8. Deceleration cut-off valve
 - 9. Cold-start valve
- D. Continuous Fuel Injection:
 - 1. Fuel pump
 - 2. Pressure accumulator
 - 3. Fuel filter
 - 4. Fuel distributor
 - 5. Fuel injections
 - 6. Air-flow sensor
 - 7. Throttle-position compensator
 - 8. Warm-running compensator
 - 9. Pneumatic overrun compensator
 - 10. Cold-start valve
- E. Electronic Fuel Injection:
 - 1. Pressure regulator
 - 2. Fuel distribution manifold
 - 3. Fuel injectors
 - 4. Electronic control unit

- 5. Engine speed sensor
- 6. Engine temperature sensor
- 7. Throttle-position sensor
- 8. Altitude/manifold-pressure sensor
- 9. Cold-start valve
- F. Air Fuel Ratio Control:
 - 1. Frequency valve
 - 2. Oxygen sensor
 - 3. Electronic control unit
- G. Intake Manifold

II. Ignition System

- A. Distributor;
 - 1. Cam
 - 2. Points
 - 3. Rotor
 - 4. Condenser
 - 5. Distributor cap
 - 6. Breaker plate
 - 7. Electronic components (breakerless or electronic system)
- B. Spark Advance/Retard System:
 - 1. Centrifugal advance mechanism:
 - a. Weights
 - b. Springs
 - 2. Vacuum advance unit
 - 3. Transmission controlled spark system:
 - a. Vacuum solenoid
 - b. Transmission switch
 - c. Temperature switches
 - d. Time delay
 - e. CEC valve
 - f. Reversing relay
 - 4. Electronic spark control system:
 - a. Computer circuitry
 - b. Speed sensor
 - c. Temperature switches
 - d. Vacuum switching valve
 - 5. Orifice spark advance control system:
 - a. Vacuum bypass valve
 - b. OSAC (orifice spark advance control) valve
 - c. Temperature control switch
 - d. Distributor vacuum control valve
 - 6. Speed controlled spark system:
 - a. Vacuum solenoid
 - b. Speed sensor and control switch
 - c. Thermal vacuum switch
- C. Spark Plugs
- D. Ignition Coil
- E. Ignition Wires

III. Mechanical Components

- A. Valve trains:
 - 1. Intake valves
 - 2. Exhaust valves
 - 3. Valve guides

4. Valve springs
 5. Valve seats
 6. Camshaft
- B. Combustion Chamber:
1. Cylinder head or rotor housing¹
 2. Piston or rotor¹

IV. Evaporative Control System

- A. Vapor Storage Canister and Filter
- B. Vapor Liquid Separator
- C. Filler Cap
- D. Fuel Tank
- E. Canister Purge Valve

V. Positive Crankcase Ventilation System

- A. PCV Valve
- B. Oil Filler Cap
- C. Manifold PCV Connection Assembly

VI. Exhaust Gas Recirculation System

- A. EGR Valve:
 1. Valve body and carburetor spacer
 2. Internal passages and exhaust gas orifice
- B. Driving Mode Sensors:
 1. Speed sensor
 2. Solenoid vacuum valve
 3. Electronic amplifier
 4. Temperature-controlled vacuum valve
 5. Vacuum reducing valve
 6. EGR coolant override valve
 7. Backpressure transducer
 8. Vacuum amplifier
 9. Delay valves

VII. Air Injection System

- A. Air Supply Assembly:
 1. Pump
 2. Pressure relief valve
 3. Pressure-setting plug
 4. Pulsed air system
- B. Distribution Assembly:
 1. Diverter, relief, bypass, or gulp valve
 2. Check or anti-backfire valve
 3. Deceleration control part
 4. Flow control valve
 5. Distribution manifold
 6. Air switching valve
- C. Temperature sensor

VIII. Catalyst, Thermal Reactor, and Exhaust System

- A. Catalytic Converter:
 1. Constricted fuel filler neck
 2. Catalyst beads (pellet-type converter)

¹ Rotary (Wankel) engines only

3. Ceramic support and monolith coating (monolith-type converter)
 4. Converter body and internal supports
 5. Exhaust manifold
- B. Thermal Reactor:
1. Reactor casing and lining
 2. Exhaust manifold and exhaust port liner
- C. Exhaust System:
1. Manifold
 2. Exhaust port liners
 3. Double walled portion of exhaust system
 4. Heat riser valve and control assembly

IX. Miscellaneous Items Used in Above Systems

1. Hoses, clamps, and pipers
2. Pulleys, belts, and idlers

X. Computer Controls

1. Electronic Control Unit (ECU)
2. Computer-coded engine operating parameter (including computer chips)
3. All sensors and actuators associated with the ECU

XI. Drive Train Parts (added to Emission-Related Parts List

1. Engine
2. Drive mechanism
3. Transmission
4. Differential
5. Axles
6. Brakes

ATTACHMENT E

QUALITY CONTROL CHECKLIST

**Emission-Related and Drivetrain Parts
Removal and Destruction - Quality Control Check List**

Check each box indicating whether the emissions-related or drive train part has been removed or destroyed. Insert N/A where a part is not in the original vehicle design.

Date _____
 Dismantler _____
 Address _____
 Quality Control Inspector _____
 Vehicle Make _____
 Vehicle Model _____
 Vehicle Year _____
 Vehicle License Number _____
 Vehicle Odometer Mileage _____

Category	Emission-Related/Drivetrain Part	Part Removed	Part Destroyed
Air Induction System	Temperature sensor elements		
	Vacuum motor for air control		
	Hot air duct & stove		
	Air filter housing & element		
	Turbocharger or supercharger		
	Intercooler		
Emission Calibrated Carburetors	Metering jets		
	Metering rods		
	Needle and seat		
	Power valve		
	Float circuit		
	Vacuum break		
	Choke mechanism		
	Throttle-control solenoid		
Emission Calibrated Carburetors (continued)	Deceleration valve		
	Dashpot		
	Idle stop solenoid, anti-dieseling assembly		
Mechanical Fuel Injection:	Accelerating pump		
	Altitude compensator		
	Pressure regulator		
	Fuel injection pump		
	Fuel injector		
	Throttle-position compensator		
	Engine speed compensator		
	Engine temperature compensator		
	Altitude cut-off valve		
	Deceleration cut-off valve		
Continuous Fuel Injection:	Cold-start valve		
	Fuel pump		
	Pressure accumulator		
	Fuel filter		

Category	Emission-Related/Drivetrain Part	Part Removed	Part Destroyed
	Fuel distributor		
	Fuel injections		
	Air-flow sensor		
	Throttle-position compensator		
	Warm-running compensator		
	Pneumatic overrun compensator		
	Cold-start valve		
Electronic Fuel Injection:	Pressure regulator		
	Fuel distribution manifold		
	Fuel injectors		
	Electronic control unit		
	Engine speed sensor		
	Engine temperature sensor		
	Throttle-position sensor		
	Altitude/manifold-pressure sensor		
Electronic Fuel Injection:	Cold-start valve		
Air Fuel Ratio Control:	Frequency valve		
	Oxygen sensor		
Air Fuel Ratio Control:	Electronic control unit		
Intake Manifold	Intake Manifold Assembly		
Distributor	Cam		
	Points		
	Rotor		
	Condenser		
	Distributor cap		
	Breaker plate		
	Electronic components (breakerless or electronic system)		
Spark Advance/Retard System	Centrifugal advance mechanism: weights and springs		
	Vacuum advance unit		
	Transmission controlled spark system: vacuum solenoid, transmission switch, temperature switches, time delay, CEC valve, reversing relay		
	Electronic spark control system: computer circuitry, speed sensor, temperature switches, vacuum switching valve		
	Orifice spark advance control system: vacuum bypass valve, orifice spark advance control valve, temperature control switch, distributor vacuum control switch		
Spark Advance/Retard System (continued)	Speed controlled spark system: vacuum solenoid, speed sensor and control switch, thermal vacuum switch		
Spark Plugs	Spark Plugs		
Ignition Coil	Ignition Coil		
Ignition Wires	Ignition Wires		

Category	Emission-Related/Drivetrain Part	Part Removed	Part Destroyed
Drivetrain	Engine		
	Flywheel		
	Bell Housing		
	Drive Shaft		
	Transmission		
	Differentials		
	Axles		
	Brakes		
Mechanical Components	Intake valves		
	Exhaust valves		
	Valve guides		
	Valve springs		
	Valve seats		
	Camshaft		
	Cylinder head or rotor housing		
	Piston or rotor		
Evaporative Control System	Vapor Storage Canister and Filter		
	Vapor Liquid Separator		
	Filler Cap		
	Fuel Tank		
	Canister Purge Valve		
Positive Crankcase Ventilation System	PCV Valve		
	Oil Filler Cap		
	Manifold PCV Connection Assembly		
Exhaust Gas Recirculation System	EGR Valve: valve body and carburetor spacer,		
	EGR Valve: internal passages and exhaust gas orifice		
Driving Mode Sensors	Speed sensor		
	Solenoid vacuum valve		
	Electronic amplifier		
	Temperature-controlled vacuum valve		
	Vacuum reducing valve		
	EGR coolant override valve		
	Backpressure transducer		
	Vacuum amplifier		
	Delay valves		
Air Injection System	Pump		
	Pressure-relief valve		
	Pressure-setting plug		
	Pulsed air system		
	Diverter		
	Relief, bypass, or gulp valve		
	Check or anti-backfire valve		
	Deceleration control part		
	Flow control valve		
	Distribution manifold		
	Air switching valve		
Temperature sensor			
Catalytic Converter/Thermal	Constricted fuel filler neck		

Category	Emission-Related/Drivetrain Part	Part Removed	Part Destroyed
Reactor/exhaust	Catalyst beads (pellet-type converter),		
	Ceramic support and monolith coating (monolith-type converter),		
	Converter body and internal supports,		
	Exhaust manifold		
	Reactor casing and lining		
	Exhaust manifold and exhaust port liner		
	Manifold		
	Exhaust port liners,		
	Double walled portion of exhaust system,		
	Heat riser valve and control assembly		
	Miscellaneous Items Used in Above Systems	Hoses, clamps, and pipers	
Pulleys, belts, and idlers			
Computer Controls	Electronic Control Unit (ECU)		
	Computer-coded engine operating parameter (including computer chips)		
	All sensors and actuators associated with the ECU		

Quality Control Inspector Final Verification All Emission-Related and Drivetrain Parts Removed and Destroyed

Quality Control Inspector Signature: _____
Date: _____

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

PROFESSIONAL SERVICES CONTRACT

CONTRACT NO. 2024.074

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 **Lineage Connect** (“CONTRACTOR”) whose address is 1700 Broadway Blvd, Kansas City, MO, 64108.

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. CONTRACTOR has been selected to provide direct mail services under the DISTRICT’s Vehicle Buy Back (“VBB”) Program beginning fiscal year ending 2025. The DISTRICT’s Board of Directors has authorized DISTRICT to spend up to \$300,000 each fiscal year to provide direct mail services using funds from the Transportation Fund for Clean Air.
 - C. 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 July 1, 2024 to June 30, 2025, 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 the CONTRACTOR's Social Security Number or Federal Employer Identification Number; and shall be submitted via email to

vehiclebuyback@baaqmd.gov with the subject line: RE: Lineage Connect invoice [month][invoice number].

- 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 \$200,000.
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 \$200,000. 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: Director of Strategic Incentives
Project #: Vehicle Buy Back Program
grants@baaqmd.gov

CONTRACTOR: Lineage Connect

1700 Broadway Blvd
Kansas City, MO 64108
Attn: Jason Hansen, Director of Sales and Customer Success
Project #: Vehicle Buy Back Program
jhansen@trustlineage.com

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.
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.

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

LINEAGE CONNECT

By: _____
Philip M. Fine
Executive Officer/APCO

By: _____
Jason Hansen
Director of Sales & Customer
Success

Date: _____

Date: _____

Approved as to form:

By: _____
Alexander G. Crockett
General Counsel

DRAFT

ATTACHMENT A

SCOPE OF WORK

CONTRACTOR shall provide direct mail services to distribute notices for DISTRICT's Vehicle Buy Back ("VBB") Program, a voluntary vehicle retirement and scrapping program that takes older, higher-polluting vehicles off Bay Area roads. CONTRACTOR will conduct a direct mail services campaign in compliance with the following requirements and procedures:

A. Data Management (e.g., data collection, analysis, suppression, mail merge):

1. CONTRACTOR shall securely receive the data from DISTRICT and shall limit the number of staff working directly with this data to the minimum.
 - a. CONTRACTOR shall establish a secure connection with DISTRICT's server using encryption protocols Secure File Transfer Protocol (SFTP). All IP addresses that will be sending data will be whitelisted with CONTRACTOR's server.
 - b. CONTRACTOR shall assign a dedicated project manager to oversee the project and manage access to the data. CONTRACTOR will implement role-based access control (RBAC) to ensure that each authorized user only has access to the data and functions necessary for their specific role in the project.
2. CONTRACTOR shall maintain the security and integrity of the information received. This includes, but is not limited to, the following:
 - a. Not leaving access terminals and modems unattended while in active session, unless these devices are secured by a locking device that prevents entry or receipt of information or are placed in a locked room that is not accessible to unauthorized persons. Additionally, CONTRACTOR shall store the data on a secure server with strict access controls and implement data encryption at rest using AES-256 or another strong encryption algorithm to protect the data from unauthorized access, and use version control to track changes to the data ensuring that any modifications are documented and can be easily reviewed or reverted if necessary, and regularly monitor and audit access logs to identify any unusual or unauthorized access attempts.
 - b. Not selling, retaining, distributing, providing, or transferring any record information or portion of the record information acquired, except as authorized by DISTRICT.
3. CONTRACTOR shall suppress or otherwise modify the database to eliminate mailings to vehicle owners with 1980 and older model year vehicles and individuals that have either requested to be removed from the mailing list or previously participated in the VBB program. DISTRICT shall provide CONTRACTOR with a Microsoft Excel spreadsheet of the names and addresses of these individuals. On a monthly basis, DISTRICT shall also provide CONTRACTOR additions to this list.

4. CONTRACTOR shall send the database to the National Change of Addresses at least every six months to update the database (i.e., update addresses and ensure that the data is current and accurate). Address changes that are no longer in DISTRICT's jurisdiction will be added to the suppressed mail list. CONTRACTOR shall, then, use Presort Data Management so that the address will be organized to match the required United States Postal Service (USPS) tray order for automated area distribution center (AADC) presort level.
5. CONTRACTOR shall merge text of the one-page letter with addresses of vehicle owners and vehicle model year from the DMV database provided by DISTRICT. DISTRICT will provide the text for the letter.
6. CONTRACTOR shall destroy all information received from DISTRICT's files within ninety (90) days or sooner at the request of DISTRICT. The method of destruction must be effective for the type of record requested and done in a manner so that the record cannot be reproduced or identified in any physical or electronic form. CONTRACTOR shall maintain a record of the data destruction process, including the date and method used, for future reference.

B. Letter and Envelope Production (e.g., printing, folding, inserting, delivering to USPS):

1. DISTRICT will provide CONTRACTOR with twenty-four (24) mail drop dates at approximately two-week intervals to coincide with the vehicle owner's receipt of registration renewal notices from the California Department of Motor Vehicles (DMV). DISTRICT will provide CONTRACTOR, using the DMV database, the date range of addresses of vehicle owners in the Bay Area to receive letters on the specific mail drop dates.
2. CONTRACTOR shall print DISTRICT's letterhead, which consists of DISTRICT's logo and contact information, on 20-pound, 8.5" x 11", white, recycled paper. The recycled paper shall contain at least 30% post-consumer material. CONTRACTOR will print the single-sided letter in black text. The DISTRICT's logo shall be grayscale. DISTRICT shall provide logo artwork in electronic format (jpeg).
3. CONTRACTOR shall print the DISTRICT's return address and logo on #10 standard left window envelope, 24-pound, white recycled stock. The DISTRICT's logo shall be in either black or grayscale, whichever is more economical. The recycled envelope paper shall contain at least 30% postconsumer material. The DISTRICT shall provide logo artwork in electronic format (e.g., jpeg).
4. CONTRACTOR shall fold letters to fit window envelopes and insert a one-page letter into each envelope.
5. CONTRACTOR shall seal each envelope, provide postage (standard mail bulk rate), and deliver to the United States Post Office for mailing on the specified drop dates provided by DISTRICT.

ATTACHMENT B

COST SCHEDULE

DISTRICT will pay CONTRACTOR in accordance to the rates below for the work outlined in Attachment A, Scope of Work. CONTRACTOR will submit monthly invoices to DISTRICT for the mail drops performed in the previous month. Payment will be made in accordance with Section 8, Payment, of this Contract.

- A. **Per Mail Drop Payment.** DISTRICT will pay CONTRACTOR a flat fee per mail drop for data management (e.g., data collection, analysis, suppression, mail merge) plus a cost per piece of mail that was sent for letter and envelope production (e.g., printing, folding, inserting, delivering to USPS) as shown in Table 1 below.

Table 1. Data Management and Letter & Envelope Production Costs

	Data Management	Letter and Envelope Production
Year 1 (7/1/2024 – 6/30/2025)	\$45/mail drop	\$0.0889 per piece of mail sent
Year 2 (7/1/2025 – 6/30/2026)	\$48/mail drop	\$0.0960 per piece of mail sent
Year 3 (7/1/2026 – 6/30/2027)	\$51/mail drop	\$0.1037 per piece of mail sent

- B. **Postage and Delivery.** Standard mail bulk rate postage and delivery costs will be billed to DISTRICT at the actual rate charged by the United States Postal Services.

Total cost of Contract shall not to exceed \$200,000.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Davina Hurt and Members
of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: May 1, 2024

Re: Acceptance of Federal Highway Administration Funding

RECOMMENDED ACTION

1. Adopt a resolution approving the acceptance of up to \$15,000,000 in Charging & Fueling Infrastructure (CFI) program funding from the Federal Highway Administration (FHWA) to expand electric vehicle (EV) charging infrastructure in the Bay Area; and,
2. Authorize the Executive Officer/APCO to enter into all necessary agreements to accept, obligate, and expend this funding.

BACKGROUND

Wide-scale adoption of electric vehicles (EVs) and electrification of all types of transportation are essential to achieving local, state, and federal emission reduction targets for greenhouse gases and criteria pollutants. California has set a goal of 250,000 EV chargers and 1.5 million EVs sold by 2025, five million EVs sold by 2030, and to phase out sales of most conventional vehicles by 2035. The Bay Area has set a target of 1.5 million zero-emissions vehicles by 2030 and 90% of vehicles in the Bay Area being zero-emissions by 2050. The Bay Area and California also share the goal to cut greenhouse gas emissions to 80% below 1990 levels by 2050. At the end of 2022, there were a total of 340,162 Zero Emission Vehicles (ZEVs) registered and operating on Bay Area roads, representing 6.17% of the region's light-duty fleet and nearly 31% of the CA zero-emission vehicle population, according to data from the California Energy Commission.

To support the increase of EVs needed to achieve Bay Area and California goals, significant investments in EV infrastructure are needed. The National Renewable Energy Laboratory (NREL) EV Infrastructure Projection Tool estimated that the Bay Area needed over 30,000 charging ports in 2023. According to the US Department of Energy's Alternative Fuels Data Center, there were approximately 13,400 publicly available charging ports (including Level 1, Level 2, and DC Fast Charging) across the Bay Area as of December 2023. External funding opportunities are essential to make this transition to zero-emission vehicles more equitable and realistic for all residents.

DISCUSSION

On March 14, 2023, the FHWA issued Notice of Funding Opportunity (NOFO) Number 693JJ323NF00004, for projects to increase the installation of publicly accessible EV charging projects. Section 11401 of the Bipartisan Infrastructure Law (BIL), enacted as the Infrastructure Investment and Jobs Act (Pub. L. 117-58, Nov. 15, 2021), established the CFI Discretionary Grant Program which is codified at 23 U.S.C. § 151(f)(2). Through the Charging & Fueling Infrastructure (CFI) Discretionary Grant Program \$700 million was available to public agencies for EV charging applications, and it was open to community projects and for corridor projects.

On June 8, 2023, the Air District submitted an application to FHWA requesting up to \$15,000,000 in CFI Program funding to install EV charging infrastructure in the Bay Area with a priority for investments in priority communities/ Justice40 areas. The Air District proposed to use its well-established Charge! Program to administer the CFI funds to subrecipients which will allow for efficient implementation and leverage program guidelines, alternate funding sources, resources, and relationships. Through the Charge! Program the Air District partners with vendors, public agencies, and businesses to purchase and install EV charging infrastructure. Crucial elements of project selection criteria include the priority population location evaluation, emissions reductions, budget, and scope. With this program, the Air District attempts to select the most beneficial projects, build out the public charging network and fill in gaps that are not adequately served from the existing network and other funding programs. The FHWA funding will scale up the Air District's Charge! Program and the alignment of the program with the CFI/ National Electric Vehicle Infrastructure program (NEVI) requirements will set up the program for further expansion if additional funds become available.

On January 17, 2024, FHWA issued a notice of proposed awards for the CFI solicitation which included a proposed award to the Air District of up to \$15,000,000. FHWA will authorize a grant of up to \$15,000,000 to the Air District for the proposed project, upon approval by the Air District Board of Directors to accept such grant of funds, submittal of remaining project information to FHWA, and full execution of a FHWA award agreement. Staff anticipates releasing a call for projects in late 2024 or early 2025.

BUDGET CONSIDERATION/FINANCIAL IMPACT

FHWA funds are considered “pass-through” funds, which are offered to grantees directly or to reduce the costs of their EV charging project. The FHWA award also includes funding to support the Air District's administrative costs for program implementation. The Air District may use funds from the Transportation Fund for Clean Air, Congestion Mitigation and Air Quality Improvement Program, or other eligible funding sources, in addition to project partner contributions to meet the match obligation for the CFI funds.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Deanna Yee
Reviewed by: Anthony Fournier

ATTACHMENTS:

1. Draft Board Resolution to Accept FHWA Funding

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

RESOLUTION NO. 2024-_____

**A Resolution Accepting Charging and Fueling Infrastructure Funds
From the U.S. Federal Highway Administration**

WHEREAS, the purpose of this Resolution is to authorize the Bay Area Air Quality Management District (Air District) to accept, obligate, and expend up to \$15,000,000 in Charging and Fueling Infrastructure (CFI) funding from the U.S. Federal Highway Administration (FHWA) and to authorize the Executive Officer/Air Pollution Control Officer to execute all necessary agreements, required documents, and amendments required to accept and expend this funding;

WHEREAS, Section 11401 of the Bipartisan Infrastructure Law (BIL), enacted as the Infrastructure Investment and Jobs Act (Pub. L. 117-58, Nov. 15, 2021), established the CFI Discretionary Grant Program which is codified at 23 U.S.C. § 151(f)(2);

WHEREAS, on March 14, 2023, FHWA issued Notice of Funding Opportunity (NOFO) Number 693JJ323NF00004, for projects to install publicly accessible Electric Vehicle (EV) charging projects;

WHEREAS, on June 8, 2023, the Air District submitted an application to FHWA requesting up to \$15,000,000 in CFI Program funding to install EV charging infrastructure in the Bay Area in accordance with FHWA CFI program requirements;

WHEREAS, on January 17, 2024, FHWA issued a notice of proposed awards for the CFI solicitation which included a proposed award to the Air District of up to \$15,000,000;

WHEREAS, FHWA will authorize a grant of up to \$15,000,000 to the Air District for the proposed project, upon approval by the Air District Board of Directors to accept such grant of funds, submittal of remaining project information to FHWA, and full execution of a FHWA award agreement;

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors hereby approves the Air District's acceptance of FHWA funds and commits the Air District to comply with the FHWA CFI program requirements.

BE IT FURTHER RESOLVED, the Air District will comply with all cost sharing requirements for the project as prescribed under 23 U.S. Code § 151(f)(10)(A).

BE IT FURTHER RESOLVED, the Executive Officer/Air Pollution Control Officer is authorized to accept, obligate, and execute all agreements, required documents, and any amendments thereto to implement and carry out the purposes of this resolution.

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 Director _____, seconded by Director _____, on the ____ day of _____, 2024 by the following vote of the Board:

AYES:

NOES:

ABSTAIN:

ABSENT:

Davina Hurt
Chair of the Board of Directors

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Davina Hurt and Members
of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: May 1, 2024

Re: Authorization to Purchase Equipment from Sonoma Technology, Incorporated

RECOMMENDED ACTION

Recommend the Board of Directors authorize the Executive Officer/APCO to purchase an organic carbon/elemental carbon analyzer (DRI 2015 Series 2 with autoloader) from Sonoma Technology, Incorporated (STI) for an amount not to exceed \$170,000.

BACKGROUND

The Air District laboratory uses the organic carbon/elemental carbon analyzer (OCEC) to analyze both routine air monitoring samples for speciation and source-oriented samples for particulate matter content. The current instrument has met the end of its useful life. The analyzer is not compatible with updated software, most of its autoloader components are not fully compatible with the current instrument, and there is limited time remaining for guaranteed service from the manufacturer. The instrument should be replaced with one with comparable technical features and the latest technology improvements.

Air District staff recommends purchasing a DRI 2015 Series 2 with autoloader from Sonoma Technology, Incorporated.

DISCUSSION

Air District staff evaluated instruments using the following criteria:

- Availability of required components and capabilities including: ability to analyze for all required compounds of interest, ability to meet minimum detection requirements, autosampler, analytical software, and type of detector
- Onsite installation and training
- Availability, length, and projected cost of continuing service after initial warranty period
- Type, projected frequency, and projected cost of consumables
- Laboratory chemist's familiarity with software and equipment and ease of transition between instruments

Air District staff actively sought out and evaluated the options to replace the OCEC including inquiring with the vendor of the current instrument, the vendor of a previously-owned instrument, and resellers of the instrument proposed.

Air District staff has prior experience with this vendor and this technology and recommends it for purchase for the following reasons:

- This instrument offers transmission and reflectance measurements at multiple multi-wavelengths.
- Use of Non-Dispersive Infrared (NDIR) eliminating the need for hydrogen for the analysis.
- Air District chemists are familiar with the general analysis and equipment and would not require significant additional training.
- The filter punch for analysis is significantly smaller, leaving more of the sample filter available for additional analysis of samples as warranted.
- Other labs and researchers use the same instrument which may create future opportunities for collaboration.
- The data generated by the new software will be more accessible for data integration into Laboratory Information Management System (LIMS).
- Previous experience with this manufacturer's ongoing service and maintenance has been prompt, thorough, and that service typically results in cost savings.

The DRI 2015 Series 2 with autoloader is the only instrument that meets all of the laboratory's upcoming needs. The investigation into third party vendors referenced back to STI for purchase. STI is the only source for the selected instrument. This purchase should, therefore, also be considered a sole source purchase.

In June 2023, the Board of Directors approved the purchase of an instrument from STI for particulate matter speciation for community monitoring applications for \$75,000. The DRI 2015 Series 2 with autoloader is \$170,000. The accumulation of both purchases with STI is over the \$200,000 limit and requires Board approval.

BUDGET CONSIDERATION/FINANCIAL IMPACT

The funds for this purchase are in the Board-approved Laboratory capital equipment budget (803/60125) for FYE 2024.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Ranyee Chiang

ATTACHMENTS:

None

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Davina Hurt and Members
of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: May 1, 2024

Re: Authorization to Execute a Contract Amendment with Kearns & West, Inc.

RECOMMENDED ACTION

Recommend the Board of Directors authorize the Executive Officer/APCO to execute an amendment to a contract with Kearns & West, Inc. to extend the term from June 30, 2024 to June 30, 2025 and increase the dollar amount from \$1,013,000 to \$2,513,000 to cover Bay Air Center operations for July 1, 2024 through June 30, 2025.

BACKGROUND

Launched in 2019, the Bay Air Center (BAC) serves as a community-oriented air quality technical assistance center. Support from the BAC includes training on air quality and monitoring, assistance with community-led use of air monitoring technologies, analysis of air quality data, and communication of findings.

The BAC currently provides the following services to organizations and community members:

- technical support, resources, and training for organizations and individuals who are implementing projects to understand and improve air quality, or who are applying for state or federal funding to implement such projects;
- compilation of publicly available air quality sensor data for use in local-scale community projects;
- maintenance and use of a portable sensor verification system to provide quality assurance to community-led sensor network projects;
- maintenance of a website with a resource library for community-based ambient air quality monitoring materials and profiles of past projects with community members; and
- start-up of the new refinery corridor particulate monitoring program approved by the Board of Directors on April 3, 2024, including formation of the community workgroup, and development of monitoring plans, sampling protocols, and quality assurance procedures for both the Air District-operated sites and community sampling efforts.

DISCUSSION

The extension of the contract and additional funding requested will enable continued operation of these programs through the fiscal year ending in 2025. The refinery corridor particulate monitoring program started under the current Board-approved and executed contract, but this contract amendment is needed for this program to be fully implemented.

The BAC contract went through a Request for Qualifications (RFQ) process in 2018, prior to execution in 2019. Due to the COVID-19 pandemic and other extenuating circumstances, work under the contract did not begin in earnest until 2022. With the Board of Directors' desire to promptly implement the refinery corridor particulate monitoring program, an additional one-year contract extension is requested prior to re-bidding in late 2024.

BUDGET CONSIDERATION/FINANCIAL IMPACT

Funding for the increase in the value of the contract is included in Program 811 (Ambient Air Quality Analysis) of the FYE2025 Proposed Budget.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Kate Hoag and Joe Lapka
Reviewed by: Ranyee Chiang and Greg Nudd

ATTACHMENTS:

1. Executed Contract No. 2019.131 - Amendment 3: Kearns & West, Inc.
2. Draft Contract No. 2019.131 - Amendment 4: Kearns & West, Inc.

AMENDMENT NO. 3 TO
BAY AREA AIR QUALITY MANAGEMENT DISTRICT
CONTRACT NO. 2019.131

This amendment to the above-entitled contract ("Contract Amendment") is dated, for reference purposes only, June 21, 2023, and consists of 2 pages.

RECITALS:

1. The Bay Area Air Quality Management District ("DISTRICT") and **Kearns & West, Inc.** ("CONTRACTOR") (hereinafter referred to as the "PARTIES") entered into the above-entitled contract for the development, public launch, and ongoing management and implementation of technical assistance center, also known as the Bay Air Center (the "Contract"), which Contract was executed on behalf of CONTRACTOR on July 3, 2019, and on behalf of DISTRICT on July 12, 2019.
2. The PARTIES entered into Amendment No. 1 to the Contract, dated November 16, 2020, for reference purposes only, to amend the term, total cost, the DISTRICT's point of contact, and Task Orders of the Contract.
3. The PARTIES entered into Amendment No. 2 to the Contract, dated June 15, 2022, for reference purposes only, to amend the term and Task Orders No. 1, No. 5 and No. 6 of the Contract.
4. The PARTIES inadvertently referenced the incorrect Term section number in Amendments No. 1 and No. 2 to the Contract, and it was and is the intent of the PARTIES to reference Section 5, "Term" to the Contract in Amendment No. 1 and No. 2.
5. The PARTIES seek to extend the term of the Contract because DISTRICT wants CONTRACTOR to continue to provide the services prescribed in the Contract, and CONTRACTOR desires to continue to provide those services, up to the new term end date.
6. The PARTIES seek to finalize the invoice totals for Task Order Nos. 2, 3, and 4 and agree work under Task Order Nos 2, 3 and 4 have completed.
7. In accordance with Section 29 of the Contract, DISTRICT and CONTRACTOR desire to amend the above-entitled Contract as follows:

TERMS AND CONDITIONS OF CONTRACT AMENDMENT:

1. By this Contract amendment, DISTRICT and CONTRACTOR amend Section 5, "Term." The term of the Contract shall be extended so that the termination date of the Contract is now June 30, 2024.
2. By this Contract amendment, DISTRICT and CONTRACTOR correct all references to Section 4, "Term," in previous Contract Amendments No. 1 and No. 2 to reference Section 5, the correct Term Section of the Contract. The PARTIES agree that this does not change the intent or meaning of Contract Amendments No. 1 and No. 2.
3. By this Contract amendment, DISTRICT and CONTRACTOR agree the cumulative invoiced work under Task Order Nos. 2, 3, and 4 shall not exceed \$141,833.66.
4. DISTRICT and CONTRACTOR agree that all other terms and conditions of the Contract shall remain in full force and effect.

IN WITNESS WHEREOF, the PARTIES have caused this Contract Amendment to be duly executed on their behalf by their authorized representatives.

BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

KEARNS & WEST, INC.

By: DocuSigned by:
Philip Fine _____
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 Philip M. Fine
 Executive Officer/APCO

By: *Crystal Jackson* _____
 Crystal Jackson
 Vice President, People &
 Operations

Date: 7/12/2023

Date: 6/27/2023

Approved as to form:
District Counsel

By: DocuSigned by:
Alexander Crockett 7/11/2023
6DC7110552B5451...
 Alexander G. Crockett
 District Counsel

AMENDMENT NO. 4 TO
BAY AREA AIR QUALITY MANAGEMENT DISTRICT
CONTRACT NO. 2019.131

This amendment to the above-entitled contract (“Contract Amendment”) is dated, for reference purposes only, April 11, 2024, and consists of 2 pages.

RECITALS:

1. The Bay Area Air Quality Management District (“DISTRICT”) and **Kearns & West, Inc.** (“CONTRACTOR”) (hereinafter referred to as the “PARTIES”) entered into the above-entitled contract for the development, public launch, and ongoing management and implementation of technical assistance center, also known as the Bay Air Center (the “Contract”), which Contract was executed on behalf of CONTRACTOR on July 3, 2019, and on behalf of DISTRICT on July 12, 2019.
2. The PARTIES entered into Amendment No. 1 to the Contract, dated November 16, 2020, for reference purposes only, to amend the term, total cost, the DISTRICT’s point of contact, and Task Orders of the Contract.
3. The PARTIES entered into Amendment No. 2 to the Contract, dated June 15, 2022, for reference purposes only, to amend the term and Task Orders No. 1, No. 5 and No. 6 of the Contract.
4. The PARTIES entered into Amendment No. 3 to the Contract, dated June 21, 2023, for reference purposes only, to extend the term of the Contract.
5. The PARTIES seek to amend the term and total cost of the Contract because DISTRICT seeks to continue receiving services from CONTRACTOR prescribed in the Contract, and CONTRACTOR desires to continue to provide those services.
6. In accordance with Section 29 of the Contract, DISTRICT and CONTRACTOR desire to amend the above-entitled Contract as follows:

TERMS AND CONDITIONS OF CONTRACT AMENDMENT:

1. By this Contract amendment, DISTRICT and CONTRACTOR amend Section 5, “Term.” The term of the Contract shall be extended so that the termination date of the Contract is now June 30, 2025.

2. By this Contract Amendment, DISTRICT and CONTRACTOR amend Paragraph D of Section 9, "Agreement to Provide Services," of the Contract to replace "\$1,013,000" with "\$2,513,000."
3. DISTRICT and CONTRACTOR agree that all other terms and conditions of the Contract shall remain in full force and effect.

IN WITNESS WHEREOF, the PARTIES have caused this Contract Amendment to be duly executed on their behalf by their authorized representatives.

BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

KEARNS & WEST, INC.

By: _____
Philip M. Fine
Executive Officer/APCO

By: _____
Crystal Jackson
Vice President, People &
Operations

Date: _____

Date: _____

Approved as to form:

By: _____
Alexander G. Crockett
General Counsel

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Davina Hurt and Members
of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: May 1, 2024

Re: Adoption of a Revised Reserves Policy

RECOMMENDED ACTION

Adopt a revised policy for economic contingency reserves, as recommended by the Finance & Administration Committee.

BACKGROUND

While the Air District has over years built up substantial reserves to be able to have sufficient funding if and when faced with unpredictable economic circumstances, reviews are necessary to ensure reserves continue to serve their purpose. This review provides an overview of best practices and advice for reserves management and details sufficiency of reserves for Air District's operations. A comparison with other California Air District's reserves management practices was also conducted.

In addition, there is a recommendation to revise Air District's reserves policy. Air District's initial reserves policy was adopted in 2007 (at 15 percent of the general fund budget) and revised in 2016 (increasing the economic contingency reserve up to 20 percent of the general fund budget). The current policy revision proposes an increase in the minimum amount held for economic contingency (up to 25 percent of the general fund budget) as well as establishing a maximum level (of 35 percent of the general fund budget).

The Finance and Administration Committee considered the Revised Reserves Policy on March 20, 2024 and recommended that the Board adopt the Revised Reserves Policy.

DISCUSSION

None.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Leonid Bak
Reviewed by: Hyacinth Hinojosa

ATTACHMENTS:

1. Reserves at the Bay Area Air Quality Management District - Background Report

Review of Reserves for Economic Contingency and Recommendation to Revise Policy

Table of Contents

I. Definition and Advice for Fund Balance (Reserves)	3
II. Use of Fund Balance (Reserves)	5
III. Reserves at the Air District	
IV. Reserves Comparisons with Counties and Air Districts	8
V. Summary and Conclusions	10

I. Definition and Advice for Fund Balance (Reserves)

In the context of financial reporting, the term fund balance (or reserves) is used to describe the net position of governmental funds calculated in accordance with generally accepted accounting principles (GAAP).

- a. **The need for a formal reserve policy.** *The Government Finance Officers Association (GFOA)* recommends that governments establish a formal policy on the level of unrestricted fund balance that should be maintained in the general fund for GAAP and budgetary purposes. Such a guideline should articulate a framework and process for how the government would increase or decrease the level of unrestricted fund balance over a specific time period. *The Air District does have such a policy in place*, albeit the Air District's policy is not as specific as GFOA recommends.
- b. **The goal of the reserves policy.** *Reserve funds provide protection from risk.* Government agencies face risks like revenue shortfalls during recessions and losses from extreme events. Reserves help make sure that the Air District can respond quickly and decisively during revenue declines without interruption of its core services and continue to conduct its mission. In most cases, discussions of fund balance will properly focus on an agency's general fund. Nonetheless, financial resources available in other funds could also be considered in assessing the adequacy of unrestricted fund balance in the general fund.
- c. **The appropriate level of reserves.** *At a minimum, according to the GFOA*, the reserve should be based on an analysis of the types of risk the agency is trying to manage with reserves. A more general guideline for a minimum is 16% – 17% or, as GFOA recommends, at a minimum, general-purpose governments, regardless of size, should aim at maintaining unrestricted budgetary fund balance in their general fund of no less than two months of regular general fund operating revenues or regular general fund operating expenditures.

GFOA also recommends including the maximum level of reserves in the reserves policy, something that the Air District currently does not do. There is no right or wrong policy on whether the agency should have a maximum level or specify a range of reserves needed, i.e., from minimum to maximum. If there is a maximum reserve level identified and agreed to in a resolution, when it is exceeded during the forecast period, the Air District may spend the excess reserves. GFOA advises that reserves should be treated as a one-time revenue.

Other important points or agency-specific issues GFOA recommends considering when determining the appropriate level or range of reserves (min./max.), include the following:

- The *predictability of its revenues* and the *volatility of its expenditures* (i.e., higher levels of unrestricted fund balance may be needed if significant

revenue sources are subject to unpredictable fluctuations or if operating expenditures are highly volatile);

- Agency's *perceived exposure to significant one-time outlays* (e.g., disasters, immediate capital needs, state budget cuts);
- The potential *drain upon general fund resources from other funds*, and, the availability of resources in other funds;
- The *potential impact on the agency's bond ratings* and the corresponding increased cost of borrowed funds;
- *Commitments and assignments* (i.e., maintaining higher levels of unrestricted fund balance to compensate for any portion of unrestricted fund balance already committed or assigned by the government agency for a specific purpose). Agencies may find it appropriate to exclude resources committed or assigned already and focus on unassigned fund balance, rather than on unrestricted fund balance.

II. Use of Fund Balance (Reserves)

Acceptable use of Reserves. Reserves are meant to address unexpected, nonrecurring costs. Reserves should not be used for recurring annual operating costs. An exception is poor economic conditions or events that disrupt the Air District's revenues. In such cases, reserves may be used to provide short-term relief so that the Air District can restructure its operations in an orderly manner.

Reserves policy should define conditions warranting its use, and, if a fund balance falls below the government's policy level, a plan to replenish it. In that context, the fund balance policy should define the time period within which and contingencies for which fund balances will be used; describe how the government's expenditure and/or revenue levels will be adjusted to match any new economic realities that are behind the use of fund balance as a financing bridge; and, describe the time period over which the components and the means of the fund balance will be replenished. Generally, governments should seek to replenish their fund balances within one to three years of use.

Unrestricted Fund Balance Above Formal Policy Requirement. In some cases, governments can find themselves in a position with an amount of unrestricted fund balance in the general fund over their formal policy reserve requirement even after considering potential financial risks in the near future.

Amounts over the formal policy may reflect a structural trend, in which case governments should consider a policy as to how this would be addressed. However, according to GFOA, use of those funds should be prohibited as a funding source for ongoing recurring expenditures.

III. Reserves at the Bay Area Air Quality Management District.

1. Overview and History. On June 12, 1958, the Air District's Board of Directors created the General Reserve in the Air District's annual budget and transferred some funds into it. For much of the Air District's history, it has operated with a certain level of reserves in its annual budgets, although there were no reserves targets or metrics to determine adequacy of reserves needed.

In 1998-99, KPMG LLC, through a study commissioned by the Air District, revealed that general reserve allocation in Air District's budget is inadequately funded. The Air District's Board agreed to raise general reserves allocation to a level consistent with generally accepted government practices but did not discuss or adopt any targets or benchmarks for the reserves.

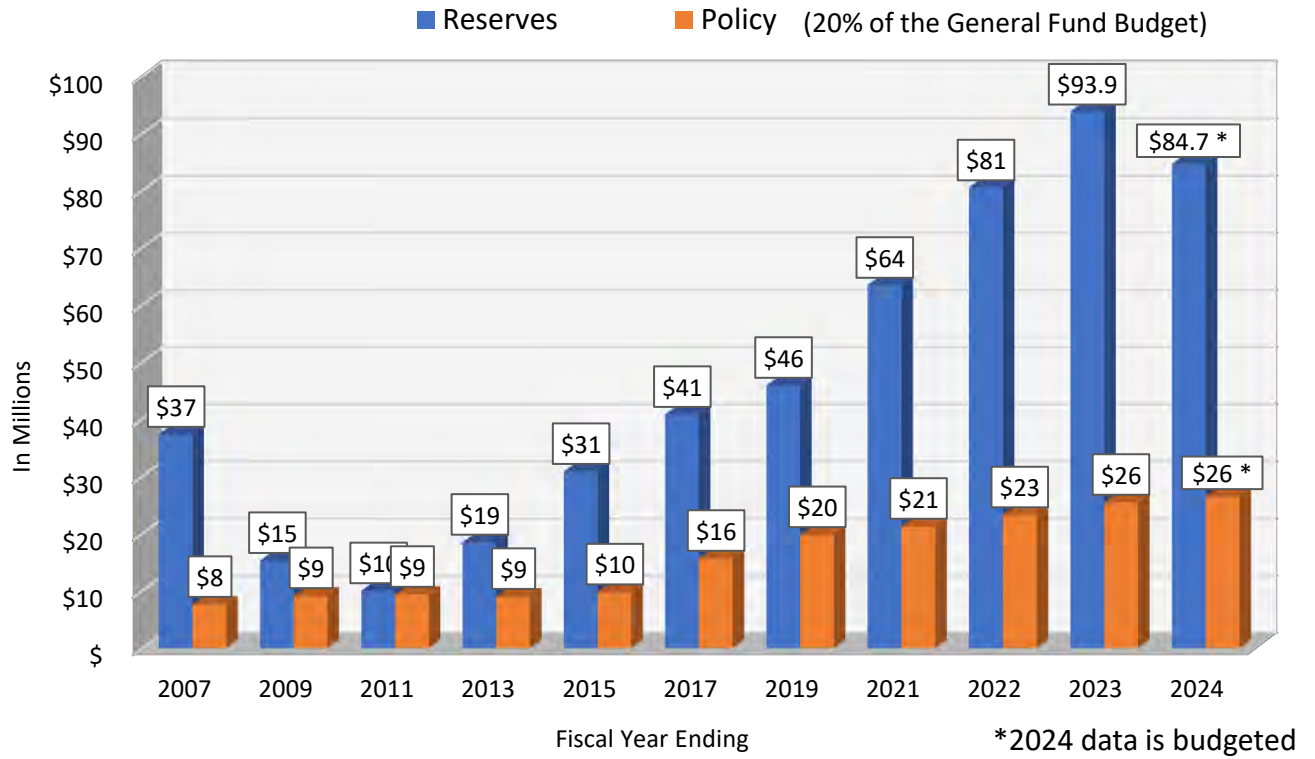
In FYE2008 (on April 25, 2007) a specific required level of general reserve (namely, undesignated reserve) was established at the request of the Board for unplanned expenditures and/or unanticipated loss in revenues at a level of 15 percent of annual revenues.

In FYE2016, the Board approved a further modification to undesignated reserves by adopting as a funding target a 20 percent reserve of the General Fund Budget as an Economic Contingency Reserve policy. This policy is still current at the Air District.

At present, consistent with policy, best practices, and its ability to satisfy operational needs and obligations, the Air District remains well funded with healthy levels of reserves. The aim of this review is to ascertain the target level of reserves as appropriate in light of increasing budgetary obligations and the changing financial landscape.

As an outcome of this review, it is recommended that the Executive Board of the Air District approve a revision to the current policy by establishing a funding target range of the economic contingency reserves of the General Fund Budget between 25 and 35 percent of budget.

Figure 1: Air District's Actual General Fund Reserves compared with Minimum Policy Requirement



III. Reserves Comparisons with Counties and Other California Air Districts

A. Comparison with counties. Bay Area counties have all different goals and targets when it comes to reserves allocation and management. Some counties do not have clear policies or carry large reserves, others have very explicit and well-defined economic contingency and reserve policies. Table 1 (below) summarizes the Bay Area counties’ reserves policy and actual reserves.

Table 1: Comparison of Bay Area County Reserves

Bay Area Counties General Fund Balance (Reserves)		
<i>County</i>	<i>Reserves Policy</i>	<i>Actual Reserves/Fund balance</i>
Alameda	unclear	3.3% of total budget
Contra Costa	10% of general fund revenues; 5% for the unassigned balance	37.8% of total revenue
Marin	5% of the general fund budget	28% of the general fund
Napa	2% of general fund for contingency	14.4% of the total budget
San Francisco	2% of total budget	2% of total budget
San Mateo	5% of general fund budget; 3% contingency reserve; 2% departmental reserve	51% of total revenue
Santa Clara	5% of net revenue	5% of net revenue
Solano	10% of the general fund budget	11.8% of total revenues; however only budgeted 3.7% of general fund expenditures
Sonoma	16.7% or 2 months of annual general fund revenue	8.3% of general fund revenues (or 1 month of annual general fund revenues)

Source: FY2023/24 county budgets

B. Comparison with California Air Districts. Similarly to counties, Air Districts in California do not follow a prescribed route with their budgets. While many have basic rules for keeping a certain proportion of their budgets or operating expenditures for reserves, for many Air Districts their actual reserves are, indeed, much higher than what their policies prescribe.

Some of the reasons for carrying the high reserve balance could be related to concerns with economic uncertainties, while in the case of at least some other Air Districts, it is their efficiency in carrying out their mission – i.e., they spent less than what was budgeted. In the case of other air districts, their reserves have been built up over time with careful planning. Table 2 (below) summarizes reserve position for the select Air Districts in California.

It is worth noting that at least two other Air Districts, South Coast AQMD and San Joaquin Valley Unified APCD have reserves policies similar to those of BAAQMD, in that they use 20 percent target for their economic contingency reserves.

Table 2: Comparison of Select California Air District's Reserves Position

Select California Air Districts' Reserves		
<i>Air District</i>	<i>Reserves Policy</i>	<i>Actual Reserves</i>
Bay Area AQMD	20% of the GF budget	69% of total revenue
South Coast AQMD	20% of total revenue	40% of total revenue
San Diego APCD	2 months of operating expenditures	33.5% of total (all funds) budget
Sacramento Metropolitan AQMD	120 days (min. 60 days) of general fund expenditures	61% of general fund budget
Monterey Bay ARD	25% of operating budget	76% of general fund budget
San Joaquin Valley Unified APCD	20% of operating expenditures	72.1% of operating expenditures

Source: Air Districts Budgets, FY2023/24

IV. Summary and Conclusions.

1. *Air District's reserves management is* generally within the recommended guidance from the GFOA, with high levels of reserves, sufficient to address economic contingencies, should the need arise.
2. Some additional *improvements to the reserves policy at the Air District include the recommended specific range of reserves*, as GFOA advises, a minimum to maximum level of funds to be held in reserves.
3. A comparison with other Air Districts in California demonstrates that *BAAQMD is not an outlier in reserves management practices* nor that reserves management issues that BAAQMD faces are unique only to our agency.
4. In comparison with counties, while clear that counties have different income streams, risk profiles, and expenditure patterns, also shows that *Air District's reserves are ample, given the balance of risks the Air District faces*.
5. Notably, *neither counties nor other California Air Districts have plans or policies on procedures for excess reserves*, in part probably because none of them identify the upper limit of reserves, only the minimum required.
6. Under acceptable uses of reserves, some entities, who do have specific policies on reserves management, only allow for one-time withdrawals and timely replenishment. *Greater specificity on acceptable uses of reserves at the BAAQMD may be useful*, however, overly specific language may undermine the warranted use of reserves.

BOARD MEETING DATE: May 1, 2023

REPORT: Finance and Administration Committee

SYNOPSIS: The Finance and Administration Committee (Committee) held a meeting on Wednesday, April 17, 2024. The following is a summary of the meeting.

RECOMMENDED ACTION:

Receive and file.

Davina Hurt, Chair
Finance and Administration Committee

DH:mh

Committee Members

Present, In-Person (Bay Area Metro Center (375 Beale Street, 1st Floor Board Room, San Francisco, California, 94105): Committee Chairperson Davina Hurt; and Directors David Haubert, Tyrone Jue, and Katie Rice.

Present, In-Person Satellite Location (Mountain View City Hall, 500 Castro Street, 2nd Floor Committee Room, Mountain View, CA 94041) Director Margaret Abe-Koga.

Present, In-Person Satellite Location (San Mateo County Hall of Justice, 400 County Center, Criminal Justice Training Room, 1st Floor, Redwood City, CA 94063): Director Ray Mueller.

Absent: Vice Chairperson Lynda Hopkins; and Directors Juan González III, and Mark Ross.

Call to Order

Finance and Administration Committee (Committee) Chairperson, Davina Hurt, called the meeting to order at 10:04 a.m.

For additional details of the Finance and Administration Committee Meeting, please refer to the webcast, which can be found [here](#) 24 hours after the meeting as concluded. Please use the webcast’s index to view specific agenda items.

CONSENT CALENDAR

3. APPROVAL OF THE DRAFT MINUTES OF THE FINANCE AND ADMINISTRATION COMMITTEE MEETING OF MARCH 13, 2024

The Committee approved the Draft Minutes of the Finance and Administration Committee Meeting of March 20, 2024.

4. **UPDATED AIR DISTRICT PROCUREMENT POLICY AND REVISED ADMINISTRATIVE CODE SECTION 9.4**

The Committee recommended the Board (i) adopt amendments to Section 9.4 of the Administrative Code regarding procurement, and (ii) adopt a Procurement Policy to establish procedures for competitive bidding, awarding, administering, and executing contracts for goods and services, leases, and other similar contractual agreements, to become effective July 1, 2024.

5. **FINANCIAL UPDATE FOR THE FISCAL YEAR (FY) 2023-2024 SECOND QUARTER ENDING DECEMBER 31, 2023**

The Committee received the FY 2023-2024 financial update for the second quarter ending December 31, 2023.

Public Comments

No requests received.

Committee Comments

None.

Committee Action

Director Haubert made a motion, seconded by Director Jue to **approve** the Consent Calendar, Items 3 to 5, inclusive; and the motion **carried** by the following vote of the Committee:

AYES: Abe-Koga, Haubert, Hurt, Jue, Mueller, Rice.
NOES: None.
ABSTAIN: None.
ABSENT: González, Hopkins, Ross.

ACTION ITEMS

6. **PROPOSED AMENDMENTS TO AIR DISTRICT REGULATION 3: FEES**

This was a further consideration of the proposed amendments to the fee regulation that the Committee discussed at its March 20 meeting to provide the Committee additional detail.

Fred Tanaka, Manager in the Engineering Division, gave the staff presentation *Amendments to Regulation 3, Fees*, including: outcome; outline; requested action; summary of proposed changed to fee schedules; other proposed amendments; cost recovery strategy: fee-recoverable work, history of studies and recommendations, overall cost recovery trends, small business fee considerations; metrics and comparisons: case study of cost recovery trends, comparison with other air districts, small and medium facilities, refineries, Schedule F; budget and rule development schedule; and feedback requested.

Public Comments

Public comments were given by Allegra Curiel, *California Council for Environmental and Economic Balance*.

Committee Comments

The Committee and staff discussed the fee-based activities that typically generate the greatest amount of collected revenue within the Bay Area Air Quality Management District’s jurisdiction, compared to those of the South Bay Air Quality Management District; the types of facilities under the category of ‘printer’; whether the Air District takes into consideration the fact that increased fees may contribute to distress of facility/company/industry; whether permitted facilities are informed of how their Air District fees are justified; the suggestion of shifting to a “fee containment” mindset that strives to find creative ways to proactively streamline fees, versus having to calculate cost recovery; the range of cost recovery rates across all fee schedules; whether attention to cost recovery rates should be applied equally across all fee schedules; and the desire to avoid unintended consequences when shifting environmental burdens from one entity onto another.

Committee Action

Director Haubert made a motion, seconded by Director Rice to recommend the Board **adopt** proposed amendments to Regulation 3, Fees, for Fiscal Year Ending (FYE) 2025; and the motion **carried** by the following vote of the Committee:

- AYES: Abe-Koga, Haubert, Hurt, Jue, Mueller, Rice.
- NOES: None.
- ABSTAIN: None.
- ABSENT: González, Hopkins, Ross.

7. AIR DISTRICT'S PROPOSED BUDGET FOR FISCAL YEAR 2024-2025

This agenda item is a continuation of the proposed budget item from the March 20, meeting. The Committee resumed discussion on the proposed FY 2024-2025 Budget and staffing recommendations from its March 20, 2024, meeting.

Stephanie Osaze, the Director of Finance, presented supplementary budget information in response to the Committee's feedback. *Continuation of Air District’s Proposed Budget for Fiscal Year 2024-2025*, including: outcome; outline; FY 24-25 Proposed Budget summary; Air District’s General Fund reserves: actual versus minimum policy requirement; 2024 General Fund reserve designations; proposed General Fund budget by type; medical retiree and pension plan funding status and policy; and recommendation.

Public Comments

No requests received.

Committee Comments

The Committee and staff discussed the Air District’s current pension plan funding level and policy, and how staff proposes to allocate pension prefunding monies toward unfunded liability each year; the cause of the fluctuation from 82% in 2021 to 74% of funded pension plan; potential changes to the Air District’s proposed reserve policy; whether the Air District attempts to forecast market returns and California Public Employees' Retirement System (CalPERS) obligations; the desire for a policy that increases discretionary contributions more aggressively for the pension fund beyond other post-employment benefits (OPEB) monies; and whether the Air District uses its reserves to invest in the Air District’s priorities of cleaning the environment.

Committee Action

Director Rice made a motion, seconded by Director Jue, to recommend the Board **conduct** public hearings on the FY 24-25 Proposed Budget, **adopt** the FY 24-25 Proposed Budget and staffing recommendations, and **allocate** \$5 million to the California Employers Pension Prefunding Trust for pension prefunding purposes; the motion **carried** by the following vote of the Committee:

- AYES: Abe-Koga, Haubert, Hurt, Jue, Mueller, Rice.
- NOES: None.
- ABSTAIN: None.
- ABSENT: González, Hopkins, Ross.

8. AUTHORIZATION TO EXECUTE A CONTRACT WITH ALLISON+PARTNERS FOR THE SPARE THE AIR ADVERTISING AND MESSAGING CAMPAIGNS

Kristina Chu, Communications Manager, gave the staff presentation *Approval of a Contract for Spare the Air Advertising and Messaging Campaigns*, including: requested action; outcome; Spare the Air Request for Proposals (RFP) overview; proposals received; RFP evaluation criteria; firm evaluation scores; Spare the Air budget overview and funding sources; and requested action.

Public Comments

No requests received.

Committee Comments

The Committee and staff discussed the Air District’s history of contracting with Allison+Partners for the Spare the Air campaigns, advertising, communications, and evaluation services; and the ways in which highly-impacted communities are receiving communications about the Spare the Air programs.

Committee Action

Director Haubert made a motion, seconded by Director Jue, to recommend the Board **authorize** the Executive Officer/Air Pollution Control Officer (APCO) to execute a contract with Allison+Partners for the Spare the Air Advertising and Messaging Campaigns for up to three years at the Air District’s discretion, based on the contractor’s performance and available funds, in an amount not to exceed \$1,950,000 per contract year during Fiscal Year Ending (FYE) 2025 and FYE 2026 and \$2,019,000 for FYE 2027; the motion **carried** by the following vote of the Committee:

AYES: Abe-Koga, Haubert, Hurt, Jue, Mueller, Rice.
NOES: None.
ABSTAIN: None.
ABSENT: González, Hopkins, Ross.

9. FUNDING COMMUNITY BENEFITS FROM PENALTY FUNDS

Greg Nudd, Deputy Executive Officer of Science and Policy, gave the staff presentation *Funding Community Benefits from Penalty Funds*, including: outcomes; outline; about penalties; proposed policy; Community Benefit project examples; penalty allocation proposal; mitigating budget risk; Community Advisory Council recommendations; Richmond-North Richmond-San Pablo Community Emissions Reduction Plan Community Steering Committee recommendations; partial results for FYE 2024; and recommendation.

Public Comments

Public comments were given by Jan Warren, Interfaith Climate Action Network of Contra Costa County.

Committee Comments

The Committee and staff discussed which entity will ensure that the community decides how the penalty funds are allocated and perform audits the allocations, whether those entities will have the capacity to perform that administrative work, and whether administrative costs were discussed with the Air District’s Community Advisory Council; entities that would be eligible to oversee and facilitate such administrative tasks in disadvantaged, overburdened communities that do not have designated Assembly Bill (AB) 617 representation, and the need to build capacity in those communities; the way in which the Air District calculates revenue projection; whether there are Bay Area communities in which Air District regulation violations frequently occur and result in small penalties; and the appreciation for this proposed policy, perceived by some as groundbreaking.

Committee Action

Director Haubert made a motion, seconded by Director Jue, to recommend the Board **adopt** the proposed Funding Community Benefits from Penalty Funds policy, including the requirement to report back to the Board on the effectiveness of the policy, effective upon approval and be retroactive to the beginning of this fiscal year; the motion **carried** by the following vote of the Committee:

AYES: Abe-Koga, Haubert, Hurt, Jue, Mueller, Rice.
NOES: None.
ABSTAIN: None.
ABSENT: González, Hopkins, Ross.

INFORMATIONAL ITEMS

10. **CORRECTIVE ACTION PLAN TO IMPLEMENT RECOMMENDATIONS FROM THE ENGINEERING PERFORMANCE AUDIT**

Dr. Meredith Bauer, Deputy Executive Officer for Engineering and Compliance, and Pamela Leong, Engineering Division Director, gave the staff presentation *Corrective Action Plan to Implement the Recommendations from the Engineering Performance Audit*, including: outcome; requested action; outline; history; key audit findings; audit recommendations: timeliness/backlog, tracking permit process/bottlenecks, accounts, management time, resource management (staffing and workload), cost recovery, and summary; corrective actions: recent progress, approach and timeline, and 5-year backlog reduction schedule; action plan: timeliness/backlog, tracking permit process/bottlenecks, accounts, management time, resource management (staffing and workload), and cost recovery; and requested action.

Public Comments

Public comments were given by Allegra Curiel, *California Council for Environmental and Economic Balance*.

Committee Comments

The Committee and staff discussed contributing factors to the Air District's current permitting backlog; the suggestion that specific types of permit applications be processed in a more streamlined, accelerated, manner; and the suggestion of tracking the performance rate of Air District engineering staff that process permit applications.

Committee Action

None; receive and file.

11. AIR DISTRICT FINANCIAL AUDIT REPORT FOR FISCAL YEAR ENDING (FYE) 2023

Joseph Moussa from Simpson & Simpson LLP, gave the presentation *Fiscal Year 2023 Bay Area Air Quality Management District Presentation of Audit Results*, including: agenda, Auditor's Required Communications (Statement on Auditing Standard 114); audit results and highlights of the basic financial statements; and audit results and highlights of the single audit.

Public Comments

No requests received.

Committee Comments

The Committee and staff discussed the sources of the Air District's \$302 million reserved which includes (restricted) funds from the General fund and Special funds; and the implementation of audit recommendations and corrective actions.

Committee Action

None; receive and file.

OTHER BUSINESS

12. PUBLIC COMMENT ON NON-AGENDA MATTERS

No requests received.

13. COMMITTEE MEMBER COMMENTS

None.

14. TIME AND PLACE OF NEXT MEETING

Wednesday, May 15, 2024, at 10:00 a.m. at 375 Beale Street, San Francisco, CA 94105. The meeting will be in-person for the Finance and Administration Committee members and members of the public will be able to either join in-person or via webcast.

Adjournment

The meeting was adjourned at 12:27 p.m.

Attachments

#3 – Approval of the Draft Minutes of the Finance and Administration Committee Meeting of March 13, 2024

#4 – Updated Air District Procurement Policy and Revised Administrative Code Section 9.4

#5 – Financial Update for The Fiscal Year (FY) 2023-2024 Second Quarter Ending December 31, 2023

#6 – Proposed Amendments to Air District Regulation 3: Fees

#7 – Air District's Proposed Budget for Fiscal Year 2024-2025

#8 – Authorization To Execute a Contract with Allison+Partners for The Spare The Air Advertising And Messaging Campaigns

#9 – Funding Community Benefits from Penalty Funds

#10 – Corrective Action Plan to Implement Recommendations from The Engineering Performance Audit

#11 – Air District Financial Audit Report for Fiscal Year Ending (FYE) 2023

BOARD MEETING DATE: May 1, 2024

REPORT: Community Equity, Health and Justice Committee

SYNOPSIS: The Community Equity, Health and Justice Committee (Committee) held a special meeting on Wednesday, April 22, 2024. The following is a summary of the meeting.

RECOMMENDED ACTION:

Receive and file.

John Gioia, Chair
Community Equity, Health and Justice Committee

JG:mh

Committee Members

Note: For this meeting only, Board Chair Hurt appointed herself to replace Director Nate Miley (who is a member of this committee, but could not be present) to establish a quorum.

Present, In-Person (City of San Pablo City Hall, Council Chambers, 1000 Gateway Ave, San Pablo, CA 94806): Committee Chairperson John Gioia; Board Chairperson Davina Hurt; and Director Shamann Walton.

Participated Remotely, via Zoom (remote presence does not count for quorum, but votes are counted for all action items): Committee Vice Chairperson Noelia Corzo (just cause.)

Absent: Director Joelle Gallagher.

Call to Order

Chair Gioia called the meeting to order at 5:39 p.m.

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.

OTHER BUSINESS (OUT OF ORDER)

3. REPORT OF THE ACTING DEPUTY EXECUTIVE OFFICER OF EQUITY AND COMMUNITY PROGRAMS (ITEM 8)

Committee Chair Gioia asked Dr. Philip M. Fine, Executive Officer / Air Pollution Control Officer, to move his report up in the meeting. Dr. Fine announced the following appointments:

- Tim Williams was appointed as the new Director of Diversity, Equity, and Inclusion, effective April 22, 2024.
- Arsenio Mataka was appointed as the new Deputy Executive Officer for Equity and Community Programs, effective June 2024.

Public Comments

Public comments were given by Ms. Margaret Gordon, West Oakland Environmental Indicators Project.

CONSENT CALENDAR

4. APPROVAL OF THE DRAFT MINUTES OF THE COMMUNITY EQUITY, HEALTH AND JUSTICE COMMITTEE MEETING OF MARCH 13, 2024 (ITEM 3)

Public Comments

No requests received.

Committee Comments

None.

Committee Action

Director Walton made a motion, seconded by Board Chair Hurt, to **approve** Minutes of the Community Equity, Health and Justice Committee of March 13, 2024; and the motion **carried** by the following vote of the Committee:

AYES: Corzo, Gioia, Hurt, Walton.
NOES: None.
ABSTAIN: None.
ABSENT: Gallagher.

ACTION ITEM

5. COMMUNITY EMISSIONS REDUCTION PLAN FOR THE RICHMOND, NORTH RICHMOND, AND SAN PABLO PATH TO CLEAN AIR (PTCA) AREA (ITEM 4)

Diana Ruiz, Community Engagement Manager, and Dr. Wendy Goodfriend, Planning and Climate Protection Division Director, gave the presentation *Path to Clean Air Richmond-North Richmond-San Pablo Draft Final Community Emissions Reduction Plan*, including: outcome; outline; requested action; overview of the Path to Clean Air (PTCA); Community Steering Committee (CSC); PTCA Plan development process; PTCA plan goals; turning problems into solutions; fuel refining solutions; Example Fuel Refining Strategies the Air District Will Lead During Implementation; Fuel Refining Proposed Rules & Rule Related Actions; mobile source solutions; commercial and industrial solutions; Example C&I Strategies the Air District will Lead during Implementation; marine and rail solutions; public health solutions; Example Health Strategies the Air District Will Lead During Implementation; other proposed rules and rule related actions; Draft PTCA Plan public review; Community Steering Committee approval; compliance with California Environmental Quality Act (CEQA); Community Steering Committee Priorities and Insights; and recommended action.

Y’Anad Burrell, former Co-Chairperson of the Richmond, North Richmond, and San Pablo PTCA CSC, and Dr. Omoniyi Omotoso, M.D., a member of the aforementioned committee, gave additional comments on the proposed Draft Final Plan.

Public Comments

Public comments were given by Marilyn, Contra Costa County resident; Philip Rosenthal, Point Richmond Neighborhood Council; Willie Robinson, National Association for the Advancement of Colored People (NAACP) Richmond; Nancy Aguirre, PTCA CSC member; John; Jean Diller, San Palbo resident; Audrey Davidson, Richmond resident; Marisol Cantú, PTCA CSC member; Dr. Stephen Rosenblum, Palo Alto resident; Ms. Margaret Gordon, West Oakland Environmental Indicators Project; Maureen Brennan; Heidi Swillinger, PTCA CSC member; Jeff Kilbreth, PTCA CSC member; and Alfredo Angulo, PTCA CSC Co-Chair.

Committee Comments

The Committee and staff discussed the fact that this recommendation does not mark the end of a process, but the beginning; whether penalty funds allocated from the Air District Community Benefits Fund could fund the Final Plan’s implementation; CEQA exemptions; whether any of the proposed strategies address reducing flaring events; the definition of ‘just transition’ within the Draft Final Plan; the percentage of the proposed strategies within the Draft Final Plan that are truly within the AD’s control; whether there is a way to estimate implementation costs; anticipated metrics for progress and accountability; the desire to see a reduction in new public space and infrastructure; and appreciation for the time and experience of the PTCA CSC members and Air District staff who developed the Draft Final Plan.

Committee Action

Chair Gioia made a motion, seconded by Board Chair Hurt, to recommend the Board of Directors **adopt** the Draft Final Community Emissions Reduction Plan for the Richmond, North Richmond, and San Pablo Path to Clean Air Plan, and **approve** the determination that the adoption of the Draft Final Plan is exempt from the California Environmental Quality Act; and the motion **carried** by the following vote of the Committee:

AYES:	Corzo, Gioia, Hurt, Walton.
NOES:	None.
ABSTAIN:	None.
ABSENT:	Gallagher.

INFORMATIONAL ITEM

6. **AIR DISTRICT RULE 6-5 SETTLEMENT AGREEMENT: COMMUNITY AIR QUALITY FUND (ITEM 5)**

Gregory H. Nudd, Deputy Executive Officer, Science and Policy, gave the staff presentation *Air District Rule 6-5 Settlement Agreement: Community Air Quality Fund*, including: outcome; outline; information only; what is Air District Rule 6-5; Chevron fluid catalytic cracking unit (FCCU) Particulate Matter (PM) Impacts; refineries’ lawsuits; Chevron Settlement: Rule 6-5 Provisions; Community Air Quality Fund; examples of possible programs; and next steps.

Public Comments

The Committee solicited public input to develop a process to determine how the funds should be spent.

Public comments were given by Cesar Zepeda, Richmond City Council; Nancy Aguirre, PTCA CSC member; Willie Robinson, NAACP Richmond Branch; Oscar Garcia, Iron Triangle Neighborhood Council; Philip Rosenthal, Point Richmond Neighborhood Council; Sandra Marquez; Heidi Swillinger, PTCA CSC member; and Ms. Margaret Gordon, West Oakland Environmental Indicators Project.

Committee Comments

The Committee and staff discussed reporting requirements; how ‘consulting’ is defined, and how consultants will be used in this process; the suggestion of highlighting health statistics/metrics that are in the PTCA Draft Final Plan to identify the highest cancer risk from PM; the belief that the initial payment of \$20 M for the Community Air Quality Fund should be billions instead of millions; the anticipation of many eligible project applicants competing for this funding, and the best way to organize their input so that they all feel heard; the fact that the unhoused population in the vicinity of Richmond need attention as well; how to integrate Richmond neighborhood councils into the funding allocation process; and whether there should be a parallel process for penalty fund allocations and settlement agreement allocations simultaneously to combine the efforts.

Committee Action

None; receive and file.

OTHER BUSINESS

7. PUBLIC COMMENT ON NON-AGENDA MATTERS (ITEM 6)

No requests received.

8. COMMITTEE MEMBER COMMENTS (ITEM 7)

The Committee thanked all who worked on Item 4, including the refinery workers’ experiences that were voiced.

9. TIME AND PLACE OF NEXT MEETING

Wednesday, May 8, 2024, at 1:00 p.m., at 375 Beale Street, San Francisco, CA 94105. The meeting will be in-person for the Community Equity, Health and Justice Committee members and members of the public will be able to either join in-person or via webcast.

Adjournment

The meeting was adjourned at 8:17 p.m.

Attachments

#3: Draft Minutes of the Community Equity, Health, and Justice Committee Meeting of October March 13, 2024

- #4: Community Emissions Reduction Plan for the Richmond, North Richmond, and San Pablo Path to Clean Air (PTCA) Area
- #5: Air District Rule 6-5 Settlement Agreement: Community Air Quality Fund

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Davina Hurt and Members
of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: May 1, 2024

Re: Public Hearing to Receive Testimony on Proposed Amendments to Air District
Regulation 3: Fees

RECOMMENDED ACTION

Receive testimony.

BACKGROUND

Staff develops recommended amendments to the Air District’s fee regulation as part of the budget preparation process. 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. Progress towards this target is reported to the Board annually by staff and is periodically reviewed by outside consultants.

DISCUSSION

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 2022 Cost Recovery Report and Board direction. Analyzing at the fee schedule-level, staff recommends:

- A 3.3% increase, the Consumer Price Index for Bay Area Urban Wage Earners and Clerical Workers (CPI-W) for the most recent year, is proposed for Schedule M and schedules with a cost recovery rate of at least 100 percent but less than 110 percent.
- A 15% increase is proposed for schedules with a cost recovery rate less than 100 percent.

Schedule	Description	Proposed Increase
Schedule A	Hearing Board Fees	15%
Schedule B	Combustion of Fuels	15%
Schedule D	Gasoline Transfer at Gas Dispensing Facilities & Bulk Plants and Bulk Terminals	3.3%
Schedule E	Solvent Evaporating Sources	15%
Schedule F	Miscellaneous Sources	15%
Schedule G1	Miscellaneous Sources	15%
Schedule G2	Miscellaneous Sources	15%
Schedule G3	Miscellaneous Sources	15%
Schedule G4	Miscellaneous Sources	15%
Schedule G5	Miscellaneous Sources	15%
Schedule H	Semiconductor and Related Operations	15%
Schedule I	Dry Cleaners (not registered)	3.3%
Schedule K	Solid Waste Disposal Sites	15%
Schedule M	Major Stationary Source Fees	3.3%
Schedule P	Major Facility Review Fees	15%
Schedule S	Naturally Occurring Asbestos (NOA) Operations	15%
Schedule V	Open Burning: Marsh Management fees only	15%
Schedule W	Petroleum Refining Emissions Tracking Fees	15%

In addition, the following key amendments are proposed:

- Fees that are administrative in nature would be increased by the CPI-W.
- Delete Subsection 320.1, Subsection 322, and Schedule Q.
- Clarify language regarding proration of Permit to Operate renewal fees.
- Be clear about no proration or refunds for shutdown sources.
- Align Risk Assessment Fees (RAFs) in Schedules B and D.A.
- Clarify alteration application fees for sources subject to G-3, G-4 and G-5.
- Clarify the applicability of the minimum fee in Schedule H.

Staff will provide additional details regarding the draft fee amendments, overall cost recovery and the proposed increases for the upcoming fiscal year. A summary of public comments received to date, including those received at a public workshop held on February 15, 2024, will be provided.

BUDGET CONSIDERATION/FINANCIAL IMPACT

The proposed fee amendments would increase fee schedule revenue in Fiscal Year Ending 2025 by an estimated \$4.7 million from fee schedule revenue that would otherwise result without the amendments.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Fred Tanaka
Reviewed by: Pamela J. Leong, Dr. Meredith Bauer

ATTACHMENTS:

1. 2024 Cost Recovery Report
2. Draft Regulation 3: Fees - Clean Copy
3. Draft Regulation 3: Fees - Tracked Changes
4. Proposed Amendments to Air District Regulation 3 Fees for FYE2025 Presentation



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

2024 COST RECOVERY REPORT

Prepared by the staff of the
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA

March 2024

Contents

<u>Executive Summary</u>	<u>1</u>
<u>Legal Authority</u>	<u>4</u>
<u>Methodology.....</u>	<u>4</u>
<u>Results</u>	<u>5</u>
<u>Discussion of Results</u>	<u>5</u>
<u>Conclusions.....</u>	<u>7</u>
<u>Appendix A: Figures</u>	<u>8</u>
<u>Appendix B: 2022 Cost Recovery and Containment Policy.....</u>	<u>14</u>
<u>Appendix C: Fee Schedule V Cost Recovery Analysis.....</u>	<u>18</u>

Executive Summary

The 2024 Cost Recovery Report includes the latest fee-related cost and revenue data gathered for the previous three fiscal years, July 1, 2021, to June 30, 2023. The results are used to prepare the Fiscal Year Ending (FYE) 2025 budget, and for evaluating potential amendments to the Air District's Regulation 3: Fees.

The completed cost recovery analysis indicates that in FYE 2023 there continued to be a revenue shortfall, as overall direct and indirect costs of regulatory programs exceeded fee revenue (see Figure 2).

The Air District is recovering approximately 87% of its fee-related activity costs (see Figure 5). The overall magnitude of this cost recovery gap was determined to be approximately \$5.1 million. This cost recovery gap was filled using General Fund revenue received by the Air District from the counties' property tax revenue. The Air District uses the three-year averages in evaluating proposed amendments to Regulation 3, Fees at the fee schedule level because longer averaging periods are less sensitive to year-to-year variations in activity levels that occur due to economic or market variations and regulatory program changes affecting various source categories.

The analysis also addressed fee-equity issues by analyzing whether there is a revenue shortfall at the individual Fee Schedule level. For the 3-year period, twenty-two (22) fee schedules for which cost recovery could be analyzed, six (6) of the component fee schedules had fee revenue contributions exceeding total cost.

Cost recovery is not a static target because the analysis is impacted by many factors on the revenue and expenses side. Personnel costs in fee-based programs have a heavy influence in overall cost recovery and cost recovery of specific fee schedules. In addition, the analysis does not account for future work/needs or address the health of any program.

Background

The Air District is responsible for protecting public health and the environment by achieving and maintaining health-based national and state ambient air quality standards, and reducing public exposure to toxic air contaminants, in the nine-county Bay Area region. Fulfilling this task involves reducing air pollutant emissions from sources of regulated air pollutants and maintaining these emission reductions over time. In accordance with State law, the Air District's primary regulatory focus is on stationary sources of air pollution.

The Air District has defined units for organizational purposes (known as "Programs") to encompass activities which are either dedicated to mission-critical "direct" functions, such as permitting, rule-making, compliance assurance, sampling and testing, grant distribution, etc., or are primarily dedicated to support and administrative "indirect" functions. The Air District has also defined revenue source categories for time billing purposes (known as "Billing Codes") for all activities, i.e., the permit fee schedules, grant revenue sources, and general support activities.

The Air District's air quality regulatory activities are primarily funded by revenue from regulatory fees, government grants and subventions, and county property taxes. Between

1955 and 1970, the Air District was funded entirely through property taxes. In 1970, the California Air Resources Board (CARB) and U.S. Environmental Protection Agency began providing grant funding to the Air District. After the passage of Proposition 13, the Air District qualified as a “special district” and became eligible for funding from the property tax allocation system commonly referred to as “AB 8”, which currently make up the county revenue portion of the budget.

State law authorizes the Air District to impose a schedule of fees to generate revenue to recover the costs of activities related to implementing and enforcing air quality programs. On a regular basis, the Air District has considered whether these fees result in the collection of a sufficient and appropriate amount of revenue in comparison to the cost 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 (*Bay Area Air Quality Management District Cost Recovery Study, Final Report: Phase One – Evaluation of Fee Revenues and Activity Costs; February 16, 1999*). The Study recommended an activity-based costing model, which has been implemented. As a result of that Study, the Air District implemented a time-keeping system. These changes improved the Air District’s ability to track costs by program activities. The 1999 Cost Recovery 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, fund balances) have been used to close this gap.

In 2004, the Air District’s Board of Directors approved funding for an updated Cost Recovery Study that was conducted by the accounting/consulting firm Stonefield Josephson, Inc. (*Bay Area Air Quality Management District Cost Recovery Study, Final Report; March 30, 2005*). This Cost Recovery Study analyzed data collected during the three-year period FYE 2002 through FYE 2004. It compared the Air District’s costs of program activities to the associated fee revenues and analyzed how these costs are apportioned amongst the fee-payers. The Study indicated that a significant cost recovery gap existed. The results of this 2005 report and subsequent internal cost recovery studies have been used by the Air District in its budgeting process, and to set various fee schedules.

In March 2011, another study was completed by Matrix Consulting Group (*Cost Recovery and Containment Study, Bay Area Air Quality Management District, Final Report; March 9, 2011*). The purpose of this Cost Recovery and Containment Study was to provide the Air District with guidance and opportunities for improvement regarding its organization, operation, and cost recovery/allocation practices. A Cost Allocation Plan was developed and implemented utilizing FYE 2010 expenditures. This Study indicated that overall, the Air District continued to under-recover the costs associated with its fee-related services. To reduce the cost recovery gap, further fee increases were recommended for adoption over a period of time in accordance with a Cost Recovery Policy to be adopted by the Air District’s Board of Directors. Also, Matrix Consulting Group reviewed and discussed the design and implementation of the new Production System which provides opportunities for increased efficiency and accuracy when fully developed.

Air District staff initiated a process to develop a Cost Recovery 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 Air District's Board of Directors on March 7, 2012. This policy specifies that the Air District should amend its fee regulation, in conjunction with the adoption of budgets for Fiscal Year Ending (FYE) 2014 through FYE 2018, in a manner sufficient to increase overall recovery of regulatory program activity costs to at least 85%. The policy also indicates 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.

In February 2018, Matrix Consulting Group (Matrix) completed an update of the 2011 cost recovery and containment study for the fiscal year that ended June 30, 2017. The primary purpose of this Study was to evaluate the indirect overhead costs associated with the Air District and the cost recovery associated with the fees charged by the Air District. The project team evaluated the Air District's FYE 2017 Programs to assess their classification as "direct" or "indirect". In addition, they audited the time tracking data associated with each of the different fee schedules. The Study provided specific recommendations related to direct and indirect cost recovery for the Air District, as well as potential cost efficiencies. The Air District is currently working with Matrix to complete an update of the February 2018 cost recovery and containment study.

In July 2021, the Air District retained the services of the Matrix Consulting Group. The work was prompted by the Board to study the Air District's current indirect costs as well as fee-related cost recovery by fee schedule and continue to look at any cost containment practices. A key goal of this analysis was to determine methods to obtain 100% cost recovery associated with fee-based activities and schedules. The final report was presented to the Budget and Finance Committee on April 27, 2022. The proposed policy was developed using the 2022 Matrix study findings and comments from the Board meetings. On December 7, 2022, the Board of Directors adopted an amended Cost Recovery and Containment Policy (Consent Item 22) that provides the framework for the Air District to contain costs and to adjust fees in support of its regulatory programs. As provided in Appendix B, the policy has three (3) main elements: 1) Cost Containment, 2) Analysis of Cost Recovery and 3) Cost Recovery Goals. Part 3 provides the strategic framework for the Regulation 3 rule development process that is conducted in parallel with the next fiscal year annual budget.

The Air District has refined its cost recovery analysis of Fee Schedule V (Open Burning) to better define the cost recovery based on burn type. The analysis is provided in Appendix C. In the past, cost recovery for Schedule V was calculated on all costs and revenue related to Open Burning. The Air District's Open Burn Program is comprised of individual Operation Fees based on burn type. Schedule V includes five Open Burning Operation Fees for these burn types - Notifications, Marsh Management, Prescribed Burning, Filmmaking/Public Exhibition, and Stubble. Air District staff refined the cost recovery analysis to examine each individual fee in Schedule V to ensure the costs associated with one burn type would not impact fee payers of another burn type.

This 2024 Cost Recovery Report incorporated the accounting methodologies developed by KPMG in 1999, Stonefield Josephson, Inc. in 2005 and Matrix Consulting Group in 2011. The analysis included the latest cost and revenue data gathered for FYE 2023 (i.e., July 1, 2022 - June 30, 2023). The results will be used as a tool in the preparation of the budget

for FYE 2025, and for evaluating potential amendments to the Air District's Regulation 3: Fees.

Legal Authority

In the post-Prop 13 era, the State Legislature determined that the cost of programs to address air pollution should be borne by the individuals and businesses that cause air pollution through regulatory and service fees. The primary authority for recovering the cost of Air District programs and activities related to stationary sources is given in Section 42311 of the Health and Safety Code (HSC), under which the Air District is authorized to:

- Recover the costs of programs related to permitted stationary sources;
- Recover the costs of programs related to area-wide and indirect sources of emissions which are regulated, but for which permits are not issued;
- Recover the costs of certain hearing board proceedings; and
- Recover the costs related to programs that regulate toxic air contaminants.

The measure of the revenue that may be recovered through stationary source fees is the full cost of all activities related to these sources, including all direct Program costs and a commensurate share of indirect Program costs. Such fees are valid so long as they do not exceed the reasonable cost of the service or regulatory program for which the fee is charged, and are apportioned amongst fee payers such that the costs allocated to each fee-payer bears a fair or reasonable relationship to its burden on, and benefits from, the regulatory system.

Air districts have restrictions in terms of the rate at which permit fees may be increased. Under HSC Section 41512.7, existing fees for authority-to-construct permits or permits to operate cannot be increased by more than 15% in any calendar year.

Methodology

The methodology for determining regulatory program revenue and costs is summarized as follows:

Revenue

Revenue from Regulation 3 fees during FYE 2023 was assigned to the appropriate Permit Fee Schedules. This is a continued improvement over prior years' process.

Costs

Costs are expenditures that are characterized as being either direct or indirect. Direct costs can be identified specifically with a particular program activity. Direct costs include wages and benefits, operating expenses, and capital expenditures used in direct support of the particular activities of the Air District (e.g., permit-related activities, grant distribution, etc.).

Indirect costs are those necessary for the general operation of the Air District as a whole. Often referred to as "overhead", these costs include accounting, finance, human resources,

facility costs, information technology, executive management, etc. Indirect costs are allocated to other indirect Programs, using the reciprocal (double-step down) method, before being allocated to direct Programs.

Employee work time is tracked by the ¼ hour using both Program and Billing Code detail. This time-keeping system allows for the capture of all costs allocatable to a revenue source on a level-of-effort basis.

Employee work time is allocated to activities within Programs by billing codes (BC1-BC99), only two of which indicate general support. One of these two general support codes (BC8) is identified with permitting activities of a general nature, not specifically related to a particular Fee Schedule.

Operating and capital expenses are charged through the year to each Program, as incurred. In cost recovery, these expenses, through the Program's Billing Code profile, are allocated on a pro-rata basis to each Program's revenue-related activity. For example, employees working in grant Programs (i.e., Smoking Vehicle, Mobile Source Incentive Fund, etc.) use specific billing codes (i.e., BC3, BC17, etc.). All operating/capital expense charges in those grant Programs are allocated pro-rata to those grant activities. Employees working in permit-related Programs (i.e., Air Toxics, Compliance Assurance, Source Testing, etc.) also use specific permit-related billing codes (i.e., BC8, BC21, BC29, etc.) and all operating/capital expense charges incurred by those Programs are allocated pro-rata to those Program's activity profiles, as defined by the associated billing codes.

Direct costs for permit activities include personnel, operating and capital costs based on employee work time allocated to direct permit-related activities, and to general permit-related support and administrative activities (allocated to Fee Schedules on pro-rata basis). Indirect costs for permit activities include that portion of general support personnel, operating and capital costs allocated pro-rata to permit fee revenue-related program activities.

Results

Appendix A contains the following figures:

- Figure 1: Total Permit Fee Revenue, Costs and Gap for FYE 2023
- Figure 2: Fee Revenue and Program Costs by Fee Schedule, FYE 2023
- Figure 3: Fee Revenue and Program Costs by Fee Schedule, FYE 2022
- Figure 4: Fee Revenue and Program Costs by Fee Schedule, FYE 2021
- Figure 5: Fee Revenue and Program Costs by Fee Schedule, FYE 2021-2023, 3-Year Average

Discussion of Results

Figure 1 indicates that in FYE 2023 there continued to be a revenue shortfall, as the direct and indirect costs of regulatory programs exceeded fee revenue. The overall magnitude of the cost recovery gap was determined to be \$5.1million for FYE 2023. This cost recovery gap was filled by General Fund revenue received by the Air District from the counties.

Figure 2 shows that in FYE 2023 there were revenue shortfalls for most of the twenty-two fee schedules for which cost recovery can be analyzed. For FYE 2023, the Air District is recovering 92.32% of its fee-related activity costs. Collected revenue exceeds Program costs for nine (9) fee schedules:

- Schedule B (Combustion of Fuels),
- 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 G-5 (Miscellaneous Sources (e.g., refinery flares),
- Schedule L (Asbestos Operations),
- Schedule N (Toxic Inventory Fees),
- Schedule R (Equipment Registration Fees),
- Schedule T (Greenhouse Gas Fees).

Collected revenue was less than program costs for the following 13 fee schedules:

- Schedule A (Hearing Board),
- Schedule F (Miscellaneous Sources (e.g., storage silos, abrasive blasting)),
- Schedule G-1 (Miscellaneous Sources (e.g., glass manufacturing, soil remediation)),
- Schedule G-2 (Miscellaneous Sources (e.g., asphaltic concrete, furnaces)),
- Schedule G-3 (Miscellaneous Sources (e.g., metal melting, cracking units)),
- Schedule G-4 (Miscellaneous Sources (e.g., cement kilns, sulfur removal and coking units, acid manufacturing)),
- Schedule H (Semiconductor and Related Operations),
- Schedule I (Dry Cleaners),
- Schedule K (Solid Waste Disposal Sites),
- Schedule P (Major Facility Review Fees),
- Schedule S (Naturally Occurring Asbestos Operations),
- Schedule V (Open Burning), and
- Schedule W (Refinery Emissions Tracking).

Figure 5 shows that over a three-year period (FYE 2021 through FYE 2023) there were revenue shortfalls for most of the twenty-two fee schedules for which cost recovery can be analyzed. For this three-year period, the Air District is recovering approximately 87.35% of its fee-related activity costs. Collected revenue exceeds costs for six (6) fee schedules:

- Schedule C (Stationary Containers for the Storage of Organic Liquids),
- Schedule D (Gasoline Transfer at Gasoline Dispensing Facilities, Bulk Plants and Terminals),
- Schedule L (Asbestos Operations),
- Schedule N (Toxic Inventory Fees),
- Schedule R (Equipment Registration Fees), and
- Schedule T (Greenhouse Gas Fees).

Collected revenue was lower than costs for the following 16 fee schedules:

- Schedule A (Hearing Board),
- Schedule B (Combustion of Fuel),
- Schedule E (Solvent Evaporating Sources),

- Schedule F (Miscellaneous Sources (e.g., storage silos, abrasive blasting)),
- Schedule G-1 (Miscellaneous Sources (e.g., glass manufacturing, soil remediation)),
- Schedule G-2 (Miscellaneous Sources (e.g., asphaltic concrete, furnaces)),
- Schedule G-3 (Miscellaneous Sources (e.g., metal melting, cracking units)),
- Schedule G-4 (Miscellaneous Sources (e.g., cement kilns, sulfur removal and coking units, acid manufacturing)),
- Schedule G-5 (Miscellaneous Sources (e.g., refinery flares)),
- Schedule H (Semiconductor and Related Operations),
- Schedule I (Dry Cleaners),
- Schedule K (Solid Waste Disposal Sites),
- Schedule P (Major Facility Review, Title V),
- Schedule S (Naturally Occurring Asbestos Operations),
- Schedule V (Open Burning), and
- Schedule W (Refinery Emissions Tracking).

The Air District uses the three-year averages shown in Figure 5 in evaluating proposed amendments to Regulation 3, Fees at the fee schedule level because longer averaging periods are less sensitive to year-to-year variations in activity levels that occur due to economic or market variations and regulatory program changes affecting various source categories. Currently, there are no active facilities that are charged Schedule I fees. Unless this schedule is deleted, Schedule I will be maintained with CPI-W adjustments.

Conclusions

Air District staff has updated the analysis of cost recovery of its regulatory programs based on the methodology established by the accounting firms KPMG in 1999 and Stonefield Josephson, Inc. in 2005 and updated by Matrix Consulting Group in 2011 and in 2018. The analysis shows that fee revenue continues to fall short of recovering activity costs. For FYE 2021 to 2023, the Air District is recovering approximately 87% of its fee-related activity costs, while cost recovery of individual fee schedules continue to lag. The overall magnitude of this cost recovery gap was determined to be approximately \$5.1 million.

To reduce or stabilize expenditures, the Air District has implemented various types of cost containment strategies, including maintaining unfilled positions when feasible and reducing service and supply budgets. In October 2023, all permit activity was transitioned to the Production System. Although all the tools are not fully developed, this allows staff to focus improvements on one system and eliminates the maintenance of the legacy systems. The new platform provides the opportunity for improved tracking, online resources and the reduction of paper processes. In addition, addressing the recommendations from the management audit is currently underway including analyzing the Air District's programs and the use of staff resources for its programs. To reduce the cost recovery gap, further fee increases will need to be evaluated in accordance with the Cost Recovery and Containment Policy adopted by the Board of Directors.

Appendix A: Figures

Figure 1: Total Permit Fee Revenue, Costs and Gap for FYE 2023

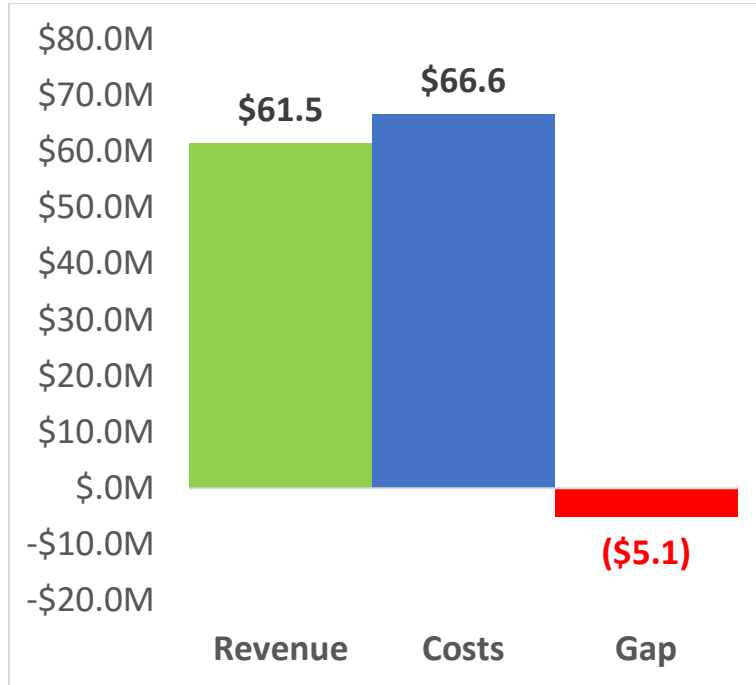


Figure 2: Fee Revenue and Program Costs by Fee Schedule, FYE 2023

Fee Schedule	Direct Cost	Indirect Cost	Total Cost	Reg 3-327.1										Surplus/ Deficit	Cost Recovery %	
				Application Revenue	Renewal Revenue	Schedule M	Reg 3-312 Bubble	Renewal Processing	Reg 3-327.2 - AB617 Fee	Reg 3-327.3 - CTR Fee	Reg 3-OBC Fees	Reg 3-311 - Banking	Total Revenue			
FS_A-Hearing Board	58,245	48,153	106,398	-	88,189	-	-	-	-	-	-	-	-	88,189	(18,209)	82.89%
FS_B-Combustion of Fuel	7,954,468	4,409,588	12,364,056	2,903,864	7,070,984	615,363	122,668	698,822	353,125	487,497	661,906	11,267	12,925,497	561,441	104.54%	
FS_C-Storage Organic Liquid	764,222	425,762	1,189,984	349,633	2,124,033	128,393	151,932	39,443	160,237	130,059	299,914	-	3,383,644	2,193,660	284.34%	
FS_D	4,785,954	2,694,779	7,480,734	415,044	6,428,000	51,139	78,624	266,717	67,968	313,028	300,658	-	7,921,179	440,445	105.89%	
FS_E-Solvent Evaporation	3,103,319	1,758,401	4,861,721	1,495,704	2,809,262	123,696	56,643	203,905	52,152	132,762	176,044	-	5,050,168	188,448	103.88%	
FS_F-Misc.	3,920,128	2,110,340	6,030,468	699,619	1,890,494	158,404	97,420	161,769	199,321	254,147	353,377	-	3,814,551	(2,215,917)	63.25%	
FS_G1-Misc.	3,983,160	2,226,979	6,210,140	776,367	3,065,797	172,890	101,175	48,222	96,698	120,650	188,124	-	4,569,924	(1,640,216)	73.59%	
FS_G2-Misc.	1,775,063	962,494	2,737,557	115,038	907,926	63,714	85,142	9,251	57,522	45,256	114,314	-	1,398,162	(1,339,395)	51.07%	
FS_G3-Misc.	1,063,595	610,555	1,674,150	-	830,413	47,707	81,729	804	53,440	27,765	97,962	-	1,139,819	(534,331)	68.08%	
FS_G4-Misc.	1,957,649	1,113,819	3,071,468	351,103	1,592,061	343,956	73,910	698	48,096	25,412	68,944	-	2,504,180	(567,288)	81.53%	
FS_G5-Misc.	723,907	427,423	1,151,330	313,351	637,189	59,080	80,949	507	51,002	25,442	87,974	-	1,255,494	104,164	109.05%	
FS_H-Semiconductor	264,775	146,182	410,957	7,016	711	-	-	116	-	39	-	-	7,881	(403,076)	1.92%	
FS_I-Drycleaners	1,001	571	1,573	-	-	-	-	-	-	-	-	-	-	(1,573)	0.00%	
FS_K-Waste Disposal	1,630,604	938,167	2,568,771	23,949	187,804	151,439	-	3,914	14,874	15,440	10,004	-	407,425	(2,161,346)	15.86%	
FS_L-Asbestos	1,469,148	902,938	2,372,086	-	3,632,384	-	-	-	-	-	-	-	3,632,384	1,260,298	153.13%	
FS_N-AB 2588	674,420	343,061	1,017,481	-	1,512,315	-	-	-	-	-	-	-	1,512,315	494,834	148.63%	
FS_P-Title V	5,738,170	3,338,274	9,076,444	708,673	6,752,033	-	-	-	-	-	-	-	7,460,706	(1,615,738)	82.20%	
FS_R-Registration	99,852	62,962	162,814	4,615	281,945	590	-	31,725	20,079	33,231	65,728	-	437,913	275,099	268.96%	
FS_S-NatOccAsbBillable	644,183	377,204	1,021,387	-	120,681	-	-	-	-	-	-	-	120,681	(900,707)	11.82%	
FS_T-GHG	1,181,743	577,271	1,759,014	-	3,339,911	-	-	-	-	-	-	-	3,339,911	1,580,897	189.87%	
FS_V-Open Burning	268,801	180,486	449,287	-	299,792	-	-	-	-	-	-	-	299,792	(149,495)	66.73%	
FS_W-PetroleumRefiningEmissionsReport	550,033	318,109	868,141	-	201,747	-	-	-	-	-	-	-	201,747	(666,394)	23.24%	
2023 SUM	\$42,612,440	\$23,973,520	\$66,585,961	\$8,163,976	\$43,773,670	\$1,916,372	\$930,193	\$1,465,893	\$1,174,512	\$1,610,728	\$2,424,949	\$11,267	\$61,471,561	(\$5,114,399)	92.32%	

Figure 3: Fee Revenue and Program Costs by Fee Schedule, FYE 2022

Fee Schedule	Direct Cost	Indirect Cost	Total Cost	Application Revenue	Renewal Revenue	Schedule M	Reg 3-327.1						Surplus/Deficit	Cost Recovery %		
							Reg 3-312 Bubble	Renewal Processing	Reg 3-327.2- AB617 Fee	Reg 3-327.3- CTR Fee	Reg 3-08C Fees	Reg 3-311 - Banking			Total Revenue	
FS_A-Hearing Board	33,970	41,433	75,403	-	353	-	-	-	-	-	-	-	-	353	(75,050)	0.47%
FS_B-Combustion of Fuel	7,893,556	4,068,298	11,961,854	1,952,715	6,840,470	582,023	236,655	776,362	326,505	400,120	2,018	5,676	11,122,543	(839,312)	92.98%	
FS_C-Storage Organic Liquid	1,106,057	551,981	1,658,038	341,256	2,100,841	126,595	201,110	33,663	155,117	119,216	-	-	3,077,798	1,419,760	185.63%	
FS_D	4,632,049	2,399,869	7,031,918	357,464	6,505,991	33,749	47,173	245,143	40,327	257,453	-	-	7,487,300	455,382	106.48%	
FS_E-Solvent Evaporation	2,470,406	1,332,906	3,803,313	505,868	2,534,082	83,894	32,040	190,403	46,102	108,305	135	-	3,500,829	(302,484)	92.05%	
FS_F-Misc.	3,257,741	1,669,041	4,926,782	439,434	1,745,097	128,754	91,897	138,706	156,310	193,640	-	-	2,893,837	(2,032,945)	58.74%	
FS_G1-Misc.	4,040,279	2,153,764	6,194,042	774,120	2,801,883	147,327	92,921	44,144	76,549	95,376	-	-	4,032,320	(2,161,722)	65.10%	
FS_G2-Misc.	1,861,747	943,739	2,805,486	285,965	822,711	69,951	60,033	8,263	34,191	30,545	-	-	1,311,659	(1,493,827)	46.75%	
FS_G3-Misc.	1,173,780	651,586	1,825,366	185,273	783,710	21,655	54,545	514	31,778	16,693	-	-	1,094,168	(731,198)	59.94%	
FS_G4-Misc.	2,268,311	1,210,110	3,478,421	39,841	1,558,636	386,459	52,369	480	34,148	17,736	-	-	2,089,669	(1,388,752)	60.08%	
FS_G5-Misc.	716,979	407,625	1,124,604	14,922	666,736	31,708	52,475	274	28,359	13,945	-	-	808,418	(316,186)	71.88%	
FS_H-Semiconductor	432,852	224,335	657,186	127,511	114,277	-	-	19,691	-	9,777	-	-	271,256	(385,930)	41.28%	
FS_I-Drycleaners	6,754	3,661	10,416	-	562	-	-	102	-	39	-	-	703	(9,713)	6.75%	
FS_K-Waste Disposal	1,863,862	1,028,934	2,892,796	18,053	171,133	120,267	-	3,593	10,310	11,070	-	-	334,426	(2,558,370)	11.56%	
FS_L-Asbestos	1,470,586	870,737	2,341,323	-	4,179,151	-	-	-	-	-	-	-	4,179,151	1,837,828	178.50%	
FS_N-AB 2588	428,326	213,177	641,503	-	1,604,232	-	-	-	-	-	-	-	1,604,232	962,729	250.07%	
FS_P-Title V	4,383,740	2,444,817	6,828,557	613,524	6,050,636	-	-	-	-	-	-	-	6,664,160	(164,397)	97.59%	
FS_R-Registration	159,439	98,222	257,661	5,780	325,587	521	-	27,965	14,441	23,529	-	-	397,823	140,163	154.40%	
FS_S-NatOccAsbBillable	432,514	244,994	677,508	-	139,486	-	-	-	-	-	-	-	139,486	(538,023)	20.59%	
FS_T-GHG	1,786,972	815,414	2,602,387	-	2,966,045	-	-	-	-	-	-	-	2,966,045	363,658	113.97%	
FS_V-Open Burning	486,632	311,070	797,702	-	248,007	-	-	-	-	-	-	-	248,007	(549,695)	31.09%	
FS_W-PetroleumRefiningEmissionsReport	452,923	264,366	717,289	-	175,432	-	-	-	-	-	-	-	175,432	(541,857)	24.46%	
2022 SUM	\$41,359,475	\$21,950,080	\$63,309,555	\$5,661,726	\$42,335,059	\$1,732,903	\$921,216	\$1,489,302	\$954,137	\$1,297,444	\$2,153	\$5,676	\$54,399,616	(\$8,909,938)	85.93%	

Figure 4: Fee Revenue and Program Costs by Fee Schedule, FYE 2021

Fee Schedule	Direct Cost	Indirect Cost	Total Cost	Application Revenue	Renewal Revenue	Schedule M	Reg 3-327.1					Reg 3-311 - Banking	Total Revenue	Surplus/Deficit	Cost Recovery %
							Reg 3-312 Bubble	Renewal Processing	Reg 3-327.2- AB617 Fee	Reg 3-327.3- CTR Fee	Reg 3-08C Fees				
FS_A-Hearing Board	56,402	26,852	83,254	-	14,318	-	-	-	-	-	-	-	14,318	(68,936)	17.20%
FS_B-Combustion of Fuel	7,726,960	3,916,462	11,643,422	2,413,951	6,231,693	675,657	185,643	478,794	258,497	-	-	7,620	10,251,855	(1,391,567)	88.05%
FS_C-Storage Organic Liquid	1,068,686	517,654	1,586,341	266,955	2,158,839	141,097	164,370	33,347	117,138	-	-	-	2,881,746	1,295,405	181.66%
FS_D	4,245,809	2,261,320	6,507,130	437,768	6,450,788	47,035	59,251	240,285	47,495	-	-	-	7,282,623	775,493	111.92%
FS_E-Solvent Evaporation	2,163,333	1,149,365	3,312,699	389,358	2,421,367	68,961	38,453	194,272	29,561	-	-	-	3,141,973	(170,726)	94.85%
FS_F-Misc.	3,374,077	1,669,249	5,043,326	517,048	1,681,546	151,028	87,616	139,464	160,529	-	-	-	2,737,231	(2,306,094)	54.27%
FS_G1-Misc.	3,944,152	2,069,514	6,013,666	726,271	2,443,232	148,630	91,132	42,963	79,901	-	-	-	3,532,130	(2,481,536)	58.74%
FS_G2-Misc.	1,482,840	796,078	2,278,917	317,512	710,793	35,490	67,996	7,754	39,801	-	-	-	1,179,345	(1,099,572)	51.75%
FS_G3-Misc.	985,122	564,659	1,549,781	22,383	709,443	24,454	63,793	596	37,938	-	-	-	858,606	(691,175)	55.40%
FS_G4-Misc.	2,097,031	1,072,688	3,169,719	192,645	1,353,758	617,392	62,646	558	41,136	-	-	-	2,268,137	(901,583)	71.56%
FS_G5-Misc.	545,053	300,611	845,664	74,087	674,547	34,567	62,482	349	35,734	-	-	-	881,766	36,102	104.27%
FS_H-Semiconductor	221,204	114,783	335,987	53,182	138,344	-	-	4,738	-	-	-	-	196,264	(139,723)	58.41%
FS_I-Drycleaners	11,530	6,832	18,362	-	2,146	-	-	200	-	-	-	-	2,346	(16,016)	12.78%
FS_K-Waste Disposal	1,983,563	1,112,198	3,095,762	41,550	165,811	107,226	-	3,896	10,547	-	-	-	329,030	(2,766,732)	10.63%
FS_L-Asbestos	1,546,351	984,848	2,531,200	-	3,989,403	-	-	-	-	-	-	-	3,989,403	1,458,203	157.61%
FS_N-AB 2588	1,194,223	566,983	1,761,206	-	1,972,317	-	-	-	-	-	-	-	1,972,317	211,111	111.99%
FS_P-Title V	3,631,018	2,024,791	5,655,809	372,216	5,815,966	-	-	-	-	-	-	-	6,188,182	532,374	109.41%
FS_R-Registration	79,494	45,021	124,515	5,418	280,300	2,136	-	20,203	8,464	-	-	-	316,521	192,006	254.20%
FS_S-NatOccAsbBillable	387,951	212,513	600,464	-	105,251	-	-	-	-	-	-	-	105,251	(495,213)	17.53%
FS_T-GHG	2,077,606	940,313	3,017,920	-	2,890,490	-	-	-	-	-	-	-	2,890,490	(127,430)	95.78%
FS_V-Open Burning	435,117	249,263	684,380	-	212,252	-	-	-	-	-	-	-	212,252	(472,128)	31.01%
FS_W-PetroleumRefiningEmissionsReport	1,149,167	569,104	1,718,271	-	152,547	-	-	-	-	-	-	-	152,547	(1,565,724)	8.88%
2021 SUM	\$40,406,691	\$21,171,102	\$61,577,793	\$5,830,345	\$40,575,152	\$2,053,673	\$883,383	\$1,167,419	\$866,741			\$7,620	\$51,384,333	(\$10,193,460)	83.45%

Figure 5: Fee Revenue and Program Costs by Fee Schedule, FYE 2021-2023, 3-Year Average

Fee Schedule	Direct Cost	Indirect Cost	Total Cost	Application Revenue	Renewal Revenue	Schedule M	Reg 3-327.1							Surplus/Deficit	Cost Recovery %	
							Reg 3-312 Bubble	Renewal Processing	Reg 3-327.2- AB617 Fee	Reg 3-327.3- CTR Fee	Reg 3-0BC Fees	Reg 3-311 - Banking	Total Revenue			
FS_A-Hearing Board	49,539	38,813	88,352	-	34,287	-	-	-	-	-	-	-	-	34,287	(54,065)	38.81%
FS_B-Combustion of Fuel	7,858,328	4,131,450	11,989,777	2,423,510	6,714,382	624,348	181,656	651,326	312,709	443,808	331,962	8,188	11,433,298	(556,479)	95.36%	
FS_C-Storage Organic Liquid	979,655	498,466	1,478,121	319,281	2,127,904	132,028	172,470	36,485	144,164	124,637	149,957	-	3,114,396	1,636,275	210.70%	
FS_D	4,554,604	2,451,990	7,006,594	403,426	6,461,593	43,974	61,683	250,715	51,930	285,240	150,329	-	7,563,700	557,107	107.95%	
FS_E-Solvent Evaporation	2,579,020	1,413,558	3,992,577	796,977	2,588,237	92,184	42,379	196,193	42,605	120,534	88,090	-	3,897,657	(94,921)	97.62%	
FS_F-Misc.	3,517,315	1,816,210	5,333,525	552,034	1,772,379	146,062	92,311	146,646	172,053	223,894	176,689	-	3,148,540	(2,184,985)	59.03%	
FS_G1-Misc.	3,989,197	2,150,086	6,139,283	758,919	2,770,304	156,282	95,076	45,110	84,383	108,013	94,062	-	4,044,791	(2,094,491)	65.88%	
FS_G2-Misc.	1,706,550	900,770	2,607,320	239,505	813,810	56,385	71,057	8,422	43,838	37,900	57,157	-	1,296,389	(1,310,931)	49.72%	
FS_G3-Misc.	1,074,166	608,934	1,683,099	69,219	774,522	31,272	66,689	638	41,052	22,229	48,981	-	1,030,865	(652,234)	61.25%	
FS_G4-Misc.	2,107,664	1,132,206	3,239,869	194,530	1,501,485	449,269	62,975	578	41,127	21,574	34,472	-	2,287,328	(952,541)	70.60%	
FS_G5-Misc.	661,979	378,553	1,040,532	134,120	659,491	41,785	65,302	377	38,365	19,693	43,987	-	981,893	(58,640)	94.36%	
FS_H-Semiconductor	306,277	161,767	468,043	62,570	84,444	-	-	8,182	-	4,908	-	-	158,467	(309,576)	33.86%	
FS_I-Drycleaners	6,428	3,688	10,117	-	903	-	-	101	-	20	-	-	1,016	(9,100)	10.05%	
FS_K-Waste Disposal	1,826,010	1,026,433	2,852,443	27,851	174,916	126,311	-	3,801	11,910	13,255	5,002	-	36,960	(2,495,483)	12.51%	
FS_L-Asbestos	1,435,362	919,508	2,414,869	-	3,933,646	-	-	-	-	-	-	-	3,933,646	1,518,777	162.89%	
FS_N-AB 2588	765,656	374,407	1,140,063	-	1,696,288	-	-	-	-	-	-	-	1,696,288	556,225	148.79%	
FS_P-Title V	4,584,309	2,602,627	7,186,936	564,804	6,206,212	-	-	-	-	-	-	-	6,771,016	(415,920)	94.21%	
FS_R-Registration	112,928	68,735	181,663	5,271	295,944	1,082	-	26,631	14,328	28,380	32,864	-	384,086	202,422	211.43%	
FS_S-NatOccAsbBillable	488,216	278,237	766,453	-	121,806	-	-	-	-	-	-	-	121,806	(644,648)	15.89%	
FS_T-GHG	1,682,107	777,666	2,459,773	-	3,065,482	-	-	-	-	-	-	-	3,065,482	605,709	124.62%	
FS_V-Open Burning	396,850	246,940	643,790	-	253,350	-	-	-	-	-	-	-	253,350	(390,439)	39.35%	
FS_W-PetroleumRefiningEmissionsReport	717,374	383,859	1,101,234	-	176,575	-	-	-	-	-	-	-	176,575	(924,658)	16.03%	
SUM	\$41,459,535	\$22,364,901	\$63,824,436	\$6,552,016	\$42,227,960	\$1,900,983	\$911,597	\$1,374,205	\$998,463	\$1,454,086	\$1,213,551	\$8,188	\$55,751,837	(\$8,072,599)	87.35%	

Appendix B: 2022 Cost Recovery and Containment Policy

Adopted December 7, 2022

COST RECOVERY AND CONTAINMENT POLICY FOR BAY AREA AIR QUALITY MANAGEMENT DISTRICT REGULATORY PROGRAMS

PURPOSE

WHEREAS, the Air District has the primary authority for the control of air pollution from all sources of air emissions located in the San Francisco Bay Area, other than emissions from motor vehicles, in accordance with the provisions of Health & Safety Code sections 39002 and 40000.

WHEREAS, the Air District is responsible for implementing and enforcing various Air District, State, and federal air quality regulatory requirements that apply to non-vehicular sources.

WHEREAS, the Air District's regulatory programs include but are not limited to permitting and notification programs, compliance and enforcement of permitted and registered facilities, compliance assistance at permitted and registered facilities, source testing and monitoring at permitted facilities, rule development for regulated industries, the development of the emissions inventory for permitted and registered facilities and other permit work at permitted facilities.

WHEREAS, the Air District is authorized to assess fees to regulated entities for the purpose of recovering the reasonable costs of regulatory program activities, and these authorities include those provided for in California Health and Safety Code sections 42311, 42364, and 44380.

WHEREAS, the Air District's fees fall within the categories provided in Section 1(e) of Article XIII C of the California Constitution, which indicates that charges assessed to regulated entities to recover regulatory program activity costs, and charges assessed to cover the cost of conferring a privilege or providing a service, are not taxes.

WHEREAS, the Air District has adopted, and periodically amends, a fee regulation for the purpose of recovering regulatory program activity costs, and this regulation with its various fee schedules, is used to allocate 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.

WHEREAS, the Air District analyzes whether assessed fees result in the collection of sufficient revenue to recover the costs of related program activities; and Air District staff conduct these analyses on an annual basis, with an independent contractor review of these analyses and methodologies -conducted approximately every five years, with the most recent independent study conducted in 2022. Each fee study and cost recovery update completed revealed that District fee revenue falls short of recovering the costs of related program activities.

WHEREAS, the Air District's most recent independent fee report (2022 Cost Recovery Report, Bay Area Air Quality Management District, May 2022) concluded that in Fiscal Year Ending (FYE) 2021, the Air District recovered approximately 83.7 percent of its fee-related activity costs (up from 65 percent in FYE 2011), resulting in an under-recovery of costs (i.e., a cost recovery gap), and a subsidy to fee payers, of approximately \$10.2 million, and that this cost recovery gap resulted despite the implementation of a number of strategies to contain costs.

WHEREAS, the Air District's Board of Directors has recognized since 1999 that the Air District's cost recovery gap has been an issue that needs to be addressed, and since that time has adopted annual fee amendments in order to increase fee revenue.

WHEREAS, the Air District's Board of Directors adopted a policy in 2012 with a goal to increase overall recovery of regulatory program activity costs to 85 percent.

WHEREAS, in addition to fee revenue, the Air District receives revenue from Bay Area counties that is derived from property taxes, and a large portion of this tax revenue has historically been used on an annual basis to fill the cost recovery gap.

WHEREAS, the tax revenue that the Air District receives varies on a year-to-year basis, and cannot necessarily be relied on to fill the cost recovery gap and also cover other Air District operational costs necessitating, in certain years, the use of reserve funds. WHEREAS, tax revenue that the Air District receives, to the extent that it is not needed to fill the cost recovery gap, can be used to fund initiatives or programs that may further the Air District's mission but that lack a dedicated funding source.

WHEREAS, it may be appropriate as a matter of policy to establish specific fee discounts for small businesses, green businesses, or other regulated entities or members of the public, where tax revenue is used to cover a portion of regulatory program activity costs, and the Air District's existing fee regulation contains several fee discounts of this type.

POLICY

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Bay Area Air Quality Management District that:

(1) Cost Containment – In order to ensure that the costs of its regulatory programs remain reasonable, the Air District should continue to implement feasible cost containment measures, including the use of appropriate best management practices, without compromising the Air District's effective implementation and enforcement of applicable regulatory requirements. The Air District's annual budget documents should include a summary of cost containment measures that are being implemented.

(2) Analysis of Cost Recovery – The Air District should continue to analyze the extent to which fees recover regulatory program activity costs, both on an overall basis, and at the level of individual fee schedules. An independent review of the Air District cost recovery analyses should be periodically completed by a qualified Air District contractor and should be updated on an annual basis by Air District staff using a consistent methodology.

(3) Cost Recovery Goals – It is the general policy of the Air District, except as otherwise noted below, that the costs of regulatory program activities be fully recovered by assessing fees to regulated entities. To move towards this goal, the Air District should amend its fee regulation over the next several years, in conjunction with the adoption of the Air District budget, in a manner sufficient to increase overall recovery of regulatory program activity costs to 100 percent. Proposed amendments to specific fee schedules should also 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. Proposed fee amendments should include fee-recoverable work that is currently not being charged a fee. As allowed by law, any proposed regulatory measures should also propose new fees or fee amendments that are designed to recover increased regulatory program implementation costs concurrent with rule adoption, unless the Board of Directors determines that a portion of those costs should be covered by tax revenue. Tax revenue should also continue to be used to cover existing fee discounts that the Air District provides (e.g., for small businesses, green businesses, and third-party permit appeals).

BE IT FURTHER RESOLVED that this resolution is non-binding in the case of unforeseen financial circumstances, and may also be reconsidered or updated by the Air District's Board of Directors.

Appendix C: Fee Schedule V Cost Recovery Analysis

Schedule V (Open Burning) Analysis

In the past, cost recovery for Schedule V was calculated on all costs and revenue related to Open Burning. The Air District’s Open Burn Program is comprised of individual Operation Fees based on burn type. Schedule V includes five Open Burning Operation Fees for these burn types - Notifications, Marsh Management, Prescribed Burning, Filmmaking/Public Exhibition, and Stubble. Air District staff refined the cost recovery analysis to examine each individual fee in Schedule V to ensure the costs associated with one burn type would not impact fee payers of another burn type.

FIGURE 1 – Fee Revenue and Program Costs for Individual Open Burn Types, FYE 2023

Burn Type	Salary	Benefits @ 61.4%	Indirect @ 64%	Total Expense	Revenue	Cost Recovery %
Notification	\$92,446	\$66,356	\$94,674	\$253,476	(\$288,496)	114%
Marsh	\$18,384	\$11,288	\$18,990	\$48,662	(\$3,771)	8%
Prescribed	\$179,006	\$109,910	\$184,906	\$473,821	(\$7,525)	2%
Total	\$289,836	\$187,553	\$298,570	\$775,959	(\$299,792)	39%

Figure 1 shows that collected revenue exceeds costs for Notifications, and there were revenue shortfalls for Marsh Burns and Prescribed Burning.

Prescribed Burning

In November 2019, the Air District Board of Directors adopted a Limited Fee Exemption for Public Agencies that waived the Operation Fee for public agencies conducting prescribed burns. In 2023, approximately 90% of prescribed burn projects were conducted by public agencies. Given the Limited Fee Exemption, the Prescribed Burning Program cannot be fully funded through its Operation Fee. Prescribed Burning will be changed to “No Revenue Source” in the Cost Recovery process.

Filmmaking/Public Exhibition and Stubble fires

In FYE 2023, there were no costs or revenue associated with these two Operation Fees.

**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
- 3-321 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 PM₁₀
- 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 XXXXXs
- 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 XXXXX
- 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 XXXX
- 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 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)

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 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)

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 District.

(Amended 6/4/86, 6/7/23)

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 \$750,000 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)
- 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 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 PM₁₀ 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)
- 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 District costs of implementing the program.
(Adopted 10/21/92; Amended 6/15/05)
- 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 **PM₁₀**: 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 District's response to an incident. The 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)*
- 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 \$651, the initial fee, the risk assessment fee, the permit to operate fee, and toxic surcharge (given in Schedules B, C, D, E, XXXXX, 2024

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 \$651, 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 \$651 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 \$13,572. 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, TBD)

3-303 Back Fees: An applicant required to obtain a permit to operate existing equipment in accordance with 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 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)

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. For gasoline dispensing facilities subject to Schedule D, an applicant for an alteration shall pay a fee of 1.75 times the filing fee.

- 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, 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, TBD)

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 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, SO₂, or PM₁₀ 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)

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 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)

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 \$651 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 \$651 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 \$651.
- 311.4 Evaluation of Existing ERCs for PM_{2.5}: An applicant to evaluate an existing PM₁₀ ERC shall pay a filing fee of \$651 per source and an evaluation fee equivalent to the total actual and reasonable time incurred by District staff at the hourly rate of \$199 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 \$651 and an evaluation fee equivalent to the total actual and reasonable time incurred by District staff at the hourly rate of \$199 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.

(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, TBD)

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 a 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 \$1,649 for each source included in the alternative compliance plan, not to exceed \$16,484.

(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, TBD)

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 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 District may employ in connection with the preparation of any such evaluation or documentation, as well as the 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)

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 District's cost exceeding \$2,272 of preparing and distributing the public notice.
- 318.3 The District shall refund to the applicant the portion of any fee paid under this Section that exceeds the 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)

3-319 Major Stationary Source Fees: Any major stationary source emitting 50 tons per year of organic compounds, sulfur oxides, nitrogen oxides, or PM₁₀ 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 in quantities above a minimum threshold level 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, TBD)

3-321 Deleted December 2, 1998

3-322 Deleted XXXXXX

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 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 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 \$128 for facilities with one permitted source, including gasoline dispensing facilities,
- 1.2 \$254 for facilities with 2 to 5 permitted sources,
- 1.3 \$506 for facilities with 6 to 10 permitted sources,
- 1.4 \$760 for facilities with 11 to 15 permitted sources,
- 1.5 \$1,009 for facilities with 16 to 20 permitted sources,

- 1.6 \$1,261 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 \$126,279 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 \$63,140 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 \$274,520 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, TBD)
- 3-328 Fee for OEHHA Risk Assessment Reviews:** Any facility that submits a health risk assessment to the 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)
- 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 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)
- 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 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 District with their intent to renew the Authority to Construct prior to its expiration, the applicant shall pay \$103 per application in addition to any other fees under this section if eligible to renew.
(Adopted 6/15/05; Amended 6/7/23, TBD)
- 3-331 Registration Fees:** Any person who is required to register equipment under 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, TBD)
- 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 XXX

3-336 Open Burning Operation Fees: Effective July 1, 2013, any person required to provide notification to the 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)

3-337 Exemption Fee: An applicant who wishes to receive a certificate of exemption shall pay a filing fee of \$651 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)

3-338 Incident Response Fee: Any facility required to obtain a District permit, and any District-regulated area-wide or indirect source, that is the site where an incident occurs to which the District responds, shall pay a fee equal to the 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 District staff involved in conducting the incident response and the cost of any materials.

(Adopted 6/19/13)

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 PM₁₀ 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 \$1,998 for facilities with one source subject to risk reduction pursuant to Regulation 11, Rule 18, including gasoline dispensing facilities;

341.2 \$3,996 for facilities with 2 to 5 sources subject to risk reduction pursuant to Regulation 11, Rule 18;

341.3 \$7,990 for facilities with 6 to 10 sources subject to risk reduction pursuant to Regulation 11, Rule 18;

341.4 \$15,981 for facilities with 11 to 15 sources subject to risk reduction pursuant to Regulation 11, Rule 18;

341.5 \$31,962 for facilities with 16 to 20 sources subject to risk reduction pursuant to Regulation 11, Rule 18;

341.6 \$42,615 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, TBD)

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 \$199,758.

If a facility retains a District-approved consultant to complete the required facility-wide HRA, the facility shall pay a fee to cover the District's costs of performing the review of the facility-wide HRA, including the costs of any outside consulting assistance which the District may

employ in connection with any such review, as well as the 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 District's actual review time in hours multiplied by an hourly charge of \$273 per hour. Facilities shall pay an HRA review fee as indicated below and the District's cost exceeding the applicable HRA review fees indicated below for performing the review of the facility-wide HRA:

342.1 \$3,278 for facilities with one to 10 sources subject to risk reduction pursuant to Regulation 11, Rule 18, including gasoline dispensing facilities;

342.2 \$8,789 for facilities with 11 to 50 sources subject to risk reduction pursuant to Regulation 11, Rule 18;

342.3 \$18,645 for facilities with more than 50 sources subject to risk reduction pursuant to Regulation 11, Rule 18.

The District shall refund to the applicant the portion of any fee paid under this Section that exceeds the 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, TBD)

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 District's costs of performing any air dispersion modeling needed to determine compliance with any District regulatory requirement. The total air dispersion modeling fee cost shall be determined based on the District's actual review time in hours multiplied by an hourly charge of \$273 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 District may employ in connection with the preparation of any such evaluation or documentation, as well as the 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)

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 \$651; and

345.2 An initial fee equivalent to the total actual and reasonable time incurred by District staff at the hourly rate or prorated of \$199 per hour not to exceed the minimum initial fee(s) in the schedule for the applicable source(s).

(Adopted 6/7/23, TBD)

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 \$651; and

346.2 An initial fee equivalent to the total actual and reasonable time incurred by District staff at the hourly rate or prorated of \$199 per hour not to exceed the minimum initial fee in Schedule E.

(Adopted 6/7/23, TBD)

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 \$651; and

347.2 An initial fee equivalent to the total actual and reasonable time incurred by District staff at the hourly rate or prorated of \$199 per hour.

(Adopted 6/7/23, TBD)

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
3-404
3-405

Change in Operating Parameters: See Section 2-1-404 of Regulation 2, Rule 1.
Deleted June 7, 2000

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 Authority to Construct: The application will be cancelled but can be reactivated upon payment of fees.
- 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.
 - 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.
- 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 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 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.
 - 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 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.

(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)

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 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 District estimates to incur in connection with the 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 District in connection with the District's performance of its environmental evaluation and the preparation of any required environmental documentation.
(Adopted 12/18/85; Amended 8/2/95)
- 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 District's share of statewide Air Toxics "Hot Spot" Information and Assessment Act expenses.
(Adopted 10/21/92; Amended 6/7/23)
- 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 District services as deemed appropriate until payment in full is made.
(Adopted 8/2/95; Amended 12/2/98, 6/15/05)
- 3-416 Adjustment of Fees:** The APCO or designees may, upon finding administrative error by 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)
- 3-417 Temporary Amnesty for Unpermitted and Unregistered Sources:** The APCO has the authority to declare an amnesty period, during which the 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)
- 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 District may waive all or any part of the fees for these transactions.
(Adopted 6/6/18; Amended 6/7/23)
- 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 District.
(Adopted 6/7/23)

**SCHEDULE A
HEARING BOARD FEES¹**

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 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	\$10,644 \$5,330	\$1,593 \$537	
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 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	\$6,391 \$3,191	\$1,593 \$537	
3.	For each application to modify a variance in accordance with §42356 ... 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	\$4,240 \$3,191	\$537 \$537	
4.	For each application to extend a variance, in accordance with §42357 .. 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	\$4,240 \$3,191	\$537 \$537	
5.	For each application to revoke a variance	\$6,391	\$537	
6.	For each application for approval of a Schedule of Increments of Progress in accordance with §41703	\$4,240	\$537	
7.	For each application for variance in accordance with §41703, which exceeds 90 days Plus, for each hearing in addition to the first hearing on said application for variance in accordance with §41703, the additional sum of	\$10,644 \$5,330	\$1,593 \$537	
8.	For each application for variance in accordance with §41703, not to exceed 90 days Plus, for each hearing in addition to the hearing on said application for a variance in accordance with §41703, the additional sum of	\$6,391 \$3,191	\$1,593 \$537	
9.	For each Appeal (Permit, Banking, Title V).....	\$10,644 per hearing day	\$5,330 per hearing day	\$5,330 for entire appeal period
10.	For each application for intervention in accordance with Hearing Board Rules §§2.3, 3.6 & 4.6.....	\$5,330	\$1,072	
11.	For each application to Modify or Terminate an abatement order	\$10,644 per hearing day	\$5,330 per hearing day	
12.	For each application for an interim variance in accordance with §42351	\$5,330	\$1,072	
13.	For each application for an emergency variance in accordance with §42359.5.....	\$2,657	\$537	

		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	\$5,330	\$1,593	\$1,593
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, TBD)

**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 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 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 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 \$8.86 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 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	All at \$44.11 per pound

**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:

$$\text{Fee} = (\text{Opacity}^* \text{ equivalent} - 20) \times \text{number of days allowed in variance} \times \$7.88$$

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:

$$\text{Fee} = (\text{Opacity}^* \text{ equivalent} - 40) \times \text{number of days allowed by variance} \times \$7.88$$

- * 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, TBD)

**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: \$104.36 per MM BTU/HOUR
 - a. The minimum fee per source is: \$557
 - b. The maximum fee per source is: \$194,686

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: \$651 plus \$104.36 per MM BTU/hr
 - b. Minimum RAF for first TAC source: \$1,341
 - c. RAF for each additional TAC source: \$104.36 per MM BTU/hr*
 - d. Minimum RAF per additional TAC source: \$557*
 - e. Maximum RAF per source is: \$194,686

* 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: \$52.18 per MM BTU/HOUR
 - a. The minimum fee per source is: \$396
 - b. The maximum fee per source is: \$97,343

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 the State Department of Health Services, and/or a qualified contractor designated by the State Department of Health Services, in reviewing a risk assessment as required under H&S Code Section 42315. The fee shall be transmitted by the District to the Department of Health Services and/or the qualified contractor upon completion of the review and submission of comments in writing to the 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, TBD)

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: \$651 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, TBD)

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: \$367.80 per single product nozzle (spn)
\$367.80 per product for each multi-product nozzle (mpn)
 2. PERMIT TO OPERATE FEE: \$140.88 per single product nozzle (spn)
\$140.88 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:

$$\$508.67 \times \left\{ \left[\frac{(mpn_{\text{proposed}})(\text{products per nozzle}) + spn_{\text{proposed}}}{(mpn_{\text{existing}})(\text{products per nozzle}) + spn_{\text{existing}}} \right] - 1 \right\}$$

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. \$3,953 per application for a new gas dispensing facility
 - b. \$899 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: \$4,831 per single product loading arm
\$4,831 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: \$5,470
 - b. RAF for each additional TAC source: \$4,831 *

* 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: \$1,346 per single product loading arm
\$1,346 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, TBD)

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: \$2,877 per 1,000 gallons
 - b. The minimum fee per source is: \$1,432
 - c. The maximum fee per source is: \$114,340

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: \$651 plus initial fee
 - b. Minimum RAF for first TAC source: \$2,360
 - c. RAF for each additional TAC source: equal to initial fee *
 - d. Minimum RAF per additional TAC source: \$1,432 *
 - e. Maximum RAF per source is: \$114,340

* 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: \$1,432 per 1,000 gallons
 - b. The minimum fee per source is: \$1,033
 - c. The maximum fee per source is: \$57,165

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, TBD)

**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: \$1,075
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: \$2,019
 - b. RAF for each additional TAC source: \$1,075*

* 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: \$782
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: \$8,731
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: \$9,908
 - b. RAF for each additional TAC source: \$8,731*

* 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: \$4,359
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: \$11,526
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: \$12,703
 - b. RAF for each additional TAC source: \$11,526*

* 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: \$5,759
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: \$60,825
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: \$61,817
 - b. RAF for each additional TAC source: \$60,825 *

* 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: \$30,407
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: \$152,403
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: \$153,579
 - b. RAF for each additional TAC source: \$152,403*

* 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: \$76,197
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: \$68,415
2. RISK ASSESSMENT FEE (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: \$69,025
 - b. RAF for each additional TAC source: \$68,415*

* 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: \$34,207
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, TBD)

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 1000 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 1000 Gallons or more	Any Inorganic Materials
Chemical Manufacturing, Organic – Latex Dipping	Any latex materials
Chemical Manufacturing, Organic – Processing Units with a Capacity of 1000 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 1000 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
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
Incinerators – Pathological Waste (see G-3 for medical or infectious waste incinerators)	Pathological waste only

Equipment or Process Description	Materials Processed or Produced
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 > 1000 barrels/hour (see G-3 for > 1000 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)

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 1000 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: \$1,249
- b. The maximum fee per source is: \$99,895

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):

\$844 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):

\$2,507 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: \$651 plus initial fee
- b. Minimum RAF for first TAC source: \$2,171
- c. RAF for each additional TAC source: equal to initial fee *
- d. Minimum RAF per additional TAC source: \$1,249*
- e. Maximum RAF per source is: \$99,895

* 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: \$903
- b. The maximum fee per source is: \$49,939

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):

\$424 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):

\$1,249 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, TBD)

**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: \$769
 - b. If the washing or drying capacity exceeds 100 pounds: \$769 plus
 For that portion of the capacity exceeding 100 pounds: \$22.00 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: \$651 plus initial fee
 - b. Minimum RAF for first TAC source: \$1,367
 - c. RAF for each additional TAC source: equal to initial fee*
 - d. Minimum RAF per additional TAC source: \$769*

* 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: \$561
 - b. If the washing or drying capacity exceeds 100 pounds: \$561 plus
 For that portion of the capacity exceeding 100 pounds: \$11.36 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, TBD)

SCHEDULE K
SOLID WASTE DISPOSAL SITES
(Adopted July 15, 1987)

1. INITIAL FEE:
 - a. Landfill (Decomposition Process) 10,158
 - b. Active Landfill (Waste and Cover Material Dumping Process) \$5,077
 - c. Active Landfill (Excavating, Bulldozing, and Compacting Processes) \$5,077

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: \$651 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) \$5,077
 - b. Active Landfill (Waste and Cover Material Dumping Process) \$2,538
 - c. Active Landfill (Excavating, Bulldozing, and Compacting Processes) \$2,538

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) \$5,597
 - b. Evaluation of Inactive Site Questionnaire as required by Health & Safety Code Section 41805.5(b) \$2,806
 - 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) \$2,806
 - d. Evaluation of Initial or Amended Design Capacity Reports as required by Regulation 8, Rule 34, Section 405 \$2,064
 - e. Evaluation of Initial or Periodic NMOC Emission Rate Reports as required by Regulation 8, Rule 34, Sections 406 or 407 \$5,902
 - f. Evaluation of Closure Report as required by Regulation 8, Rule 34, Section 409 \$2,064
 - g. Evaluation of Annual Report as required by Regulation 8, Rule 34, Section 411 \$5,165

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, TBD)

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 1000 square feet or linear feet.
 \$988 for amounts 1001 square feet or liner feet to 2000 square feet or linear feet.
 \$1,358 for amounts greater than 2000 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 feet or linear feet or greater than 35 cubic feet.
 \$1,098 for amounts 501 square feet or linear feet to 1000 square feet or linear feet.
 \$1,620 for amounts 1001 square feet or liner feet to 2500 square feet or linear feet.
 \$2,309 for amounts 2501 square feet or linear feet to 5000 square feet or linear feet.
 \$3,169 for amounts 5001 square feet or linear feet to 10000 square feet or linear feet.
 \$4,031 for amounts greater than 10000 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 PM₁₀, the fee shall be based on the following:

1.	Organic Compounds	\$159.60 per ton
2.	Sulfur Oxides	\$159.60 per ton
3.	Nitrogen Oxides	\$159.60 per ton
4.	PM ₁₀	\$159.60 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 PM₁₀, 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, TBD)

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
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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 a 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\$1,308 per source
- b. MFR EMISSIONS FEE..... \$51.44 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 a District-approved continuous emission monitor or a District-approved parametric emission monitoring system.

- c. MFR/SYNTHETIC MINOR MONITORING FEE\$13,067 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 a 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 a District Permit to Operate.

- a. SYNTHETIC MINOR FILING FEE \$1,820 per application
- b. SYNTHETIC MINOR INITIAL PERMIT FEE \$1,308 per source
- c. SYNTHETIC MINOR REVISION FEE..... \$1,308 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 \$1,820 per application
- b. MFR INITIAL PERMIT FEE \$1,820 per source
- c. MFR ADMINISTRATIVE AMENDMENT FEE \$515 per application
- d. MFR MINOR REVISION FEE \$2,584 per source modified
- e. MFR SIGNIFICANT REVISION FEE \$4,817 per source modified
- f. MFR REOPENING FEE \$1,580 per source modified
- g. MFR RENEWAL FEE \$768 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 \$2,721 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 a 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 a District invoice.

a. MFR PUBLIC HEARING FEE Cost of Public Hearing not to exceed \$22,239

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 \$311 per source, not to exceed \$30,572

(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, TBD)

**SCHEDULE R
EQUIPMENT REGISTRATION FEES**

1. Persons operating commercial cooking equipment who are required to register equipment as required by District rules are subject to the following fees:
 - a. Conveyorized Charbroiler REGISTRATION FEE: \$744 per facility
 - b. Conveyorized Charbroiler ANNUAL RENEWAL FEE: \$209 per facility
 - c. Under-fired Charbroiler REGISTRATION FEE: \$744 per facility
 - d. Under-fired Charbroiler ANNUAL RENEWAL FEE: \$209 per facility

2. Persons operating non-halogenated dry cleaning equipment who are required to register equipment as required by District rules are subject to the following fees:
 - a. Dry Cleaning Machine REGISTRATION FEE: \$371
 - b. Dry Cleaning Machine ANNUAL RENEWAL FEE: \$259

3. Persons operating diesel engines who are required to register equipment as required by District or State rules are subject to the following fees:
 - a. Diesel Engine REGISTRATION FEE: \$250
 - b. Diesel Engine ANNUAL RENEWAL FEE: \$166
 - c. Diesel Engine ALTERNATIVE COMPLIANCE PLAN FEE (for each plan submitted under District Regulation 11-17-402): \$250

4. Persons operating boilers, steam generators and process heaters who are required to register equipment by District Regulation 9-7-404 are subject to the following fees:
 - a. REGISTRATION FEE \$137 per device
 - b. ANNUAL RENEWAL FEE: \$115 per device

5. Persons owning or operating graphic arts operations who are required to register equipment by District Regulation 8-20-408 are subject to the following fees:
 - a. REGISTRATION FEE: \$446
 - b. ANNUAL RENEWAL FEE: \$278

6. Persons owning or operating mobile refinishing operations who are required to register by District Regulation 8-45-4 are subject to the following fees:
 - a. REGISTRATION FEE \$209
 - b. ANNUAL RENEWAL FEE \$123

(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)

**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): \$1,111

Any person submitting a request to amend an existing ADMP shall pay the following fee: \$569

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: \$8,570

3. GEOLOGIC EVALUATION FEE:

Any person submitting a Geologic Evaluation for exemption from Section 93105 shall pay the following fee: \$4,232

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 District in conducting inspections to determine compliance with the ADMP on an ongoing basis. Inspection fees shall be invoiced by the 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: \$213 per hour

b. The owner of any property for which Geologic Evaluation is required shall pay fees to cover the costs incurred by the District. Inspection fees shall be invoiced by the District, based on the actual time spent in conducting such inspections, and the following time and materials rate: \$213 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, TBD)

**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, TBD)

**SCHEDULE V
OPEN BURNING**

1. Any prior notification required by Regulation 5, Section 406 is subject to the following fee:
 - a. OPERATION FEE: \$199
 - b. The operation fee paid as part of providing notification to the 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 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:
 - \$821 for 50 acres or less
 - \$1,117 for more than 50 acres but less than or equal to 150 acres
 - \$1,408 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 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 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	for 25 acres or less
\$714	for more than 25 acres but less than or equal to 75 acres
\$867	for more than 75 acres but less than or equal to 150 acres
\$1,021	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)

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: \$102,946
- b. Each subsequent annual submittal: \$51,474

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: \$6,293
- b. Each subsequent annual submittal: \$3,146

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 \$14,298.

(Adopted 6/15/16; Amended 6/5/19, 6/16/21, 11/3/21, 6/15/22, 6/7/23, TBD)

**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 PM₁₀ within the vicinity of a 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 PM₁₀, if occurring in an amount less than 35 tons per year, shall not be counted.

(Adopted: 6/15/16; Amended: 6/21/17)

**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
- 3-321 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 PM₁₀
- 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 XXXXX Excavation of Contaminated Soil and Removal of Underground Storage Tank Operation Fees~~
- 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 XXXXX Indirect Source Review Fees~~ ← Clean up
- 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 XXXX EXCAVATION OF CONTAMINATED SOIL AND REMOVAL OF UNDERGROUND STORAGE TANKS~~
- 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 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)

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 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)

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 District.

(Amended 6/4/86, 6/7/23)

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 \$750,000 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)
- 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 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 PM₁₀ 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)
- 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 District costs of implementing the program.
(Adopted 10/21/92; Amended 6/15/05)
- 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 **PM₁₀**: 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 District's response to an incident. The 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)*
- 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 ~~\$630651~~, the initial fee, the risk assessment fee, the permit to operate fee, and toxic surcharge (given in Schedules B, C, *June 7XXXXX, 20232024*

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 ~~\$630651~~, 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 ~~\$630651~~ 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 ~~\$43,13813,572~~. 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, TBD)

3-303

Back Fees: An applicant required to obtain a permit to operate existing equipment in accordance with 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 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)

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. For gasoline dispensing facilities subject to Schedule D, an applicant for an alteration shall pay a fee of 1.75 times the filing fee.

- 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, and, ~~if District regulations require a health risk assessment of the alteration,~~ the risk assessment fee ~~provided for in~~ 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, TBD)

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 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, SO₂, or PM₁₀ 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)

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 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)

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 ~~\$630651~~ 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 ~~\$630651~~ 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 ~~\$630651~~.
- 311.4 Evaluation of Existing ERCs for PM_{2.5}: An applicant to evaluate an existing PM₁₀ ERC shall pay a filing fee of ~~\$630651~~ per source and an evaluation fee equivalent to the total actual and reasonable time incurred by District staff at the hourly rate of ~~\$193199~~ 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 ~~\$630651~~ and an evaluation fee equivalent to the total actual and reasonable time incurred by District staff at the hourly rate of ~~\$193199~~ 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.

(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, TBD)

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 a 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 ~~\$1,5961,649~~ for each source included in the alternative compliance plan, not to exceed ~~\$15,95716,484~~.

(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, TBD)

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 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 District may employ in connection with the preparation of any such evaluation or documentation, as well as the 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)

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 District's cost exceeding \$2,272 of preparing and distributing the public notice.

318.3 The District shall refund to the applicant the portion of any fee paid under this Section that exceeds the 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)

3-319

Major Stationary Source Fees: Any major stationary source emitting 50 tons per year of organic compounds, sulfur oxides, nitrogen oxides, or PM₁₀ 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 in quantities above a minimum threshold level 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.

~~320.1 An applicant who qualifies as a small business under Regulation 3-209 shall pay a Toxic Inventory Fee as set out in Schedule N up to a maximum fee of \$12,477 per year.~~

(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, TBD)

3-321

Deleted December 2, 1998

3-322

~~**Excavation of Contaminated Soil and Removal of Underground Storage Tank Operation Fees:** Persons submitting a written notification for a given site to conduct either excavation of contaminated soil or removal of underground storage tanks as required by Regulation 8, Rule 40, Section 401, 402, 403 or 405 shall pay a fee based on Schedule Q. Deleted XXXXXX~~

(Adopted 1/5/94; Amended 8/2/95; 5/21/03)

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. ~~This renewal-Renewal fees is-are~~ applicable to all sources required to obtain permits to operate in accordance with District regulations. ~~The permit renewal invoice shall also specify-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 actual-the current usage or emission levels that have been reported to or calculated by the 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 ~~\$124,128~~ for facilities with one permitted source, including gasoline dispensing facilities,
- 1.2 ~~\$246,254~~ for facilities with 2 to 5 permitted sources,
- 1.3 ~~\$490,506~~ for facilities with 6 to 10 permitted sources,
- 1.4 ~~\$736,760~~ for facilities with 11 to 15 permitted sources,
- 1.5 ~~\$977,1,009~~ for facilities with 16 to 20 permitted sources,
- 1.6 ~~\$1,221,261~~ 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 ~~\$122,245,126,279~~ 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 ~~\$64,123,63,140~~ 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 ~~\$265,750,274,520~~ 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, TBD)

3-328 Fee for OEHHA Risk Assessment Reviews: Any facility that submits a health risk assessment to the 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)

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 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)

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 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 District with their intent to renew the Authority to Construct prior to its expiration, the applicant shall pay ~~\$400,103~~ per application in addition to any other fees under this section if eligible to renew.

- (Adopted 6/15/05; Amended 6/7/23, TBD)*
- 3-331 Registration Fees:** Any person who is required to register equipment under 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, TBD)*
- 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 XXX Indirect Source Review Fees:** ~~Applicants that must file an Air Quality Impact Assessment pursuant to District rules for a project that is deemed to be an indirect source shall pay a fee based on Schedule U.~~
- (Adopted 5/20/09)*
- 3-336 Open Burning Operation Fees:** Effective July 1, 2013, any person required to provide notification to the 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)*
- 3-337 Exemption Fee:** An applicant who wishes to receive a certificate of exemption shall pay a filing fee of ~~\$630651~~ 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)*
- 3-338 Incident Response Fee:** Any facility required to obtain a District permit, and any District-regulated area-wide or indirect source, that is the site where an incident occurs to which the District responds, shall pay a fee equal to the 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 District staff involved in conducting the incident response and the cost of any materials.
- (Adopted 6/19/13)*
- 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 PM₁₀ 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 ~~\$1,9341,998~~ for facilities with one source subject to risk reduction pursuant to Regulation 11, Rule 18, including gasoline dispensing facilities;
 - 341.2 ~~\$3,8683,996~~ for facilities with 2 to 5 sources subject to risk reduction pursuant to Regulation 11, Rule 18;
 - 341.3 ~~\$7,7357,990~~ for facilities with 6 to 10 sources subject to risk reduction pursuant to

Clean up

- Regulation 11, Rule 18;
- 341.4 ~~\$15,470~~15,981 for facilities with 11 to 15 sources subject to risk reduction pursuant to Regulation 11, Rule 18;
- 341.5 ~~\$30,941~~31,962 for facilities with 16 to 20 sources subject to risk reduction pursuant to Regulation 11, Rule 18;
- 341.6 ~~\$41,254~~42,615 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, TBD)

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 ~~\$493,377~~199,758.

If a facility retains a District-approved consultant to complete the required facility-wide HRA, the facility shall pay a fee to cover the District's costs of performing the review of the facility-wide HRA, including the costs of any outside consulting assistance which the District may employ in connection with any such review, as well as the 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 District's actual review time in hours multiplied by an hourly charge of ~~\$264~~273 per hour. Facilities shall pay an HRA review fee as indicated below and the District's cost exceeding the applicable HRA review fees indicated below for performing the review of the facility-wide HRA:

- 342.1 ~~\$3,173~~3,278 for facilities with one to 10 sources subject to risk reduction pursuant to Regulation 11, Rule 18, including gasoline dispensing facilities;
- 342.2 ~~\$8,508~~8,789 for facilities with 11 to 50 sources subject to risk reduction pursuant to Regulation 11, Rule 18;
- 342.3 ~~\$48,049~~18,645 for facilities with more than 50 sources subject to risk reduction pursuant to Regulation 11, Rule 18.

The District shall refund to the applicant the portion of any fee paid under this Section that exceeds the 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, TBD)

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 District's costs of performing any air dispersion modeling needed to determine compliance with any District regulatory requirement. The total air dispersion modeling fee cost shall be determined based on the District's actual review time in hours multiplied by an hourly charge of ~~\$264~~273 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 District may employ in connection with the preparation of any such evaluation or documentation, as well as the 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)

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 ~~\$630~~651; and
- 345.2 An initial fee equivalent to the total actual and reasonable time incurred by District staff at the hourly rate or prorated of ~~\$193~~199 per hour not to exceed the minimum initial fee(s) in the schedule for the applicable source(s).

(Adopted 6/7/23, TBD)

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 ~~\$630~~651; and
- 346.2 An initial fee equivalent to the total actual and reasonable time incurred by District staff at the hourly rate or prorated of ~~\$193~~199 per hour not to exceed the minimum initial

fee in Schedule E.

(Adopted 6/7/23, TBD)

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 ~~\$630651~~; and

347.2 An initial fee equivalent to the total actual and reasonable time incurred by District staff at the hourly rate or prorated of ~~\$193199~~ per hour.

(Adopted 6/7/23, TBD)

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 Authority to Construct: The application will be cancelled but can be reactivated upon payment of fees.

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.

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.

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 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 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.

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 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.

(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)

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 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 District estimates to incur in connection with the 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 District in connection with the District's performance of its environmental evaluation and the preparation of any required environmental documentation.

(Adopted 12/18/85; Amended 8/2/95)

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 District's share of statewide Air Toxics "Hot Spot" Information and Assessment Act expenses.

(Adopted 10/21/92; Amended 6/7/23)

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 District services as deemed appropriate until payment in full is made.

(Adopted 8/2/95; Amended 12/2/98, 6/15/05)

3-416 Adjustment of Fees: The APCO or designees may, upon finding administrative error by 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)

3-417 Temporary Amnesty for Unpermitted and Unregistered Sources: The APCO has the authority to declare an amnesty period, during which the 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)

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 District may waive all or any part of the fees for these transactions.

(Adopted 6/6/18; Amended 6/7/23)

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 District.

(Adopted 6/7/23)

**SCHEDULE A
HEARING BOARD FEES¹**

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 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	\$9,256 10,644 \$4,6355,330	\$1,385 1,593 \$467537	
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 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	\$5,557 6,391 \$2,7753,191	\$1,385 1,593 \$467537	
3. For each application to modify a variance in accordance with §42356 ... 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	\$3,687 4,240 \$2,7753,191	\$467 537 \$467537	
4. For each application to extend a variance, in accordance with §42357 .. 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	\$3,687 4,240 \$2,7753,191	\$467 537 \$467537	
5. For each application to revoke a variance	\$5,557 6,391	\$467 537	
6. For each application for approval of a Schedule of Increments of Progress in accordance with §41703	\$3,687 4,240	\$467 537	
7. For each application for variance in accordance with §41703, which exceeds 90 days Plus, for each hearing in addition to the first hearing on said application for variance in accordance with §41703, the additional sum of	\$9,256 10,644 \$4,6355,330	\$1,385 1,593 \$467537	
8. For each application for variance in accordance with §41703, not to exceed 90 days Plus, for each hearing in addition to the hearing on said application for a variance in accordance with §41703, the additional sum of	\$5,557 6,391 \$2,7753,191	\$1,385 1,593 \$467537	
9. For each Appeal (Permit, Banking, Title V)	\$9,256 10,644 4 per hearing day	\$4,635 5,330 per hearing day	\$4,635 5,330 30 for entire appeal period

		Large Companies	Small Business	Third Party
10.	For each application for intervention in accordance with Hearing Board Rules §§2.3, 3.6 & 4.6.....	\$ <u>4,6355,330</u>	\$ <u>9321,072</u>	
11.	For each application to Modify or Terminate an abatement order	\$ <u>9,25610,644</u> per hearing day	\$ <u>4,6355,330</u> per hearing day	
12.	For each application for an interim variance in accordance with §42351	\$ <u>4,6355,330</u>	\$ <u>9321,072</u>	
13.	For each application for an emergency variance in accordance with §42359.5.....	\$ <u>2,3102,657</u>	\$ <u>467537</u>	
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	\$ <u>4,6355,330</u>	\$ <u>1,3851,593</u>	\$ <u>1,3851,593</u>
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, TBD)

**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 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 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 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 \$~~7,748.86~~ 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 \$~~38,354.11~~ 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
~~1,3-Butadiene~~
~~Inorganic arsenic~~
~~Beryllium~~
Polynuclear aromatic hydrocarbons (PAH)
~~Trichloroethylene~~
Vinyl chloride
~~Lead~~
~~1,4-Dioxane~~
~~Trichloroethylene~~

**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:

$$\text{Fee} = (\text{Opacity} * \text{equivalent} - 20) \times \text{number of days allowed in variance} \times \$7.88$$

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:

$$\text{Fee} = (\text{Opacity} * \text{equivalent} - 40) \times \text{number of days allowed by variance} \times \$7.88$$

* 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, TBD)

**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: \$90.75104.36 per MM BTU/HOUR
 - a. The minimum fee per source is: \$484557
 - b. The maximum fee per source is: \$169,292194,686
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: \$630651 plus \$90.75104.36 per MM BTU/hr
 - b. Minimum RAF for first TAC source: \$1,1661,341
 - c. RAF for each additional TAC source: \$90.75104.36 per MM BTU/hr*
 - d. Minimum RAF per additional TAC source: \$484557*
 - e. Maximum RAF per source is: \$169,292194,686
 - * 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: \$45.3752.18 per MM BTU/HOUR
 - a. The minimum fee per source is: \$344396
 - b. The maximum fee per source is: \$84,64697,343
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 the State Department of Health Services, and/or a qualified contractor designated by the State Department of Health Services, in reviewing a risk assessment as required under H&S Code Section 42315. The fee shall be transmitted by the District to the Department of Health Services and/or the qualified contractor upon completion of the review and submission of comments in writing to the 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, TBD)

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: ~~\$630~~651 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, TBD)

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: \$~~356.05~~367.80 per single product nozzle (spn)
\$~~356.05~~367.80 per product for each multi-product nozzle (mpn)
2. PERMIT TO OPERATE FEE: \$~~136.38~~140.88 per single product nozzle (spn)
\$~~136.38~~140.88 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:

$$\$492.42508.67 \times \{[(mpn_{proposed})(products \text{ per nozzle}) + spn_{proposed}] - [(mpn_{existing})(products \text{ per nozzle}) + spn_{existing}]\}$$

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. \$~~3,8273,953~~ per application for a new gas dispensing facility
 - b. \$~~773-899~~ 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: \$~~4,676.764,831~~ per single product loading arm
\$~~4,676.764,831~~ 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: \$~~5,2955,470~~
 - b. RAF for each additional TAC source: \$~~4,6774,831~~ *
* 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: \$~~1,3031,346~~ per single product loading arm
\$~~1,3031,346~~ 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, TBD)

**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: \$2,502,877 per 1,000 gallons
 - b. The minimum fee per source is: \$1,245,432
 - c. The maximum fee per source is: \$99,426,114,340

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: \$630,651 plus initial fee
 - b. Minimum RAF for first TAC source: \$2,052,360
 - c. RAF for each additional TAC source: equal to initial fee *
 - d. Minimum RAF per additional TAC source: \$1,245,432 *
 - e. Maximum RAF per source is: \$99,426,114,340
 - * 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: \$1,245,432 per 1,000 gallons
 - b. The minimum fee per source is: \$898,033
 - c. The maximum fee per source is: \$49,709,571,165

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, TBD)

**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: \$9351,075
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: \$1,7562,019
 - b. RAF for each additional TAC source: \$9351,075*
 - * 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: \$680782
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: \$7,5928,731
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: \$8,6469,908
 - b. RAF for each additional TAC source: \$7,5928,731*
 - * 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: \$3,7904,359
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 perc59ent. 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: \$40,02311,526
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: \$41,04612,703
 - b. RAF for each additional TAC source: \$40,02311,526*
 - * 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: \$5,0085,759
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: \$52,89460,825
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: \$53,75461,817
 - b. RAF for each additional TAC source: \$52,89460,825 *

* 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: \$26,44130,407
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: \$132,524152,403
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: \$133,547153,579
 - b. RAF for each additional TAC source: \$132,524152,403*

* 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: \$66,25876,197
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: \$59,49168,415
2. RISK ASSESSMENT FEE (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: \$60,02269,025
 - b. RAF for each additional TAC source: \$59,49168,415*

* 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: \$29,74534,207
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, TBD)

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 1000 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 1000 Gallons or more	Any Inorganic Materials
Chemical Manufacturing, Organic – Latex Dipping	Any latex materials
Chemical Manufacturing, Organic – Processing Units with a Capacity of 1000 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 1000 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
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
Incinerators – Pathological Waste (see G-3 for medical or infectious waste incinerators)	Pathological waste only

Equipment or Process Description	Materials Processed or Produced
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 > 1000 barrels/hour (see G-3 for > 1000 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)

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 1000 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: \$~~1,0861,249~~
- b. The maximum fee per source is: \$~~86,86599,895~~

The initial fee ~~shall include the~~ fees for each type of operation listed ~~below, which is 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):

~~\$734-844~~ 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):

~~\$2,1802,507~~ 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: \$~~630651~~ plus initial fee
- b. Minimum RAF for first TAC source: \$~~1,8882,171~~
- c. RAF for each additional TAC source: equal to initial fee *
- d. Minimum RAF per additional TAC source: ~~\$1,0861,249~~ *
- e. Maximum RAF per source is: \$~~86,86599,895~~

* 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: \$~~785903~~
- b. The maximum fee per source is: \$~~43,42549,939~~

The permit to operate fee ~~shall include the~~ fees for each type of operation listed ~~below, which is 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):

~~\$369,424~~ 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):

~~\$1,0861,249~~ 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, TBD)

**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: \$744769
 - b. If the washing or drying capacity exceeds 100 pounds: \$744769 plus
 For that portion of the capacity exceeding 100 pounds: \$20.9522.00 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: \$630651 plus initial fee
 - b. Minimum RAF for first TAC source: \$1,3231,367
 - c. RAF for each additional TAC source: equal to initial fee*
 - d. Minimum RAF per additional TAC source: \$744769*

* 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: \$543561
 - b. If the washing or drying capacity exceeds 100 pounds: \$543-561 plus
 For that portion of the capacity exceeding 100 pounds: \$11.0011.36 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, TBD)

SCHEDULE K
SOLID WASTE DISPOSAL SITES
(Adopted July 15, 1987)

1. INITIAL FEE:
 - a. Landfill (Decomposition Process) \$8,833,10,158
 - b. Active Landfill (Waste and Cover Material Dumping Process) \$4,415,077
 - c. Active Landfill (Excavating, Bulldozing, and Compacting Processes) \$4,415,077

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: \$630,651 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) \$4,415,077
 - b. Active Landfill (Waste and Cover Material Dumping Process) \$2,207,538
 - c. Active Landfill (Excavating, Bulldozing, and Compacting Processes) \$2,207,538

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) \$4,867,597
 - b. Evaluation of Inactive Site Questionnaire as required by Health & Safety Code Section 41805.5(b) \$2,440,806
 - 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) \$2,440,806
 - d. Evaluation of Initial or Amended Design Capacity Reports as required by Regulation 8, Rule 34, Section 405 \$1,795,064
 - e. Evaluation of Initial or Periodic NMOC Emission Rate Reports as required by Regulation 8, Rule 34, Sections 406 or 407 \$5,132,902
 - f. Evaluation of Closure Report as required by Regulation 8, Rule 34, Section 409 \$1,795,064
 - g. Evaluation of Annual Report as required by Regulation 8, Rule 34, Section 411 \$4,491,165

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, TBD)

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 1000 square feet or linear feet.
 \$988 for amounts 1001 square feet or liner feet to 2000 square feet or linear feet.
 \$1,358 for amounts greater than 2000 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 feet or linear feet or greater than 35 cubic feet.
 \$1,098 for amounts 501 square feet or linear feet to 1000 square feet or linear feet.
 \$1,620 for amounts 1001 square feet or liner feet to 2500 square feet or linear feet.
 \$2,309 for amounts 2501 square feet or linear feet to 5000 square feet or linear feet.
 \$3,169 for amounts 5001 square feet or linear feet to 10000 square feet or linear feet.
 \$4,031 for amounts greater than 10000 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 PM₁₀, the fee shall be based on the following:

	1.	Organic Compounds	\$ 154.50 <u>159.60</u> per ton
	2.	Sulfur Oxides	\$ 154.50 <u>159.60</u> per ton
	3.	Nitrogen Oxides	\$ 154.50 <u>159.60</u> per ton
	4.	PM ₁₀	\$ 154.50 <u>159.60</u> 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 PM₁₀, 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, TBD)

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
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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 a 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 ~~\$1,1371,308~~ per source
- b. MFR EMISSIONS FEE..... ~~\$44,7351.44~~ 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 a District-approved continuous emission monitor or a District-approved parametric emission monitoring system.

- c. MFR/SYNTHETIC MINOR MONITORING FEES ~~\$11,36313,067~~ 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 a 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 a District Permit to Operate.

- a. SYNTHETIC MINOR FILING FEE ~~\$1,5831,820~~ per application
- b. SYNTHETIC MINOR INITIAL PERMIT FEE ~~\$1,1371,308~~ per source
- c. SYNTHETIC MINOR REVISION FEE..... ~~\$1,1371,308~~ 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 ~~\$1,5831,820~~ per application
- b. MFR INITIAL PERMIT FEE ~~\$1,5831,820~~ per source
- c. MFR ADMINISTRATIVE AMENDMENT FEE ~~\$448-515~~ per application
- d. MFR MINOR REVISION FEE ~~\$2,2472,584~~ per source modified
- e. MFR SIGNIFICANT REVISION FEE ~~\$4,1894,817~~ per source modified fluid
- f. MFR REOPENING FEE ~~\$1,3741,580~~ per source modified
- g. MFR RENEWAL FEE ~~\$668-768~~ 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 ~~\$2,3662,721~~ 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 a 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 a District invoice.

a. MFR PUBLIC HEARING FEE Cost of Public Hearing not to exceed \$~~49,33822,239~~

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 \$~~270-311~~ per source, not to exceed \$~~26,58430,572~~

(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, TBD)

**SCHEDULE Q
EXCAVATION OF CONTAMINATED SOIL AND
REMOVAL OF UNDERGROUND STORAGE TANKS
(ADOPTED JANUARY 5, 1994)**

1. ~~Persons excavating contaminated soil or removing underground storage tanks subject to the provisions of Regulation 8, Rule 40, Section 401, 402, 403 or 405 are subject to the following fee:~~

a. ~~OPERATION FEE: _____ \$168~~

~~(Amended 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, 6/4/14, 6/3/15, 6/15/16)~~

**SCHEDULE R
EQUIPMENT REGISTRATION FEES**

1. Persons operating commercial cooking equipment who are required to register equipment as required by District rules are subject to the following fees:
 - a. Conveyorized Charbroiler REGISTRATION FEE: \$744 per facility
 - b. Conveyorized Charbroiler ANNUAL RENEWAL FEE: \$209 per facility
 - c. Under-fired Charbroiler REGISTRATION FEE: \$744 per facility
 - d. Under-fired Charbroiler ANNUAL RENEWAL FEE: \$209 per facility

2. Persons operating non-halogenated dry cleaning equipment who are required to register equipment as required by District rules are subject to the following fees:
 - a. Dry Cleaning Machine REGISTRATION FEE: \$371
 - b. Dry Cleaning Machine ANNUAL RENEWAL FEE: \$259

3. Persons operating diesel engines who are required to register equipment as required by District or State rules are subject to the following fees:
 - a. Diesel Engine REGISTRATION FEE: \$250
 - b. Diesel Engine ANNUAL RENEWAL FEE: \$166
 - c. Diesel Engine ALTERNATIVE COMPLIANCE PLAN FEE (for each plan submitted under District Regulation 11-17-402): \$250

4. Persons operating boilers, steam generators and process heaters who are required to register equipment by District Regulation 9-7-404 are subject to the following fees:
 - a. REGISTRATION FEE \$137 per device
 - b. ANNUAL RENEWAL FEE: \$115 per device

5. Persons owning or operating graphic arts operations who are required to register equipment by District Regulation 8-20-408 are subject to the following fees:
 - a. REGISTRATION FEE: \$446
 - b. ANNUAL RENEWAL FEE: \$278

6. Persons owning or operating mobile refinishing operations who are required to register by District Regulation 8-45-4 are subject to the following fees:
 - a. REGISTRATION FEE \$209
 - b. ANNUAL RENEWAL FEE \$123

(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)

**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): \$9661,111

Any person submitting a request to amend an existing ADMP shall pay the following fee: \$495569

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: \$7,4528,570

3. GEOLOGIC EVALUATION FEE:

Any person submitting a Geologic Evaluation for exemption from Section 93105 shall pay the following fee: \$3,6804,232

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 District in conducting inspections to determine compliance with the ADMP on an ongoing basis. Inspection fees shall be invoiced by the 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: \$206-213 per hour

b. The owner of any property for which Geologic Evaluation is required shall pay fees to cover the costs incurred by the District. Inspection fees shall be invoiced by the District, based on the actual time spent in conducting such inspections, and the following time and materials rate: \$206-213 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, TBD)

**SCHEDULE T
GREENHOUSE GAS FEES**

No
increase

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.

**SCHEDULE V
OPEN BURNING**

1. Any prior notification required by Regulation 5, Section 406 is subject to the following fee:
 - a. OPERATION FEE: \$199
 - b. The operation fee paid as part of providing notification to the 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 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: \$744,821 for 50 acres or less
\$974,117 for more than 50 acres but less than or equal to 150 acres
\$1,224,408 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 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 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 for 25 acres or less
\$714 for more than 25 acres but less than or equal to 75 acres
\$867 for more than 75 acres but less than or equal to 150 acres
\$1,021 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 6/19/13; 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)

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: \$89,518,102,946
- b. Each subsequent annual submittal: \$44,760,51,474

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: \$5,4726,293
- b. Each subsequent annual submittal: \$2,7363,146

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 \$12,43314,298.

(Adopted 6/15/16; Amended 6/5/19, 6/16/21, 11/3/21, 6/15/22, 6/7/23, TBD)

**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 PM₁₀ within the vicinity of a 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 PM₁₀, if occurring in an amount less than 35 tons per year, shall not be counted.

(Adopted: 6/15/16; Amended: 6/21/17)



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

AGENDA: 15

Amendments to Regulation 3, Fees

Board of Directors Meeting
May 1, 2024

Fred Tanaka
Manager, Engineering Division
ftanaka@baaqmd.gov

Presentation Outcome



Update the Board of Directors on proposed Regulation 3 (Fees) Amendments for Fiscal Year Ending (FYE) 2025.

Presentation Outline



- Cost Recovery Background
- Proposed Fee Amendments
- Impact of Proposed Amendments
- Small Business Considerations
- Air District Comparisons
- Budget and Rule Development Schedule
- Summary of Public Comments
- Questions

Requested Action



Receive testimony

Cost Recovery Background



- Air District has authority to assess fees to recover the reasonable costs from fee-based programs.
- Board of Directors set goals to improve cost recovery levels.

	FYE 2010	FYE 2011	FYE 2012	FYE 2013	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022	FYE 2023
By Year	63.8%	66.9%	76.1%	80.2%	79.5%	83.1%	81.4%	81.2%	83.0%	84.7%	83.2%	83.8%	85.9%	92.3%
3-Year Average			68.8%	73.6%	78.7%	80.8%	81.4%	82.2%	81.9%	83.0%	83.6%	83.5%	84.3%	87.4%

- Other funding sources have historically been used to close the cost recovery gap.

Cost Recovery Background: Variables



Cost recovery is not a static target.

Cost Recovery Impacts – Revenue

- Fee and fee changes
- Facilities, sources, emissions and operational changes
- Number of notifications and applications processed

Cost Recovery Impacts – Expenses

- Fee-supported programs/rules
- Efficient use of resources
- Shifts in priorities
- Staffing levels

Cost Recovery Background: Fee-Recoverable Work



Example Activities 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)

Example Activities Not Covered by Regulation 3 Fees

- AB617 Community Engagement & Outreach
- Ambient Air Monitoring
- Climate change work for 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)

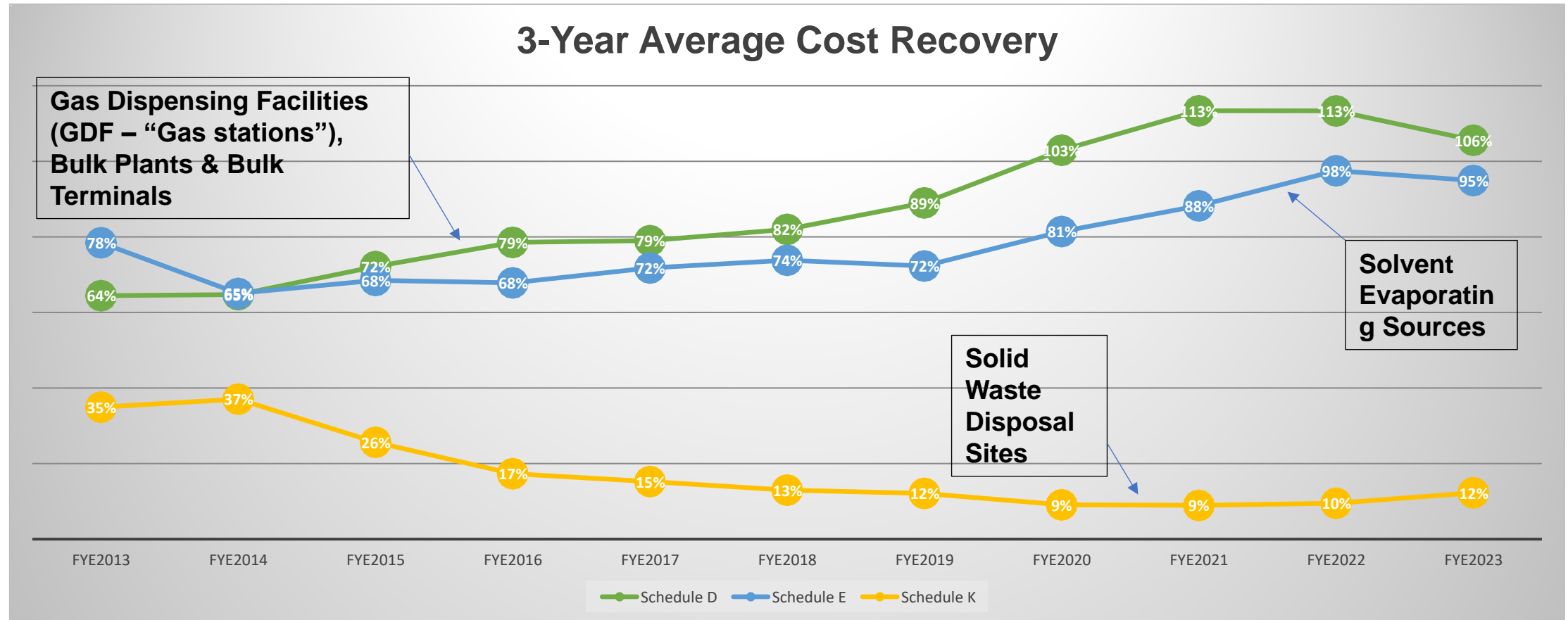
Cost Recovery Background: Limitations of Cost Recovery



Cost Recovery vs. Work Backlog

- 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 or the effective use of those resources.

Cost Recovery Background: Sample of Fee Schedule Trends



Cost Recovery Background: Historical Strategies



Revenue from Fee Schedule (3-year average)	FYE 2018	FYE 2019 & 2020	FYE 2021 (Covid)	FYE 2022	FYE 2023	FYE 2024
110% or more of costs	-	-	-	-	-	-
100 to <110% of costs	-	-	-	-	+15%	CPI-W*
95 to < 100% of costs	CPI-W*	CPI-W*	-	CPI-W*	+15%	+15%
85 to < 95% of costs	+7%	+7%	-	+7%	+15%	+15%
75 to < 85% of costs	+8%	+8%	-	+8%	+15%	+15%
50 to < 75% of costs	+9%	+9%	-	+9%	+15%	+15%
Less than 50% of costs	+9%	+15%	-	+15%	+15%	+15%

* The annual Consumer Price Index for Bay Area Urban Wage Earners and Clerical Workers (CPI-W) increase.

Proposed Amendments: Cost Recovery



Revenue from Fee Schedule (3-year average)	Change in Fees	Fee Schedules
100 to <110% of costs	3.3% increase (CPI-W)	D, I, M*
Less than 100% of costs	15% increase	A, B, E, F, G1, G2, G3, G4, G5, H, K, P, S, V**, W

* Schedule M is not evaluated for cost recovery, but the proposed increase is based as a general fee.

**Marsh burning fees only

Proposed Amendments: Cost Recovery



Fee Schedules with 3.3% increase

Schedule D: Gasoline Transfer at GDFs & Bulk Plants and Bulk Terminals
Except the Risk Assessment Fee (RAF) for existing GDFs

Schedule I: Dry Cleaners (not registered machines & currently none are permitted)

Schedule M: Major Stationary Source Fees

Fee Schedules with 15% increase

Schedule A: Hearing Board Fees

Schedule B: Combustion of Fuels (E.g., permitted boilers, engines, heaters,)

Schedule E: Solvent Evaporating Sources (E.g., permitted graphic arts, painting, wipe cleaning)

Proposed Amendments: Cost Recovery (cont.)



Fee Schedules with 15% increase

Schedule F:	Misc. Sources (storage silos, abrasive blasting)
Schedule G-1:	Misc. Sources (e.g., glass manufacturing, soil remediation)
Schedule G-2:	Misc. Sources (e.g., asphaltic concrete, furnaces)
Schedule G-3:	Misc. Sources (e.g., metal melting, cracking units)
Schedule G-4:	Misc. Sources (e.g., cement kilns, sulfur removal & coking units)
Schedule G-5:	Misc. Sources (Refinery flares)
Schedule H:	Semiconductor and Related Operations
Schedule K:	Solid Waste Disposal Sites (e.g., Landfills)
Schedule P:	Major Facility Review Fees
Schedule S:	Naturally Occurring Asbestos Operations
Schedule V:	Open Burning – Marsh Management fees only
Schedule W:	Petroleum Refining Emissions Tracking Fees

Proposed Amendments: Cost Recovery (cont.)



Specific fees in Section 300 are proposed to be increased by 3.3% (CPI-W)

- Section 302: New and modified source filing fees
- Section 311: Emission Banking Fees
- Section 312: Regulation 2, Rule 9 Alternative Compliance Plan fee
- Section 330: Fee for Renewing an Authority to Construct
- Section 327: Permit to Operate renewal fees
- 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

Proposed Amendments: Schedules Not Being Increased



Fees and fee schedules that are not proposed for increase:

- Section 3-307: Transfers of Permits
- Schedule C: Stationary Storage Tanks of Organic Liquids Except the RAF
- Schedule L: Asbestos Operations
- Schedule N: Toxic Inventory Fees
- Schedule R: Equipment Registration Fees
- Schedule T: Greenhouse Gas Fees
- Schedule V: Open Burning except Marsh Management fees
- Schedule X: Major Stationary Source Community Air Monitoring Fees

Proposed Amendments: Obsolete Sections



The following section and schedule are proposed for deletion:

Proposal #1 – Subsection 320.1

The Toxic Inventory Fee for Small Businesses is no longer applicable.

Proposal #2 – Section 322 and Schedule Q

Excavation of Contaminated Soil and Removal of Underground Storage Tank Operation work is no longer performed by the Air District.

Proposal #3 – Section 335

The referenced Schedule U for Indirect Source Fees was deleted in 2023.

Proposed Amendments: Clarifying Language



Section 304.2 (Alteration: Schedule G Fees)

- Clarify that fees charged for alterations involving sources subject to Schedules G-3, G-4 and G-5. Current wording is clumsy.

Section 327 (Permit to Operate, Renewal Fees)

- Clarify language on proration applicability when new/modified sources are started up off schedule from the permit anniversary.

Proposed Amendments: Clarifying Language (cont.)



Section 327.5 (Permit to Operate, Renewal Fees) and Section 331 (Registration Fees)

- Clarify that there is no proration or refund of fees if a source or operation shuts down before the expiration date.

Schedule H – Semiconductor & Related Operations

- Clarify that if a specific solvent cleaning or coating operation is not defined, the minimum fee applies.

Proposed Amendments: Alignment of Risk Assessment Fees



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 in Schedule C.2.a is proposed for a 3.3% increase.

Schedule D.A: Gasoline Transfer at Gasoline Dispensing Facilities (GDFs)

The RAF for existing GDFs is proposed for a 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.

Proposed Amendments: Cost Recovery Impact



- Estimated budget increased by \$4.7M compared to projected FYE 2023 revenues
- This strategy has a weighted fee schedule increase of **7.8 percent.**

Impact of Proposed Amendments: Petroleum Refineries



Annual Permit Fee Increase/Decrease (Fiscal Year Ending)							
	2023, % fee change		2023 Renewal fee	2024, % fee change		2024 Renewal fee	2025, Projected % fee change
	Predicted	Actual		Predicted	Actual		Proposed budget
Chevron	17.7	18	\$4.5 million	8.1	1.0	\$4.5 million	8.5
Martinez Refining Co.	17.8	37	\$5.5 million	8.9	4.7	\$5.7 million	7.9
Phillips 66	22.5	11	\$2.7 million	8.5	9.6	\$3.0 million	8.6
Tesoro	21.2	-26	\$1.9 million	-1.0	-21.6	\$1.6 million	9.1
Valero	12.9	8.1	\$2.9 million	9.4	12.2	\$3.4 million	9.0

Impact of Proposed Amendments: Small Business



Facility Type	Current renewal fee: Not OBC	Current renewal fee: OBC	Proposed renewal fee: Not OBC	Proposed renewal fee: OBC
Backup Engine* (Sch. B)	\$489	\$559	\$547 10.6%	\$626 10.6%
GDF “Gas station”** (Sch. Da)	\$2,692	\$3,079	\$2,781 3.2%	\$3,180 3.2%
Auto Body Shop* (Sch. E)	\$1,067	\$1,220	\$1,212 12.0%	\$1,386 12.0%
Coffee Roaster (Sch. F)	\$839	\$960	\$950 11.7%	\$1,087 11.7%

*Minimum fee – Permit fees are greater for larger engines.

**Common configuration with 6 islands with 3-triple product nozzles

Small Business Considerations



- Facility Size
 - Total fees paid influenced by number/size of equipment/sources and their throughput/capacity.
 - Small businesses typically pay little or no emission-based fees.
- Schedule R: Equipment Registration Fees
 - e.g., Dry cleaning machines, small combustion, mobile refinishing, small graphic arts operations.
 - No fee increase in 6 years.
- Other considerations
 - Discounts on certain application fees for small (50%) and green (10%) businesses.
 - Covid Relief of renewal late fees.
 - Discount if registered mobile refinishing operators took the industry compliance school.

Air District Comparisons: Renewal Fees for Petroleum Refineries



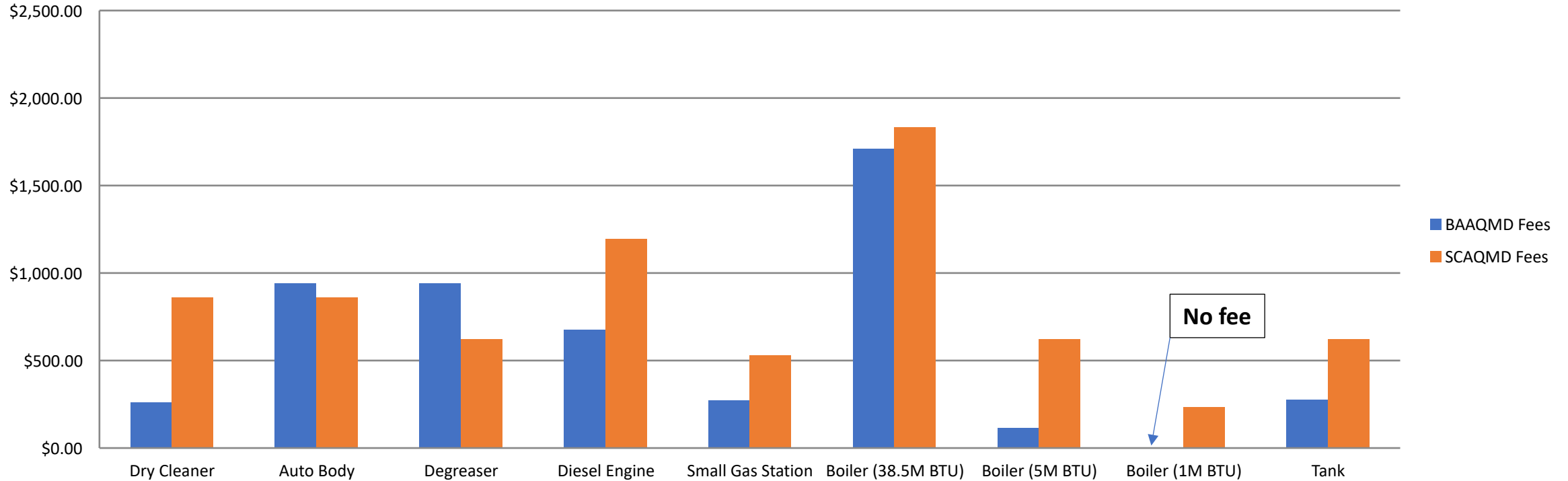
- Refinery facilities across the state differ in size and operations.
- South Coast AQMD charges fees for source test work, fence line and community monitoring, and 'Toxic Hot Spots' program separately.
 - Those fees are not reflected in their total below.
- In FYE 2022 for all refineries, the fees were:

Agency	Range of Permit Renewal Fees	# of Refineries
BAAQMD	\$1.6M to \$5.7M	5
SCAQMD	\$1.5M to \$4.6M	7

Air District Comparisons: Renewal Fees for Small Facilities



Small Facility Comparison of Renewal Fees (FYE 2023)

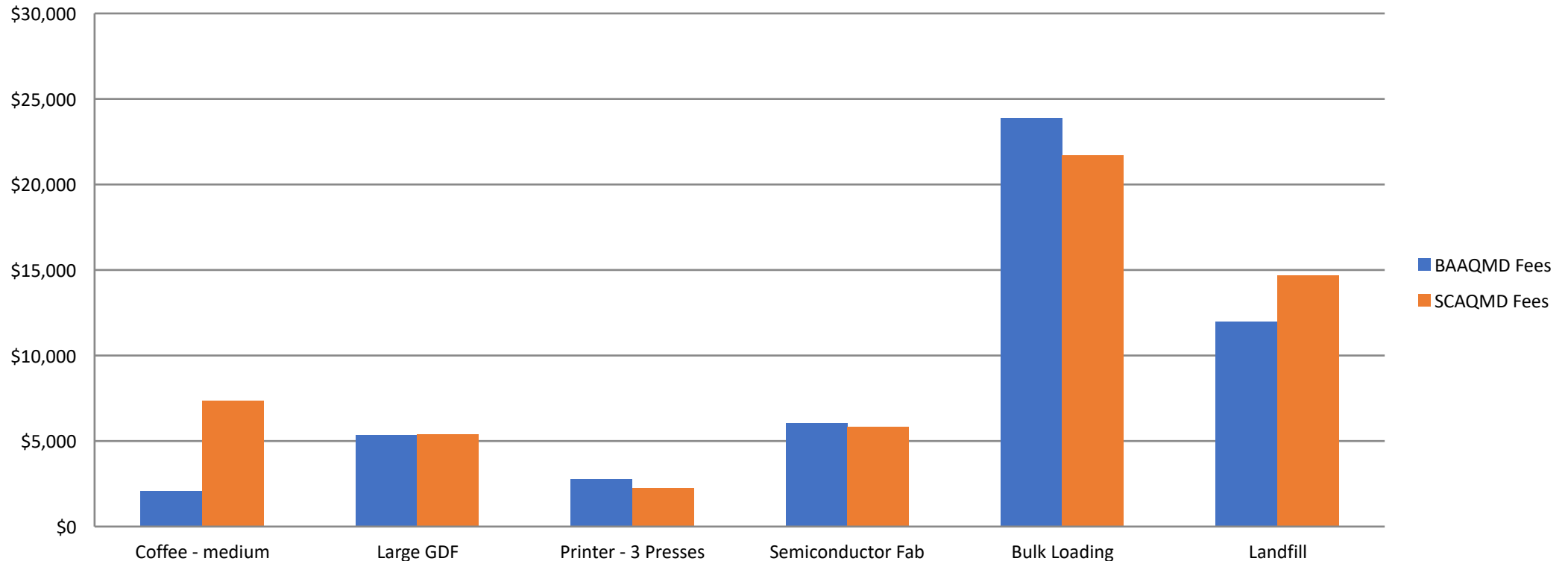


- Compare with South Coast AQMD.
- Single device/operation comparisons
- Minimum fees where applicable

Air District Comparisons: Renewal Fees for Medium Facilities



Medium Facility Comparison of Renewal Fees (FYE 2023)



- Normalized number of sources and throughput/capacity.
- Emissions are assumed equivalent.

Budget and Rule Development Schedule



Description	Date
Public workshop for Regulation 3 amendments	February 15, 2024
Written workshop comments on Regulation 3 due	March 18, 2024
Finance and Administration Committee briefing	March 20, 2024
Finance and Administration Committee briefing	April 17, 2024
First public hearing on budget & Regulation 3 to receive testimony	May 1, 2024
Written Public Hearing comments on Regulation 3 due	May 17, 2024
Second public hearing on budget and Regulation 3 to consider adoption	June 5, 2024
Budget and fee amendments effective, if adopted	July 1, 2024

Summary of Public Comments



Here is a summary of the comments received since the workshop:

- Concern for increasing fees at dry cleaning facilities.
- Permit costs are high for sub-slab depressurization systems that are gone in 1 to 3 months.
- Increasing fees at metal manufacturing facilities should parallel with an increase in transparency and level of service. (CA Metals Coalition).
- There should be no fee increases and the Air District should use resources more efficiently.
- Will fees eventually be reduced due to New Production System going live? (California Council for Environmental and Economic Balance, Resource Recovery Coalition of California).
- Consider suspending Schedule X fees until community monitors are installed (Western States Petroleum Association).
- Companies with May/June budgeting cannot budget for significant fee increases. (Phillips 66 Refinery – P66).
- A comment that some people may not have received workshop notice in the mail (P66).
- Request response to comments sooner than last year. (CCEEB, RRCC).

Feedback Requested/Prompt



Receive public testimony and Board comments.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Davina Hurt and Members
of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: May 1, 2024

Re: Community Emissions Reduction Plan for the Richmond, North Richmond, and San Pablo Path to Clean Air (PTCA) Area

RECOMMENDED ACTION

Recommend the Board of Directors (i) adopt the PTCA Plan and (ii) approve the determination that adoption of the PTCA Plan is exempt from the California Environmental Quality Act (CEQA).

BACKGROUND

Assembly Bill 617 (AB 617), signed in 2017, focuses on improving local air quality and health in disproportionately impacted communities. The law requires the California Air Resources Board (CARB) to work with community groups, air districts and others to select locations around the state where communities and their air district will work together to reduce local air pollution. In September 2018, CARB approved the Air District's recommendation to develop a community air monitoring plan (CAMP) in Richmond-North Richmond-San Pablo to identify and understand areas of elevated air pollution exposure in these communities. The CAMP Community Steering Committee adopted the branding and name "Path to Clean Air" (PTCA). With the completion of the PTCA CAMP, the Air District recommended that Richmond-North Richmond-San Pablo (the PTCA area) begin the next phase of the AB 617 program with development of a community emissions reduction plan (CERP). In September 2020, CARB approved the Air District's recommendation to develop a CERP for the PTCA area.

On April 22, 2024, the Community Equity, Health and Justice Committee held a special meeting at City of San Pablo City Hall Council Chambers on the Path to Clean Air Draft Final PTCA Plan and the Committee voted to recommend the Board of Directors (i) adopt the Draft Final PTCA Plan and (ii) approve the determination that adoption of the Draft Final PTCA Plan is exempt from the California Environmental Quality Act (CEQA).

The Path To Clean Air CERP (Draft Final PTCA Plan) is available on the Richmond-North Richmond-San Pablo CERP webpage at <https://www.baaqmd.gov/PTCA-CERP>. The plan documents will be finalized upon approval by the Board of Directors.

DISCUSSION

Path to Clean Air Plan Overview

The PTCA Plan builds on work completed for the PTCA CAMP and the Air District's long history of leadership and innovation protecting air quality and public health. The PTCA Plan also represents the work of a Community Steering Committee (CSC) over a three-year period. The PTCA Plan was co-developed by the CSC, Air District, CARB, local governments, and key implementation partners. These partners participated in monthly committee meetings, ad hoc subcommittees, and writing and review teams, designed to center the CSC's community voice in the PTCA Plan.

The PTCA area includes areas of Richmond and San Pablo and unincorporated Contra Costa County, including North Richmond. The PTCA area has major pollution sources, and residents suffer from disproportionately high health burdens. To address the disproportionate pollution and health burdens, the CSC and partners set plan goals, identified major pollution sources and pollutants, and created strategies and actions to reduce local emissions and exposures. The PTCA Plan stretches beyond the Air District's existing efforts to reduce local sources of air pollution, incorporates lived experience and expertise of community members, and reflects collaboration with partner agencies, including CARB and local governments.

The Four Plan Goals of the PTCA Plan:

Goal #1 Just Transition: In pursuit of our right to breathe clean air, promote environmental justice, and ensure the well-being of our residents and workers, our community-driven emissions reduction plan is rooted in Just Transition principles. This plan seeks to address the consequences of historical racial disparities by developing more stringent air pollution policies that advance social healing and restoration.

Goal #2 Health: In pursuit of reducing historically high rates of asthma, cancer, and other chronic health conditions, our plan seeks to lower our community's disproportionate exposure to air pollution by reducing toxic emissions from local sources by 30-50% by 2035.

Goal #3 Community Engagement: Through education and engagement, our plan aims to empower our community by providing resources and tools to promote understanding of air pollution and its impact on our health and environment.

Goal #4 Hold Government Accountable: Our goal is to hold our government accountable for implementing our plan, including its strategies and actions, to protect our health and environment and effectively enforce regulations on high-polluting industries and other toxic sources of emissions in our community.

Air Pollution Overview

Keeping with the community-centered approach, the PTCA Plan's air pollution overview draws from a community mapping project. The Air District worked with six nonprofit organizations from the PTCA area to collect and analyze over 500 public comments. The community mapping goals included gathering local knowledge and gaining diverse perspectives about community air pollution concerns, locations where people gather, and community strengths and assets.

The community mapping project identified the locations of pollution sources and the populations exposed to these sources, such as nearby residents and people visiting community resources such as schools, day care, recreation, and senior care centers.

Armed with the community-identified issues and challenges, the Air District completed a comprehensive technical assessment that categorizes air pollution contributions – in terms of both emissions and exposure – for the pollution sources identified as community concerns. These pollution sources include fuel refining and other industrial activities; cargo ships, rail operations, and construction equipment; goods movement and vehicle traffic; and fireplaces and gas appliances. The technical assessment quantifies and identifies pollutants, such as fine particulate matter (PM_{2.5}) and air toxics, and attributes pollutants to each of the main sources; it also includes modeled exposure contributions.

PM_{2.5} refers to fine inhalable particles with diameters of 2.5 micrometers or smaller. Fine particles are much smaller than the width of a human hair and can travel deep into the lungs and bloodstream, where they can cause or contribute to short-term health effects like bronchitis and asthma attacks, and long-term effects like cancer, heart attack, stroke, and respiratory conditions like emphysema. The technical assessment identifies two-thirds of PM_{2.5} emitted in the PTCA area comes from permitted sources (fuel refineries and industrial uses). Sixty-three percent (63%) of local PM_{2.5} emissions are from the Chevron Refinery; 19% are from fireplaces and water heaters; 7% are from ships, aircraft, rail, and construction equipment; another 7% is from cars, trucks, and buses; and 4% is from industrial facilities, gas stations, and autobody shops. Many of the PTCA Plan's strategies seek to reduce PM_{2.5} emissions and exposure due to its potential to contribute to respiratory diseases, cancer, and heart disease.

Air toxics are pollutants that are known or suspected to cause cancer and other serious health effects such as neurological, reproductive, developmental, cardiovascular, or respiratory conditions. CARB defines over 200 chemicals as air toxics. Some examples of air toxics include diesel particulate matter; particulate metals such as arsenic, manganese, and chromium; and volatile organic gases such as benzene and formaldehyde. The technical assessment evaluates air toxics through air monitoring, emissions inventory development, and modeling. Key local sources of toxic air emissions include fuel refining, vehicle traffic, and marine and rail operations. Many of the PTCA Plan's strategies seek to reduce air toxics because exposure to air toxics increases risks for cancer and chronic health effects, such as asthma.

Turning Problems into Solutions

Community-identified issues and challenges and the technical assessment informed the CSC's development of strategies and actions. Overall, the PTCA Plan includes 140 actions that are grouped into 31 strategies across five community concerns: Commercial and Industrial, Fuel Refining, Marine and Rail, Public Health, and Mobile sources; as well as four cross-cutting issues: Compliance and Enforcement, Land Use, Properly Resourced CERP, and Urban Greening.

Community Steering Committee Brings a Strong Community Voice to the Process

To ensure a strong community voice in the development of the PTCA Plan, in March 2021 the Air District Board of Directors appointed individuals to a CSC to guide the development of the PTCA Plan. The CSC co-developed the plan with the Air District, CARB, local governments, and key implementation partners. The CSC members represent the diverse communities of the PTCA, bringing together an inclusive group of individuals with a range of knowledge and expertise. All the CSC members represent individuals who work, live, or grew up in the area. Since the CSC's first meeting on April 19, 2021, the CSC membership has included local stakeholders, including residents, community leaders, public agency staff, business representatives, and non-profit groups who have worked together and with Air District staff to create the PTCA Plan.

The Air District selected CSC community members through an application process that included completing a Conflict of Interest form. To have an adequately diverse cross-section of the population with opportunities for all to be engaged in the process, the Air District decided that the CSC would have a minimum of 27 and a maximum of 31 members, with two non-voting members to represent local business and industrial companies, including Chevron.

Beginning in April 2021, the CSC scheduled monthly steering committee meetings that were open to the public. The CSC operated under the Brown Act from April 2021 through March 2023, which made community building a challenge. However, one-on-one conversations between CSC members were held in the first few months, laying a foundation of collaboration and trust.

The CSC decided at the February 2023 CSC meeting to request transition to a community-governed governance structure. The Board of Directors voted to dissolve the board-appointed CSC in April 2023. The creation of a community-governed CSC allowed for more community building without the formalities and rigidity that compliance with the Brown Act requires. The community-governed CSC also designated city and government representatives as non-voting members and expanded the two non-voting members of business and industrial companies to include trade unions.

During both the board-appointed CSC and the community-led CSC periods, to keep momentum going between monthly meetings, the CSC formed ad hoc working groups of CSC member volunteers who focused on specific issues and met more frequently than the monthly CSC meetings. These ad hoc working groups worked on CSC Governance issues, Community Outreach, the PTCA Plan’s Vision and Principles, Technical Assessment, and Community Description. The ad hoc groups included strategy and action writing and review teams.

Public Comments and Revisions to Draft Path to Clean Air Plan:

On December 13, 2023, the Air District and the CSC released the Draft PTCA Plan. The public comment and review of the Draft PTCA Plan ended on Friday, January 19, 2024. A Public Workshop was held on January 11, 2024. The Public Workshop was attended by over 70 people, representing Richmond, North Richmond and San Pablo residents, community leaders, business owners, and other stakeholders.

CSC Co-chairs Y’Anad Burrell and Alfredo Angulo and the Air District’s Environmental Justice and Community Engagement Officer, Suma Peesapati made opening remarks at the public workshop. After opening comments, a plenary session provided attendees with an overview AB 617; described the Draft PTCA Plan, including the goals, needs and purposes; highlighted the air quality concerns and sources of air pollution; and spotlighted solutions to air pollution developed in the Draft PTCA Plan. Next, attendees rotated through three breakout rooms to take a closer look at topical areas: Fuel Refining Strategies; Vehicles and Trucks, Streets and Freeways, and Logistics and Warehouses Strategies (“Mobile” Strategies) and Key Leads and Partners. By visiting each of the three breakout rooms, attendees learned more about the selected strategies and how these strategies address air quality and other community concerns the CSC identified in PTCA area. After breakout groups, attendees reconvened together for a final question and answer session.

Forty-eight individuals and organizations submitted comment emails on the Draft PTCA Plan. From the 48 comment emails, Air District staff identified 223 specific comments. These comments, along with staff responses, are summarized in Attachment A. The full text of each comment email is compiled in Attachment B.

The key themes that emerged from the comments include suggestions related to the Draft PTCA Plan’s strategies and actions, calls for more certainty about plan implementation, comments related to air pollution health and the need for popular education, and comments and questions about the technical analysis. The comment summaries are grouped into four key themes: strategies and actions, implementation, health and education, and technical basis.

Air District staff organized the 223 comments into these four themes and evaluated each comment to determine if a substantive or non-substantive change to the Draft PTCA Plan was needed. Substantive changes are modifications that change the meaning, intent, or direction of a strategy or action; identify new action implementation leads; modify the timeline for implementation or impact; or add new findings or factual information. Air District staff made only non-substantive changes to the Draft PTCA Plan to create the Draft Final PTCA Plan. These non-substantive changes included clerical and grammatical changes, and clarifications to make the PTCA Plan more accessible and understandable to the public.

On March 25, 2024, the CSC unanimously approved the Draft Final PTCA Plan.

Compliance with CEQA:

Air District staff have reviewed all aspects of the PTCA Plan and determined that it is exempt from CEQA.

First, as an overall matter, the PTCA Plan is being adopted to benefit the environment and the health of residents of the PTCA area, and all the action items within the PTCA Plan support this goal. Because the PTCA Plan's goal is to protect air quality and public health, its adoption is exempt from CEQA review under Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment.

Second, all the individual strategies set forth in the PTCA Plan would be exempt if they were implemented on their own, apart from adoption of the PTCA Plan. Strategies that would either not cause any physical changes to the environment or involve such minimal physical changes that it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment fall within the commonsense exemption in CEQA Guidelines section 15061(b)(3). Strategies that call for feasibility and planning studies are exempt under Public Resources Code section 21150 and CEQA Guidelines section 15262. Strategies that would result only in the modification of existing facilities or the construction of new minor facilities are exempt under CEQA Guidelines sections 15301 (“Existing Facilities”; class 1) and 15303 (“New Construction or Conversion of Small Structures”; class 3). Strategies that call for information collection, inspections, enforcement, education, and workplace regulations are exempt under CEQA Guidelines sections 15306 (“Information Collection”; class 6), 15309 (“Inspections”; class 9), 15321 (“Enforcement Actions by Regulatory Agencies”; class 21), 15322 (“Educational or Training Programs Involving No Physical Changes”; class 22), and 15324 (“Regulations of Working Conditions”).

Appendix I of the PTCA Plan *Applicability Analysis for California Environmental Quality Act* is attached to this memo as Attachment C.

BUDGET CONSIDERATION/FINANCIAL IMPACT

Resources to prepare the *Path to Clean Air* are included in the FYE 2024 budget. Initial implementation of the approved PTCA Plan is resourced in the FYE 2025 budget; however, ongoing implementation will require additional resources from the state, Air District, and others.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Alison Kirk
Reviewed by: Wendy Goodfriend

ATTACHMENTS:

1. Draft Final PTCA Plan
2. Appendix A: Strategy Actions April 2024
3. Appendix B: Community Description April 2024
4. Appendix C: Emissions & Modeling April 2024
5. Appendix D: Air Monitoring April 2024
6. Appendix E: Enforcement Overview and Findings April 2024
7. Appendix F: CARB Clean Air Pathway Complaints April 2024
8. Appendix G: Community Steering Committee April 2024
9. Appendix H: Outreach & Community Engagement April 2024
10. Appendix I: CEQA Exemption April 2024
11. Appendix J: PTCA List of Community Concerns April 2024
12. Appendix K: Strategy Writing Guide April 2024
13. Attachment A: PTCA Draft Plan Comment Summary and Responses
14. Attachment B: Public Comments Submitted on PTCA Draft Plan
15. Attachment C: Appendix I. Applicability Analysis for CEQA
16. Attachment D: PTCA Strategies
17. Path to Clean Air Richmond-North Richmond-San Pablo Community Emissions Reduction Plan Presentation

The Path to Clean Air

Richmond, North Richmond & San Pablo Community Emissions Reduction Plan

April 2024



**BAY AREA AIR QUALITY
MANAGEMENT DISTRICT**

TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	4
EXECUTIVE SUMMARY	6
Chapter 1: Introduction	8
Chapter 2: Community Steering Committee	10
Chapter 3: Vision and Principles and Plan-level Goals.....	14
Chapter 4: Community Description.....	17
Chapter 5: Air Pollution Overview	22
Chapter 6: Enforcement Overview & Findings.....	60
Chapter 7: Key Issues and Strategies	82
Commercial and Industrial Sources Near Community.....	84
Fuel Refining, Support Facilities, Storage and Distribution	92
Marine and Rail	104
Public Health and Reducing Exposure	110
Vehicles and Trucks, Streets and Freeways, Logistics and Warehouses (“Mobile”)	121
Cross-Cutting Issues	130
Compliance & Enforcement	130
Land Use	132
Resource PTCA Plan Implementation.....	134
Urban Greening	135
Chapter 8: CARB Statewide Strategies.....	138
Chapter 9: Implementation and Reporting.....	147
PTCA Plan Glossary	153

Appendices

- A. Detailed Action Descriptions
- B. Community Description
- C. Supplemental Technical Information – Emissions and Modeling
- D. Air Monitoring
- E. Air District Enforcement Findings
- F. CARB Clean Air Pathway Complaints
- G. Community Steering Committee
- H. Outreach & Community Engagement
- I. California Environmental Quality Act (CEQA) Analysis
- J. List of Community Concerns for the PTCA Community Emissions Reduction Plan
- K. PTCA Strategy Writer’s Guide

DRAFT

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Members of the Community Steering Committee

The members of the Community Steering Committee (CSC) are people who work, live, or grew up in the Path to Clean Air (PTCA) area. They represent various neighborhoods, occupations, public agencies, and industries. CSC members have spent time and energy on developing the PTCA Plan in collaboration with the Air District, CARB, local jurisdictions, and partner agencies and organizations.

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- BK White (Government Representative - City of Richmond Mayor's Office)
- Dave Severy (Resident)
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- Hakim Johnson (Industry Representative - Chevron)
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* Dr. Henry Clark was a longtime Richmond resident and an inspirational member of the Community Steering Committee until his death on June 2, 2022

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EXECUTIVE SUMMARY

In 2017, the California Legislature passed a law (Assembly Bill 617) requiring the state's air districts to partner with communities highly impacted by air pollution to create community-based emissions reduction plans. Since 2018 the Air District has partnered with community members from the Richmond, North Richmond, San Pablo community - otherwise referred to as the Path to Clean Air (PTCA) area. The area's approximately 160,000 residents live, work and spend their time near many air pollution sources, which include oil refining, and other large industrial businesses, freeways, rail yards, a marine port, and many smaller sources. The PTCA was nominated by the Air District and selected by California Air Resources Board (CARB) to develop a Community Air Monitoring Plan in 2018, which was completed in 2021. In 2021 the PTCA area was nominated by the Air District and selected by CARB to develop a Community Emissions Reduction Plan. The resulting PTCA Plan charts a path towards equal partnership in the work to improve local air quality.

The PTCA Community Steering Committee (CSC), representative of members who work, live or grew up in the PTCA area, directed the plan development, while the Air District provided technical and logistical support. Early work between the CSC and the Air District centered on relationship building and balancing power dynamics. For example, CSC norms were established in certain subcommittees to prioritize community voice in a "progressive stack" format wherein people from marginalized groups are selected to speak first at meetings. Similarly, the CSC's consensus process empowered the community to drive decision making by designating local industry representatives and city and government representatives as non-voting members. In 2023, the CSC established a process to revise the Charter as part of the transition from a governing CSC to a community led CSC. The CSC's Governance Ad Hoc changed the Charter to further clarify the statement of purpose, membership makeup and voting requirements, roles and responsibilities, meeting procedures, materials, and participation.

In parallel with relationship building, the CSC and Air District began developing a common understanding of the area's air quality issues. A list of community concerns was developed with CSC input based on a variety of public engagement efforts, from traditional town hall meetings to use of community organizing and Social Pinpoint mapping in which community-members provided information on location-specific community assets and challenges. The community's influence during the assessment phase resulted in successfully leveraging existing social networks to collect over 500 comments documenting the impact of poor air quality in which health consequences from air pollution and physical reactions to air pollution were the most commonly expressed concerns.

In addition to community-identified issues and challenges, the PTCA Plan is based on a comprehensive technical assessment. The technical assessment categorizes air pollution contributions - in terms of both emissions and exposure - for each of the area's main sources such as fuel refining and other industrial activities; cargo ships, rail operations, and construction equipment; goods movement and vehicle traffic; and fireplaces and gas appliances. Findings from the assessment reveal that some of the worst pollution emitters currently operate with Air District permits. The technical assessment quantifies and identifies pollutants, such as fine particulate matter, and attributes pollutants to each of the main sources; it also includes modeled exposure contributions. It is with this detailed assessment that specific strategies were developed to target the most egregious pollution sources, including the Chevron Richmond

Refinery, as well as strategies to target specific pollutants, such as fine particulate matter, which is especially dangerous due to its potential to contribute to cancer, heart attack, stroke, and other respiratory diseases.

The Community Description chapter and appendix document the racial, ethnic and socio-economic composition of the area and provides a stark analysis of the health outcomes of PTCA residents. The PTCA residents are predominantly Latinx, Asian, and Black/African American. Despite a rich history of activism against fossil fuel operations as well as air pollution regulatory initiatives, disparate health outcomes persist. Low-income and Black/African American residents experience higher rates of emergency room visits in comparison to non-White residents, a higher risk of dying from strokes and heart disease, and higher rates of asthma among children and Black residents.

It is within the context of severe pollution burden and associated health disparities that the CSC created PTCA Plan goals to develop more stringent air pollution policies that advance social healing and restoration, to lower the community's disproportionate exposure to air pollution by reducing toxic emissions, to empower the community and to hold government accountable to enforce regulations more effectively on high-polluting industries.

The PTCA Plan was co-written with the CSC members.

Air District staff and CSC members spent several months writing strategies that seek to achieve the community's desired transformation. The PTCA Plan includes a range of strategies, from practical procedural changes to highly ambitious and transformative actions. Rather than limit the expansiveness of strategies, actions include discussion of likely political, fiscal, and legal limitations and potential obstacles, in order to balance expectations. In this way, the PTCA Plan introduces an assertive program of strategies and actions to fundamentally address long standing environmental injustices. The strategies involve moving towards a "just transition" to a renewable energy economy and holding the fuel refining industry accountable. Other far-reaching strategies detailed in the plan include eliminating health disparities by expanding health care to low-income PTCA residents and supporting guaranteed income programs. Many other visionary strategies are contained in the PTCA Plan and it is imperative that the Air District, the CSC, and the multitude of partner agencies responsible for implementation convene and work with the business community to ensure enduring change.

Chapter 1: Introduction

In 2017, the California Legislature passed AB617, requiring the state's air districts engage in a collaborative process between communities highly impacted by air pollution emissions and exposure to create a Community Emissions Reduction Plan that presents a list of strategies to reduce emissions and exposure in these communities. The Richmond-North Richmond-San Pablo community, also known as the Path to Clean Air (PTCA) area, is among these AB617 communities. It comprises the cities of Richmond and San Pablo, and the following unincorporated areas in Contra Costa County: Bay View, East Richmond Heights, Rollingwood, Tara Hills, Montalvin Manor, North Richmond, and El Sobrante.

Under direction and resourcing from the California Air Resources Board (CARB), the Bay Area Air Quality Management District (Air District), along with local community leaders from the aforementioned communities, have worked to develop the PTCA Community Emissions Reduction Plan, also referred to as the PTCA Plan. The PTCA Plan includes strategies to reduce harmful air pollution emissions and exposure that impacts people where they live, work, and play. This process has strived to work alongside the PTCA communities impacted by high cumulative pollution exposure burden. In return, the PTCA communities are empowered to refocus the Air District on local impacts and solutions, led by community priorities.

The Plan lays out a series of measures to be implemented over the next ten years by state, regional, and local agencies to reduce pollution in the community. Throughout several years in the planning phase, a steering committee made up of residents, industry, workers, advocates, and local agencies have met monthly to vet the creation and structure of the PTCA Plan, along with establishing governance structures that will serve for the implementation phase. The PTCA Plan was community driven, written by and designed to serve those in the PTCA community for years to come. The PTCA Plan has many different authors to authentically reflect community interests. The Air District will continue to build and maintain relationships with the community during Plan implementation. Likewise, the Air District will convene and support agency stakeholders in implementing the strategies in the Plan.

Path to Clean Air Plan Overview

Chapter 1 summarizes the purpose and scope of the Plan, including history of AB617 legislation, its implementation through the CARB, and how resources are funneled to the PTCA Plan.

Chapter 2 is information about all Community Steering Committee (CSC) members who were involved in the creation of the Plan, their roles, and their affiliations.

Chapter 3 is the PTCA Plan vision, principles and goals. This framework provides guidance in the form of core values CSC members chose to incorporate in the creation and implementation of the PTCA Plan.

Chapter 4 describes the PTCA community, including the long history of sources generating pollution that impacts the community, such as industrial, port-related, transportation, and other sources.

Chapter 5 describes the pollutants and impacts that are the focus of the Plan; fine particulate matter (PM_{2.5}), diesel particulate matter, cancer risk, and chronic health impacts from toxic air

contaminants. It also goes into exposure assessments, demonstrating which parts of the PTCA area are most impacted.

Chapter 6 describes enforcement processes by the Air District and CARB in the PTCA Plan, along with proposed goals and strategies for each agency to enhance these efforts.

Chapter 7 describes the strategies proposed by the CSC to carry out the goals of the Plan. Action will be needed from many entities, including CARB, Air District, the City of Richmond, City of San Pablo, and others. Proposed actions cover five community concern thematic areas: Commercial & Industrial, Marine & Rail, Public Health and Reducing Exposure, Vehicles and Trucks, Streets and Freeways, Logistics and Warehouses (“Mobile”), and Fuel Refining. In addition, there are Cross-Cutting issues that span more than one topic area: Compliance & Enforcement, Land use, Properly Resource CERP Implementation, and Urban Greening. This chapter includes the Strategies needed to carry out Goals, referencing detailed information that can be found within appendices.

Chapter 8 is an overview of the California Air Resources Board (CARB) Statewide Actions, and how they relate to the PTCA community.

Chapter 9 describes additional steps and structures that will be carried out during the implementation phase of the Plan, along with methods to track implementation of this Plan’s strategies.

Appendices to the Plan include all of the Actions related to Strategies, the detailed technical analysis, enforcement details, community outreach information, and other materials.

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Chapter 2: Community Steering Committee

Overview of the CSC Members and their Affiliations

The Community Steering Committee (CSC) is a diverse group of community members who live and/or work in the PTCA area, and includes high school students, college and university students, health-care and government professionals, educators, activists, architecture and planning professionals; retired elders, people who are relatively new to the area and people who have lived in the area their entire lives; and people who have personally experienced or are closely connected to people with personal experience of health disparities related to poor air quality.

In 2021, community members were selected through an Air District led application process that included completing a Conflict of Interest form. To have an adequately diverse cross-section of the population with opportunities for all to be engaged in the process, the Air District decided that the CSC would have a minimum of 27 and a maximum of 31 members, with two non-voting members who represent local business and industrial companies, including Chevron. In 2023, the CSC moved to a community led governing structure, with designated city and government representatives also considered non-voting members and the two non-voting members representing business and industrial companies expanded to include trade unions.

Starting in April of 2021, the CSC scheduled monthly steering committee meetings that were open to the public. The CSC operated under the Brown Act from April 2021 through March 2023, which made community building a challenge. However, one-on-one conversations between CSC members were held in the first few months, laying a foundation of collaboration and trust. Monthly meetings often included presentations by the Air District to help inform the CSC members of technical issues related to air quality monitoring, permitting, and enforcement. Eventually, with the expiration of AB 2449, the CSC decided at the February 2023 CSC meeting to request transitioning to a community-governed governance structure that allowed the continuation of virtual meetings, and allowed for more community building without the formalities and rigidity that compliance with the Brown Act requires. The transition from a Brown Act CSC to a community-governed CSC became official with a vote at the April 5, 2023, Air District Board of Directors meeting.

To keep momentum going between monthly meetings, the CSC formed ad hoc working groups of small groups of CSC member volunteers who focused on specific issues and met more frequently than monthly CSC meetings. A list of each ad hoc, with short descriptions of their members and purpose, are on the following pages.

Ad Hoc Working Groups

Vision and Principles Ad Hoc

The goal for the Vision and Principles Ad Hoc was to take the collective values and agreements of the CSC and draft the Vision and Principles for the group. It was one of the first action items for the CSC and helped guide the CSC as it moved forward in designing the PTCA Plan, and it is

intended to continue to be a reference during the implementation process of the PTCA Plan. The Ad Hoc grouped the CSC values into five principles: Collaborative and Involved Stakeholders, Community and Equity-Centered, Understandable Information and Data-Driven, Led by Strategy Goals and Prioritizes Effective Strategies, and Follow a Transparent Process and Commit to Restorative Investments.

The Vision and Principles Ad Hoc consisted of six committee members: Nancy Aguirre, Y'Anad Burrell, Philip Mitchell, Kevin G. Ruano Hernandez, David Severy, and Vernon Whitmore.

Technical Assessment Ad Hoc

The goals of the Technical Assessment Ad Hoc were to: build the expertise of the committee members to engage in discussion and inform decisions; conduct a thorough analysis of air pollution data and determine community concerns and the targets that will have the greatest impact to support the key issues statements; and promote clear and effective communication and education by developing meaningful descriptions of air quality issues.

The Technical Assessment Ad Hoc consisted of six committee members: Nancy Aguirre, Marisol Cantú, Luz Gomez, Hakim Johnson, Jeff Kilbreth, Jessica Range, and Kevin G. Ruano Hernandez.

Community Description Ad Hoc

The goal of the Community Description Ad Hoc was to tell the story of the PTCA area; to clearly explain why the CSC was created; and the health and air pollution problems of the PTCA area that the CSC is trying to solve. The Ad Hoc described the demographics and history of the community by incorporating various sources, including the Census, CalEnviroScreen, local policy, and community perspectives from the Town Hall.

The Community Description Ad Hoc consisted of five committee members: Nancy Aguirre, Jeffrey Kilbreth, Kevin G. Ruano Hernandez, Heidi Swillinger, and Vernon Whitmore.

Governance Ad Hoc

The Governance Ad Hoc arose from the need to transition from being an Air District Board of Directors appointed committee to a community governed committee. This transition was timed with the expiration of AB 2449, which allowed Brown Act committees to meet virtually during the Pandemic. The Governance Ad Hoc led an update to the CSC charter in 2023, will continue to make charter revisions as necessary, and is responsible for recruiting and recommending new CSC members to the full CSC for confirmation.

The Governance Ad Hoc consisted of five committee members: Alfredo Rafael Angulo-Castro, Heidi Swillinger, Jessica Range, Marisol Cantú, and Nancy Aguirre.

Problems to Solutions (P2S) Ad Hoc

The Problems to Solutions Ad Hoc began the research and writing process to draft solutions addressing the six areas of community concern and helped ensure a community-driven process.

The Problems to Solutions Ad Hoc including: Nancy Aguirre, Alfredo Rafael Angulo-Castro, Francisco Avila, Marisol Cantú, Jeff Kilbreth, Omoniyi (Niyi) Omotoso, Dave Severy, and Heidi Swillinger.

Problem to Solutions Ad Hoc Writing Teams

The Problems to Solutions Ad Hoc consists of several writing groups that address major air quality sources in the PTCA area. Each writing group, listed below with more detail, was supported by Air District staff. Each working group drafted two to three Key Issues Statements and the solutions related to each statement. The Key Issues were developed from common themes found in the community concerns shared through various platforms such as the Path to Clean Air Social Pinpoint platform, Community Town Hall, and community input from the monitoring plan. The Problems to Solutions Ad Hoc members facilitated a Jamboard brainstorm session during a CSC meeting to collect feedback from CSC members to guide the next steps and to incorporate in the final Plan.

Marine and Rail (M&R)

The Marine and Rail (M&R) writing group addressed reducing diesel emissions, including supporting and advancing CARB's efforts that are already underway, and minimizing the cumulative effects of marine and rail due to the port infrastructure. The M&R writing group consisted of two committee members: Jessica Range and Heidi Swillinger.

Commercial and Industrial (C&I) Sources Near Communities

The Commercial and Industrial (C&I) writing group addressed reducing overall PM exposure, PM_{2.5} exposure, fugitive dust and the variety of commercial and industrial sources, including both large and small operations. The C&I writing group consisted of the two CSC co-chairs and one non-voting member: Y'Anad Burrell and Alfredu Rafael Angulo-Castro and Hakim Johnson.

Public Health and Reducing Exposure

The Public Health writing group addressed reducing vulnerabilities and exposure to air pollution and improving public health data and reporting. The Public Health writing group consisted of four committee members: Jeff Kilbreth, Omoniyi (Niyi) Omotoso, Darlena David, and Simren Sandhu.

Mobile: Vehicles and Trucks, Streets and Freeways, and Logistics and Warehouses

The Mobile writing group addressed high exposure from freight trucks, emissions from fossil-fuel powered vehicles, and streets and freeways. The Mobile writing group consisted of two committee members: Francisco Avila and Dave Severy.

Odors and Smells

The Odor and Smells writing group addressed the deferred maintenance and poor housekeeping from facilities producing odors and the need for expanding compliant system education, outreach, and access. The Odor and Smells writing group consisted of one committee member: Nancy Aguirre.

Refineries: Fuel Refining, Supporting Facilities, Storage, and Distribution

The Refineries writing group addressed the fuel refining sector as the largest source of emissions in the area, persistent flaring coming from this sector, and lack of accountability with Air District Regulations. The Refineries writing group consisted of four committee members: Marisol Cantú, Lizbeth Ibarra, Jeff Kilbreth, and Heidi Swillinger.

Cross-cutting strategies

The Cross-cutting strategies consisted of seven small groups that address topic areas and strategies are relevant to more than one of community concern areas: Land Use was led by Alfredo Rafael Angulo-Castro; Promoting Urban Greening by Dr. Omoniyi Omotoso; Website by Nancy Aguirre; Compliance and Enforcement by Heidi Swillinger; Community Engagement by Nancy Aguirre and Dave Severy; Legislative by Jeff Kilbreth; and Underreported Dangers by Jeff Kilbreth.

To learn more about the CSC please see Appendix G.

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Chapter 3: Vision and Principles and Plan-level Goals

The Vision Statement and Principles

Vision Statement

We envision that all people grow and live in neighborhoods, with human-centered infrastructure planning, including space for our communities to safely be together, free of emission sources and air pollution. The effects of air pollution are known to cause severe health risks that include asthma, cancer, heart disease and other serious long-term health conditions. We envision removing barriers to health equity for all residents, as well as a significant reduction of pollution-driven respiratory illness rates in children. We aim to accomplish this by using effective communication strategies to inform people of elevated health risks in real time, by developing community led efforts to monitor emissions, by holding industry and all polluters accountable, and by strategizing a measurable reduction in emissions and exposure.

Principles

Collaborative and Involved Stakeholders

Serve as effective leaders in collaborating with elected officials to become engaged, accountable, and reflective of our communities' best wishes. Empower long term relationships between grassroots organizations, businesses, and local governments.

Community and Equity-Centered

Through an equity-centered lens, community voices will be at the forefront of this process. The communication tools used to reach community members will be diverse, inclusive, and ensure an understanding of the process.

Understandable Information and Data-Driven

Building on data from the community air monitoring plan to inform community members about the short and long-term effects of health as a result of poor air quality in their neighborhoods. Share information in a format that the community can understand including the use of popular education tools, youth voices, and media to ensure decision making is data driven.

Led by Strategy Goals and Prioritizes Effective Strategies

Prioritize the most effective emissions reduction and monitoring strategies to eliminate sources of pollution to the highest extent possible in a manner that is sustainable for the long-term.

Follow a Transparent Process and Commit to Restorative Investments

Transparency through real-time communication with community members about progress and updates, with an emphasis on ensuring the information reaches everyone at all socioeconomic levels. A commitment to restorative investment in communities that have been disproportionately harmed by environmental injustice.

Development and Use of the Vision and Principles

The Vision and Principles concept was introduced to the CSC in June 2021. The Vision is a description of the future the community wants to see and acts as the guide throughout the process to focus on what the community envisions and hold all stakeholders accountable. The Principles reflect the CSC’s values and help the CSC in their work towards achieving the Vision.

In July 2021, the co-chairs Alfredo Angulo-Castro and Y’Anad Burrell collaborated with Air District staff to create and facilitate a brainstorming activity with the CSC via a Jamboard, an online digital interactive whiteboard that can be accessed by all members to provide ideas. The activity prompted CSC members to share their hopes and dreams for the PTCA Plan, values for the Vision, and Principles that will help achieve the Vision.



Screenshot from CSC Meeting #4 Vision and Principles Jamboard Activity; July 2021

After the brainstorming activity, five CSC members volunteered to work with the co-chairs in an Ad Hoc to debrief on the Jamboard brainstorming activity, group ideas into common themes, and then analyze the themes to draft the Vision and Principles per the CSC’s collective ideas. The Vision and Principles Ad Hoc was composed of a total of seven committee members: Nancy Aguirre, Philip Mitchell, Kevin G. Ruano Hernandez, David Severy, Vernon Whitmore, and co-chair Y’Anad Burrell and Alfredo Angulo-Castro.

In August 2021, the Ad Hoc presented their work to the CSC. This included groupings from the common themes heard in the brainstorming session the month prior and initial draft Vision and Principles. The CSC was asked to review and vote on final draft Vision and Principles in September 2021.

Vision and Principles Guide Plan Development and Implementation

Throughout the development PTCA Plan process, the Vision and Principles helped maintain focus, direction, and proper framing, by creating a shared cohesive set of outcomes understood by all those involved in drafting the Plan.

When the Plan is approved and adopted, it is intended that the Vision and Principles will still be used to guide the continuation of the process. The Principles can serve as accountability tools to ensure that the implementation is collaborative, community- and equity-centered, data-driven, accessible, transparent and reparative to the communities that have been unjustly burdened and harmed by poor air quality.

Additionally, due to the complexity of some of the problems and strategies, the implementation process may be very long-term and will likely involve onboarding new partners. As new partnerships form throughout that process, and in response to the needs of certain strategies, this document can help set intentions and serve as a foundation for those relationships.

Plan-Level Goals

Plan-level Goals are mileposts that will be used during PTCA Plan implementation to help track and report progress. These Goals are intended to be:

- Overarching, high impact
- Exciting, marketable, punchy, help to tell the story, get people interested.
- Center equity to lift up the needs of the most impacted.
- Help align strategies and actions towards an agreed upon outcome.

The CSC worked with the Air District to develop plan-level Goals. The process to create draft and final Goals including a presentation to the CSC about Goals and how they fit into the PTCA effort, time for CSC members to brainstorm individually and share their Goal ideas, and the convening of a CSC member working group. The working group synthesized and organized the Goal ideas into themes and then developed draft and final proposed Goals. The CSC reviewed the final Goals and voted to approve them at the September 2023 meeting.

Goal #1: In pursuit of our right to breathe clean air, promote environmental justice, and ensure the well-being of our residents and workers, our community-driven emissions reduction plan is rooted in Just Transition principles. This plan seeks to address the consequences of historical racial disparities by developing more stringent air pollution policies that advance social healing and restoration.

Goal #2: In pursuit of reducing historically high rates of asthma, cancer, and other chronic health conditions, our plan seeks to lower our community's disproportionate exposure to air pollution by reducing toxic emissions from local sources by 30-50% by 2035.

Goal #3: Through education and engagement, our plan aims to empower our community by providing resources and tools to promote understanding of air pollution and its impact on our health and environment.

Goal #4: Our goal is to hold our government accountable for implementing our plan, including its strategies and actions, to protect our health and environment and effectively enforce regulations on high-polluting industries and other toxic sources of emissions in our community.

Chapter 4: Community Description

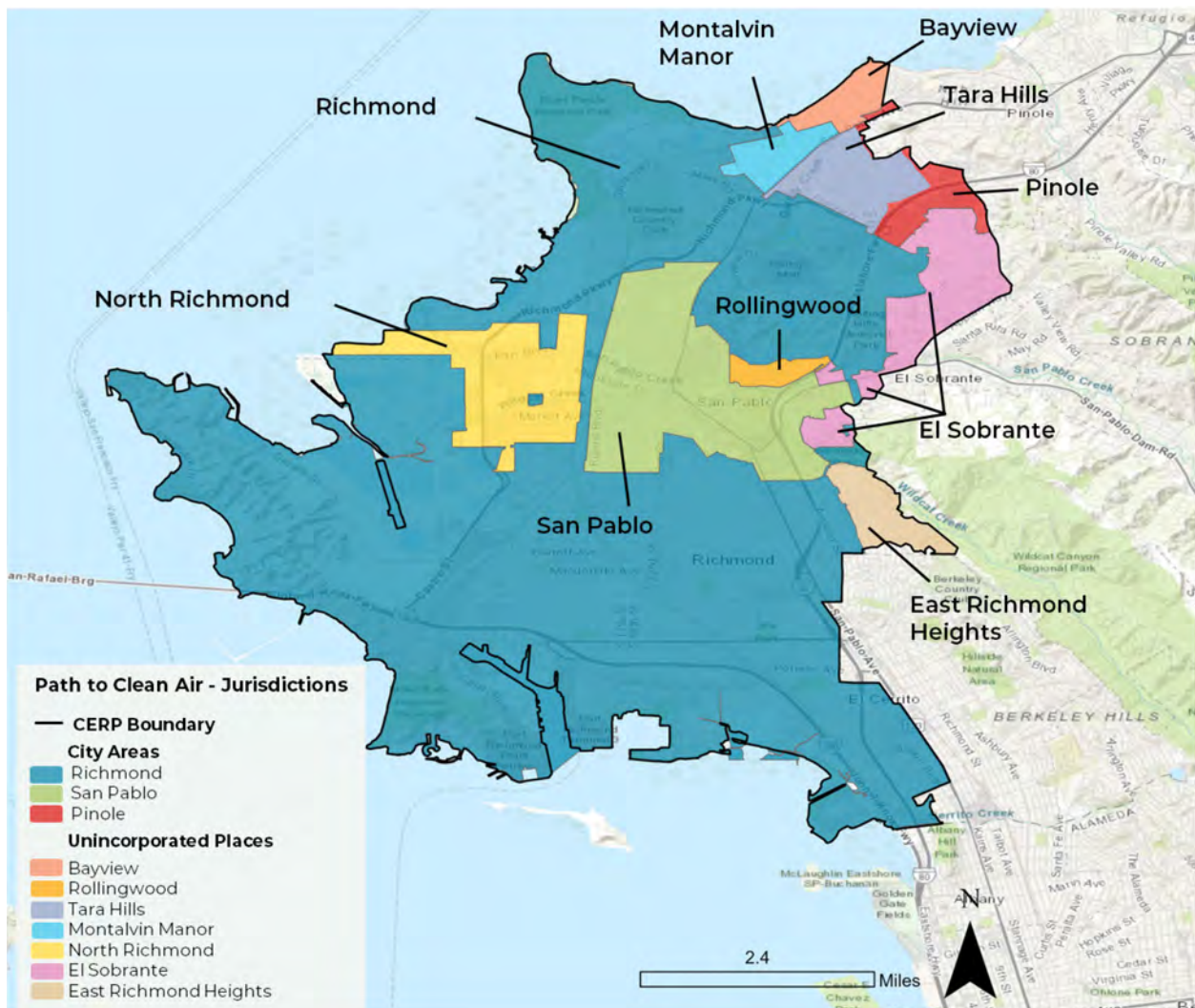


Figure 4-1. Community Emissions Reduction Plan Boundary and Component Geographies.

The PTCA area comprises the cities of Richmond and San Pablo and several unincorporated areas in Contra Costa County including Bay View, East Richmond Heights, Rollingwood, Tara Hills, Montalvin Manor, North Richmond, and El Sobrante (see Figure 4-1). These towns were founded on land originally inhabited by the Ohlone people. Historic activity brought waves of immigration, including many Black workers, to the area’s burgeoning shipbuilding and chemical production industry. Today, communities of color are located adjacent to industrial uses and freeways in which diesel trucks transport goods, resulting in a high pollution-burden.

Situated near the East Bay waterfront, the PTCA community — with a current population of almost 166,450 people — was a magnet for World War II-era industries like shipbuilding, chemical production, and oil refining. In the 1940s, the population surged as many workers, including many people of color, flocked to the area for jobs. This period was part of the Second Great Migration. Black Americans migrated en masse to the West Coast for jobs and a haven from the Jim Crow policies prevalent in the American South that enforced segregation and marginalized

Black communities. Despite their contributions to the region's growth during and after the war, newly arrived Black and Brown people were targets of exclusionary labor and housing policies that continue to negatively affect income, homeownership, mobility, and wealth accumulation to this day.

Today, the PTCA community has become a significant corridor for transporting goods via ship, rail, and 18-wheelers, leading to congested freeways and roads running through residential communities. These transportation corridors include I-580 to the south, I-80 to the east, Richmond Parkway to the west, and San Pablo Avenue through the center of our community. When drivers seek to bypass freeway congestion, traffic spills onto residential streets in the PTCA community. In addition to these transportation corridors, the Chevron Refinery, rail yards, and rail lines associated with the Port of Richmond lie west of the PTCA area.

The Chevron Refinery is by far the largest single generator of emissions in the PTCA community for many air pollutants. For example, the graphic below shows that the Chevron Refinery emits more fine particulate matter and sulfur dioxide than all other contributing sources in our community combined. Chevron also is the largest source of numerous toxic air contaminants, such as hydrogen cyanide, sulfuric acid, manganese, and hydrogen sulfide.

The following are the source sectors of emissions represented in Figures 4-2 and 4-3 below:

- Area Sources: smaller stationary sources of pollution that are geographically dispersed and not covered by the Air District's permit requirements. Examples include residential sources like fireplaces and consumer products. Examples include dry cleaning facilities, oil and natural gas production, industrial boilers fired by coal, wood, and oil, and hazardous waste incineration.
- Off-Road Mobile Sources: mobile sources of air pollution, including locomotives, marine vessels, aircraft, heavy equipment, recreation equipment, and small engines and tools (such as lawnmowers).¹
- On-Road Mobile Sources: mobile sources of air pollution, including motorcycles, passenger cars and trucks, and commercial trucks and buses.²
- Other Point Sources (non-Chevron): other permitted stationary sources of air pollution besides the Chevron refinery, such as factories, power plants, and gas stations that emit various air pollutants.³

¹ Environmental Protection Agency. (n.d.-b). *Mobile sources of air pollution*. EPA. <https://www.epa.gov/mobile-source-pollution/learn-about-how-mobile-source-pollution-affects-your-health#:~:text=Mobile%20sources%20of%20air%20pollution,-Mobile%20sources%20of&text=On%2Droad%20vehicles%20include%3A,Commercial%20trucks%20and%20buses>

² Ibid.

³ Environmental Protection Agency. (n.d.-c). *Stationary Sources of Air Pollution*. EPA. <https://www.epa.gov/stationary-sources-air-pollution>

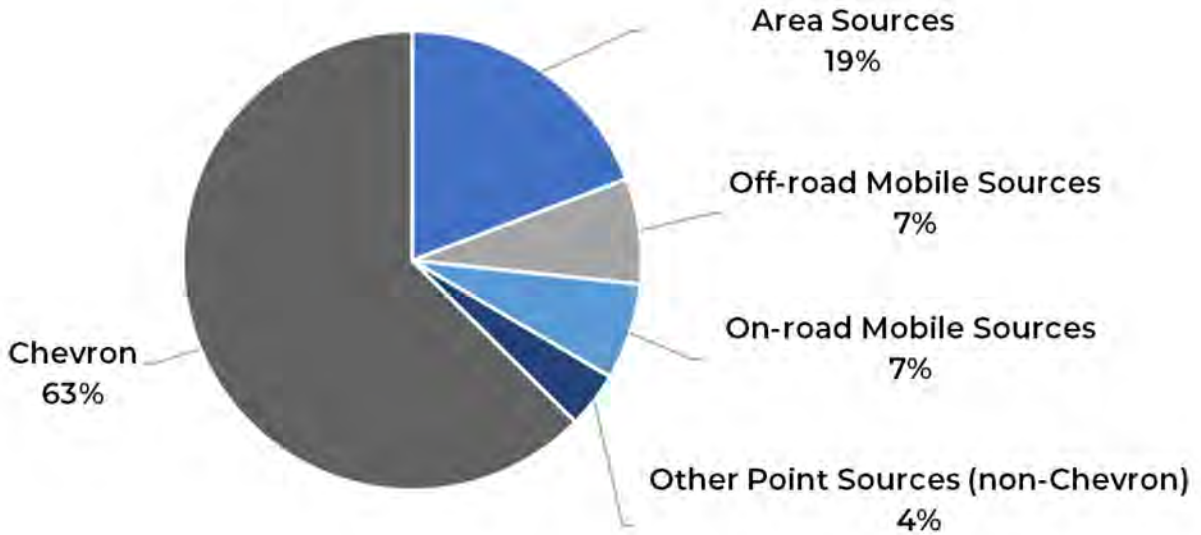


Figure 4-2. 2019 PM2.5 Emissions for the PTCA Community by Source Sector; Source: BAAQMD

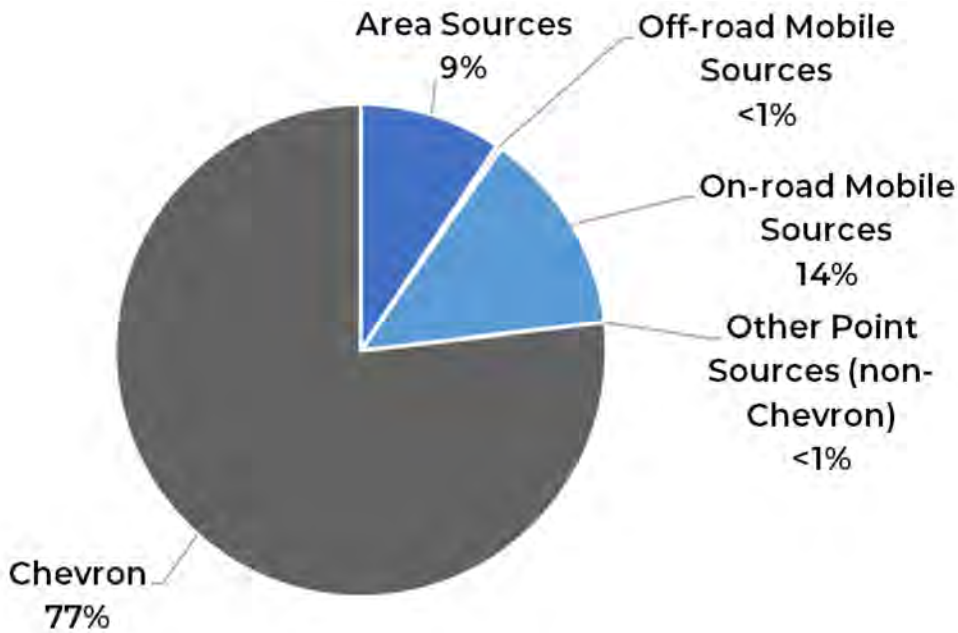


Figure 4-3. 2019 Manganese Emissions for the PTCA Community by Source Sector; Source: BAAQMD

In the PTCA community, more than 50% of residents are Black, indigenous, and people of color (BIPOC) – a higher proportion than BIPOC people living in the rest of Contra Costa County. Communities of color disproportionately live in close proximity to the Chevron Refinery, the major source of air pollution in our area, and/or within 1,000 feet of a freeway or railway. Our

population of unhoused people experiences even more pollution exposure from local sources than housed residents.

Due to these compounding factors, residents in census tracts near Chevron, freeways, and railroads experience some of the highest pollution burdens in the state, according to CalEnviroScreen 4.0. Most census tracts in the PTCA community experience higher-than-state-average rates of asthma, heart attack emergency department visits, and incidences of babies born with low birth weight. These health outcomes disproportionately affect people of color.

One-third of PTCA community members reside in low-income households that make less than half the area median income of \$103,599. The Area Median Income (AMI) is the midpoint of a region's income distribution, where half of the families in a region earn more than the median income and half earn less than the median income. In addition, when compared to the rest of our county, fewer PTCA community members have health insurance coverage or are in the labor force. When compared to the rest of the county, the number of people with less than a high school level of education is twice as high. In the PTCA community, white people, followed by Asian people, comprise the highest proportion of those with a higher education degree.

PTCA residents are employed mostly in the fields of education, health, and social assistance. Other large employment areas are administration, arts, entertainment, accommodation, food services, construction, transportation and warehousing, and utilities.

In low-income census tracts of our county, many people live more than half a mile from a grocery store. The PTCA community, however, has the most census tracts in which many households have low food access, defined as living more than one-half mile from the nearest supermarket, supercenter, or large grocery store, and no car access - potentially hindering their ability to travel to a grocery store.

According to elections data from 2018 (the last election data available), our residents have among the lowest voter participation rates in our county. Despite this, residents are profoundly cognizant and concerned about air pollution and its impact on our lives. The PTCA community has a deep history of environmental and social justice activism. Community members have formed coalitions to stand against fossil fuel operations, primarily led by Black and Brown activists. The West County Toxics Coalition, for example, was formed in 1986 to empower low-income residents in communities of color to exercise greater control over environmental problems generated by the Chevron Refinery and other sources of pollution.⁴ Communities for a Better Environment has similarly advocated strongly for greater emissions restrictions from the refinery and decreasing greenhouse gas emissions from Richmond facilities.⁵ In the 1960s, the Black Panther Party had a heavy presence in communities like North Richmond, working to meet the needs of Black and Brown communities ignored by decision-makers.⁶

Historically, the PTCA communities of color were sited next to industrial sites due to many factors, including racist policies that allowed for the institution of racial covenants and discriminatory lending, which created and enforced residential segregation. Racial covenants were legal attempts to prohibit people of color from purchasing or living in homes in certain areas designated as white communities, which resulted in residential segregation throughout the

⁴ West County Toxics Coalition. <http://www.westcountytoxicscoalition.org/>. Accessed 13 June 2022.

⁵ Richmond | Communities for a Better Environment. <https://www.cbecal.org/organizing/northern-california/richmond/>. Accessed 13 June 2022.

⁶ Richmond Pulse - New Exhibit Highlights Richmond's Connection to Black Panthers. 1 Feb. 2016, <https://richmondpulse.org/2016/01/31/new-exhibit-highlights-richmonds-connection-to-black-panthers/>.

country.⁷ Lending discrimination is when lenders make decisions related to mortgage applications based on factors such as a person's race. While the local and state government no longer enforces such segregation, the legacy of generations of disinvestment and abandonment lingers today, as seen by our contrasting health outcomes compared to wealthier, whiter parts of Contra Costa County.

See Appendix B Community Description, for additional historical context and demographic, pollution exposure and health data.

This community description is dedicated to the memory of Dr. Henry Clark, a pioneer of the Bay Area's environmental justice movement. A longtime Richmond resident,⁸ Dr. Clark was an inspirational member of the Community Steering Committee until his death on June 2, 2022.

Our work would not have been possible without the contributions of Bay Area Air Quality Management District staffer Lily MacIver, who tracked down, coherently presented, and helped us interpret vast amounts of data necessary to accurately describe our community and the challenges it faces from air pollution.

⁷ California Land Title Association. (n.d.). Discriminatory Racial Covenants and their Removal from Antiquated Real Property Records. <https://www.clta.org/page/Consumer18>

⁸ Bernard, S. (2018, December 12). *Henry Clark and three decades of environmental justice*. Richmond Confidential. <https://richmondconfidential.org/2012/12/06/henry-clark-and-three-decades-of-environmental-justice/>

Chapter 5: Air Pollution Overview

To support the development of the Plan, the Air District worked closely with the CSC to conduct an extensive technical assessment of air pollution sources and impacts in the PTCA area. This assessment was organized around key steps in the air pollution pathway shown in Figure 5-1, which leads from emissions of air pollution to potential health effects. To characterize the first step in the pathway, a baseline emissions inventory was developed that quantified the amount of air pollutants discharged into the atmosphere by sources within the PTCA area. Ambient pollutant concentrations were then evaluated using monitoring and modeling methods, which provide different but complementary types of information. Air quality monitors measure the concentration of specific air pollutants at selected locations, capturing the effects of all pollution sources and allowing changes in air quality to be tracked over time. Air quality models supplement this information by providing an estimate of pollutant concentrations at unmonitored locations and under projected future conditions. Modeling was also used to provide more detailed information on the relationship between specific sources of emissions and pollutant concentrations. Lastly, human exposures and health risks resulting from local emission sources were assessed by combining modeled pollutant concentrations with population data and toxicity factors.



Figure 5-1. The air pollution pathway from emissions to health effects.

This chapter provides a summary of key findings from the technical assessment, including insights from both monitoring and modeling activities. Some of the key findings discussed in this chapter include:

- Air monitoring data showed that levels of some pollutants, including fine particulate matter (PM_{2.5}) and certain toxic air contaminants (TACs), have not improved over the past ten years.
- Local air monitoring projects revealed how air quality can vary from place to place within the PTCA area, as well as occurrences of higher levels of pollutants that may be associated with specific local pollution sources.
- The 2019 baseline emissions inventory assembled for the PTCA area shows that the Chevron refinery and related fuel refining sources accounted for over half of local emissions of numerous pollutants, including sulfur oxides (SO_x), PM_{2.5}, manganese, nickel, and hydrochloric acid.
- An exposure analysis indicated that fuel refining and on-road mobile source sectors combined accounted for about three-fourths of the annual average residential PM_{2.5} exposure and about 90% of the population-weighted score for non-cancer health effects from TACs attributable to local sources within the PTCA community.

More detailed findings that support specific Plan strategies and actions are presented in Chapter 7 and supplementary technical information is provided in Appendices C (modeling) and D (monitoring).

Types of Air Pollutants

Several factors influence air pollution levels in the PTCA area, including emissions from local sources within the PTCA area, emissions from sources outside the PTCA area, chemical reactions between different pollutants after they are emitted, and meteorological conditions. Sources of air pollution are wide-ranging and include anthropogenic sources like commercial and industrial facilities, motor vehicles, trains, ships, and residences, as well as natural sources like wildfires and airborne sea salt. Certain pollution sources or operations produce multiple pollutants at the same time, such as burning fuels or other materials.

Two main categories of air pollutants are Criteria Air Pollutants (CAPs) and Toxic Air Contaminants (TACs), as summarized in Table 5-1. CAPs are six common air pollutants that harm human health and are pollutants that the U.S. Environmental Protection Agency (U.S. EPA) sets standards for under the Clean Air Act, called the National Ambient Air Quality Standards (NAAQS).⁹ California also has ambient air quality standards (CAAQS) for several air pollutants.¹⁰ The original CAAQS predate the creation of the U.S. EPA and its first NAAQS, and some of the existing CAAQS are more stringent than the NAAQS. However, attainment of the NAAQS has precedence over attainment of the CAAQS. TACs are pollutants that are known or suspected to cause cancer or other serious health effects.¹¹ Of these pollutants, particulate matter and various TACs are of higher concern due to their health impacts and the numerous sources of these pollutants in the PTCA area.

Table 5-1. Categories and examples of air pollutants.

Pollutant Category	Description	Pollutants in this Category
Criteria Air Pollutants (CAPs)	Six common air pollutants that harm human health and have NAAQS set by the U.S. EPA	<ul style="list-style-type: none"> • Ozone (O₃) • Particulate matter (PM_{2.5} and PM₁₀) • Carbon monoxide (CO) • Nitrogen dioxide (NO₂) • Sulfur dioxide (SO₂) • Lead (Pb)
Toxic Air Contaminants (TACs)	TACs include over 200 pollutants identified by CARB that are known or suspected to cause cancer or other serious health effects	<p>Examples of TACs:</p> <ul style="list-style-type: none"> • Benzene, toluene, ethylbenzene, xylene (BTEX), which are volatile organic compounds (VOCs) found in gasoline and released through combustion of fossil fuels • Diesel particulate matter (DPM), resulting from combustion of diesel fuel • Certain metals such as mercury, chromium, and arsenic

⁹ U.S. EPA webpage on Criteria Air Pollutants: <https://www.epa.gov/criteria-air-pollutants>

¹⁰ CARB webpage for the California Ambient Air Quality Standards: <https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards>

¹¹ CARB webpage on Toxic Air Contaminants: <https://ww2.arb.ca.gov/resources/documents/carb-identified-toxic-air-contaminants>

PM_{2.5} refers to fine inhalable particles with diameters of 2.5 micrometers or smaller.^{12,13} Fine particles are much smaller than the width of a human hair, as illustrated in Figure 5-2, and can travel deep into the lungs and bloodstream, where they can cause or contribute to short-term health effects like bronchitis and asthma attacks, and long-term effects like heart disease and respiratory conditions like emphysema. PM_{2.5} can be directly emitted into the air (referred to as primary PM) or can form in the air through complex reactions of other pollutants that are emitted as gases (often referred to as secondary PM_{2.5}). PM_{2.5} is emitted from many sources, notably the combustion of fossil fuels for industrial operations; by cars, trucks, and other on-road mobile sources; and off-road mobile sources such as trains, ships, tugboats, recreational watercraft, and construction equipment. Other combustion sources of PM_{2.5} include residential wood stoves and fireplaces, certain restaurants, and diesel generators. There are non-combustion sources of PM_{2.5}, such as dust from unpaved surfaces, vehicle brakes, and facilities with sand, gravel, and metal operations. Natural sources of PM_{2.5} emissions include wind-blown dust and sea salt, and biogenic sources that contribute to particle formation.

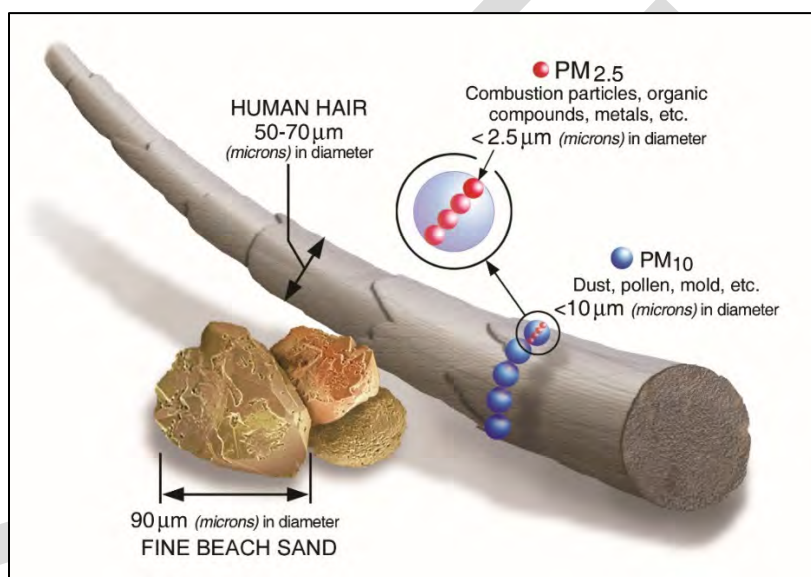


Figure 5-2. Illustration of size comparisons for types of particulate matter. Image source: U.S. EPA.

Particulate matter comes in many shapes, sizes, and compositions. Black carbon, commonly known as soot, is a component of particulate matter. Black carbon is correlated with diesel particulate matter, which is of particular health concern because of its toxicity. Another category of particulate matter is ultrafine particles, which are particles with diameters of less than 0.1 micrometers. These very small particles can travel farther into the body and cause adverse health effects. The health effects of different components and sizes of particulate matter is an active and evolving area of scientific research.¹⁴

¹² CARB webpage on Inhalable Particulate Matter and Health (PM_{2.5} and PM₁₀): California Air Resources Board.

<https://ww2.arb.ca.gov/resources/inhalable-particulate-matter-and-health>

¹³ U.S. EPA webpage on Particulate Matter (PM) Basics: <https://www.epa.gov/pm-pollution/particulate-matter-pm-basics>

¹⁴ For more information on the health effects of ultrafine particles (UFP), see:

<https://www.nature.com/collections/bjiefcddb>; <https://link.springer.com/article/10.1007/s00038-019-01202-7>; or <https://www.liebertpub.com/doi/abs/10.1089/089426802320282310>.

TACs, also referred to as air toxics, are pollutants that are known or suspected to cause cancer and other serious health effects such as neurological, reproductive, developmental, cardiovascular, or respiratory conditions. There are over 200 substances or groups of substances in the list of TACs as defined by CARB. Some examples of TACs include diesel particulate matter; particulate metals such as arsenic, manganese, and chromium; and volatile organic gases such as benzene and formaldehyde. Sources of different TACs vary by specific contaminant, and many TACs are co-emitted during combustion or evaporation of fuels. The California Office of Environmental Health Hazard Assessment (OEHHA) has developed Reference Exposure Levels (RELs) for non-cancer health impacts for chronic (annual), 8-hour, and acute (1-hour) exposures for many TACs, which can be compared with measured or modeled TAC data.¹⁵ The REL is the concentration level at or below which no adverse non-cancer health effects are expected for the specified chronic, 8-hour, or 1-hour exposure. Examples of non-cancer chronic health effects include damage to the respiratory, nervous, immune, and reproductive systems and neurological and developmental disorders. At higher levels, exposure to TACs can cause acute health effects such as headaches, nausea, respiratory irritation and asthma episodes, and irritation of the eyes, nose, throat, and skin. OEHHA also establishes cancer potency factors for TACs. Additional metrics to assess the impacts of the combination of different TACs, including cancer risk and chronic hazard index (HI), are described in the Model-Based Exposure Assessment section found later in this chapter (see footnotes 26 and 27).

Air Quality Monitoring

Air quality monitoring systems measure levels of different pollutants in the air, providing information about how much pollution people may be exposed to. There are several air monitoring systems and networks in operation within the PTCA area. Air monitoring efforts are conducted by different organizations and agencies, and the data they collect include different pollutants and have different purposes and end uses. The PTCA Air Monitoring Reference Guide provides more information on these different monitoring systems.¹⁶

Ambient air quality monitoring provides information on the outdoor air we breathe in our neighborhoods and communities. There are several methods for monitoring ambient air quality, each with different purposes, strengths, and limitations. However, no single monitoring system can inform every aspect of air quality and air monitoring is not feasible in all places at all times and for all pollutants. Air monitoring data reflect the combined impacts of pollution emissions and influences from meteorological conditions and chemical reactions in the atmosphere, some of which may not be included or may have considerable uncertainty in emissions inventories or air quality modeling.

The Air District operates a multi-pollutant network of long-term air monitoring sites across the Bay Area.¹⁷ Data provided by the Air District's network can help characterize long-term air quality trends and is used for comparison with health-based standards, in particular, the NAAQS set by the EPA.¹⁸ The Air District's network includes a monitoring site in San Pablo (on Rumrill Blvd. near Market Ave.), in Richmond (at 7th Street and Hensley Street), and in Point Richmond. The Air District also requires Chevron to conduct air monitoring at or near the refinery fence line for

¹⁵ OEHHA's Summary of Acute, 8-hour and Chronic Reference Exposure Levels (RELs): <https://oehha.ca.gov/air/general-info/oehha-acute-8-hour-and-chronic-reference-exposure-level-rel-summary>

¹⁶ Air Monitoring Data Reference Guide for the Path to Clean Air area: <https://www.baaqmd.gov/~/media/files/ab617-community-health/richmond/quarterly-report-documents/ptca-monitoring-data-inventory-pdf.pdf?la=en>

¹⁷ The Air District's Annual Air Monitoring Network Plan (2023): https://www.baaqmd.gov/~media/files/technical-services/2023_network_plan-pdf.pdf?la=en

¹⁸ Description of U.S. EPA's health-based NAAQS: <https://www.epa.gov/air-trends/air-quality-design-values>

compliance with several EPA and Air District requirements. Air District Regulation 9, Rule 1 (Rule 9-1)¹⁹ and Regulation 9, Rule 2 (Rule 9-2)²⁰ require ground-level monitoring of sulfur dioxide (SO₂) and hydrogen sulfide (H₂S), respectively, and Air District Regulation 12, Rule 15 (Rule 12-15) requires certain monitoring along the refinery fenceline.²¹ Chevron also operates three in-community air monitoring stations as part of an agreement with the City of Richmond.²² The specific pollutants measured by Air District and Chevron monitoring sites and systems in the PTCA area are listed in Table 1. Figure 5-3 shows a map of Air District-operated and Chevron-affiliated monitoring sites in the PTCA area.

Table 5-2. Monitoring conducted by the Air District or Chevron in the PTCA area. Measurement abbreviations: ozone (O₃), carbon monoxide (CO), nitrogen oxide (NO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), hydrogen sulfide (H₂S), particulate matter (PM). Meteorological measurements generally include temperature, wind speed, and wind direction.

Monitoring Organization or Program	Monitoring Location	Pollutants and Parameters Measured
Air District	San Pablo (Rumrill Blvd.)	O ₃ , CO, NO, NO ₂ , SO ₂ , PM ₁₀ , PM _{2.5} , selected air toxics
Air District	Richmond (7 th Street)	SO ₂ , H ₂ S, Air Toxics
Air District	Point Richmond	H ₂ S
Chevron-Ground Level Monitoring	Chevron Castro	SO ₂ and H ₂ S
Chevron-Ground Level Monitoring	Chevron Golden Gate	SO ₂ and H ₂ S
Chevron-Ground Level Monitoring	Chevron Gertrude	SO ₂ , H ₂ S, Meteorology
Chevron-Richmond Community Monitoring	Atchison Village	Black Carbon, PM _{2.5} , H ₂ S, Benzene, Toluene, Ethylbenzene, m,p-Xylene, o-Xylene, Ammonia, n-Heptane, n-Hexane, 3-Methylpentane, n-Octane, 1,2,3-Trimethylbenzene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, 2,2,4-Trimethylpentane, Meteorology
Chevron-Richmond Community Monitoring	North Richmond	Black Carbon, PM _{2.5} , H ₂ S, Benzene, Toluene, Ethylbenzene, m,p-Xylene, o-Xylene, Ammonia, n-Heptane, n-Hexane, 3-Methylpentane, n-Octane, 1,2,3-Trimethylbenzene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, 2,2,4-Trimethylpentane, Meteorology
Chevron-Richmond Community Monitoring	Point Richmond	Black Carbon, PM _{2.5} , H ₂ S, Benzene, Toluene, Ethylbenzene, m,p-Xylene, o-Xylene, Ammonia, n-Heptane, n-Hexane, 3-Methylpentane, n-Octane, 1,2,3-Trimethylbenzene, 1,2,4-

¹⁹ Air District Regulation 9, Rule 1: Sulfur Dioxide: <https://www.baaqmd.gov/rules-and-compliance/rules/reg-9-rule-1-sulfur-dioxide>

²⁰ Air District Regulation 9, Rule 2: Hydrogen Sulfide: <https://www.baaqmd.gov/rules-and-compliance/rules/reg-9-rule-2-hydrogen-sulfide>

²¹ Air District Regulation 12, Rule 15: Petroleum Refining Emissions Tracking: <https://www.baaqmd.gov/rules-and-compliance/rules/regulation-12-rule-15-petroleum-refining-emissions-tracking>

²² Data from Chevron-operated air monitoring systems are available in real-time: <https://www.richmondairmonitoring.org/measurements.html>

Monitoring Organization or Program	Monitoring Location	Pollutants and Parameters Measured
		Trimethylbenzene, 1,3,5-Trimethylbenzene, 2,2,4-Trimethylpentane, Meteorology
Chevron-Fenceline Monitoring	Along refinery fenceline	Benzene, Toluene, Ethylbenzene, p-xylene, H ₂ S, SO ₂ , Butane, Ethane, Methane, Propane, Pentane



Figure 5-3. Locations of Air District-operated monitoring sites and selected Chevron-affiliated monitoring sites and systems in the PTCA area.

Comparing measured concentrations of pollutants in the air to EPA’s health-based NAAQS is one way to assess air quality in terms of health impacts. This comparison uses a statistic called a design value. Each year, for each air monitoring site, a design value is calculated using measured pollutant concentrations over the past three years.²³ Tracking how design values change over time provides information on whether overall air quality is improving, worsening, or holding steady relative to air quality standards, and helps illustrate how design values can vary across different locations and for different pollutants. Design values for annual average and 24-hour PM_{2.5}, 8-hour ozone, and 1-hour nitrogen dioxide for the San Pablo air monitoring site are

²³ EPA Air Quality Design Values website: <https://www.epa.gov/air-trends/air-quality-design-values>.

below their respective NAAQS levels (Table 5-3). However, reductions in PM_{2.5} concentrations at levels below the NAAQS have been shown to have health benefits. EPA is currently considering lowering (in this case strengthening) the existing NAAQS for annual PM_{2.5} to a level between 9 and 10 micrograms per meter cubed (µg/m³), and the annual average PM_{2.5} design value for the San Pablo air monitoring site may be above the new standard.²⁴

Table 5-3. Design values (2020-2022) for fine particulate matter (PM_{2.5}), ozone, and nitrogen dioxide at the San Pablo monitoring site. Units are in micrograms per meter cubed (µg/m³), parts per million (ppm), or parts per billion (ppb), depending on pollutant.

National Ambient Air Quality Standard	Level of the NAAQS	San Pablo Monitoring Site 2020-2022 Design Value
Annual PM _{2.5} (2012 standard)	12 µg/m ³	10.0 µg/m ³
24-Hour PM _{2.5} (2006 standard)	35 µg/m ³	27 µg/m ³
8-Hour Ozone (2015 standard)	0.70 ppm	0.52 ppm
1-Hour Nitrogen Dioxide (2010 standard)	100 ppb	32 ppb

The design value for annual PM_{2.5} assesses long-term, or chronic, exposure to PM_{2.5}, while the design value for 24-hr PM_{2.5} assesses exposure to shorter-duration PM_{2.5} episodes. Design values for annual PM_{2.5} at Air District monitoring sites, including the San Pablo air monitoring site, have remained below the NAAQS (Figure 5-4). In some years, the San Pablo monitoring site had one of the higher design values for annual PM_{2.5} among other Air District monitoring sites. While significant progress was made in the past, annual average PM_{2.5} concentrations have not notably increased (worsened) or decreased (improved) in the last ten years.

The 24-hour PM_{2.5} design value, as opposed to the annual PM_{2.5} design value, is much more strongly affected by shorter-term air quality events, such as smoke from wildfires. In recent years, wildfire smoke contributed to numerous occurrences of high 24-hour PM_{2.5} concentrations across the Bay Area, leading to design values above the NAAQS (Figure 5-5). Outside of the recent years with severe wildfire events, the 24-hour PM_{2.5} design values were below the current 24-hr PM_{2.5} NAAQS.

Design values for 8-hour ozone (Figure 5-6) and 1-hour nitrogen dioxide (Figure 5-7) have been well below the NAAQS at the San Pablo monitoring site for the last decade. Ozone forms in the atmosphere from reactions of other pollutants, especially under sunny, hot weather conditions. In the Bay Area, ozone levels are generally higher farther inland from the coast and Bayshore. Nitrogen dioxide (NO₂) and other nitrogen oxides (NO_x) react with other pollutants to form both particulate matter and ozone.

²⁴ EPA Press Release on reconsideration of the PM NAAQS, January 2023: <https://www.epa.gov/pm-pollution/proposed-decision-reconsideration-national-ambient-air-quality-standards-particulate>

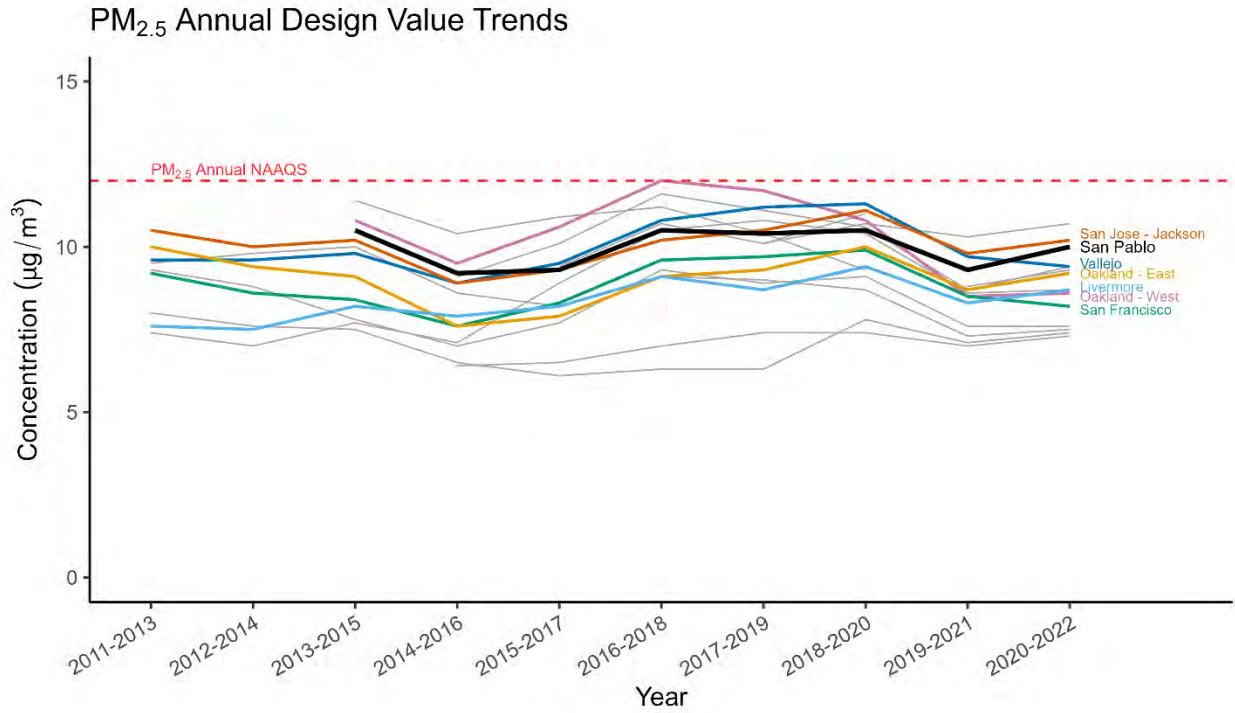


Figure 5-4. Design values for annual PM_{2.5} at Air District monitoring sites. Each line represents design values at a different monitoring site. Grey lines denote design values for Air District monitoring sites that are not otherwise labeled. Design values for annual PM_{2.5} have not notably increased (worsened) or decreased (improved) over the past ten years.

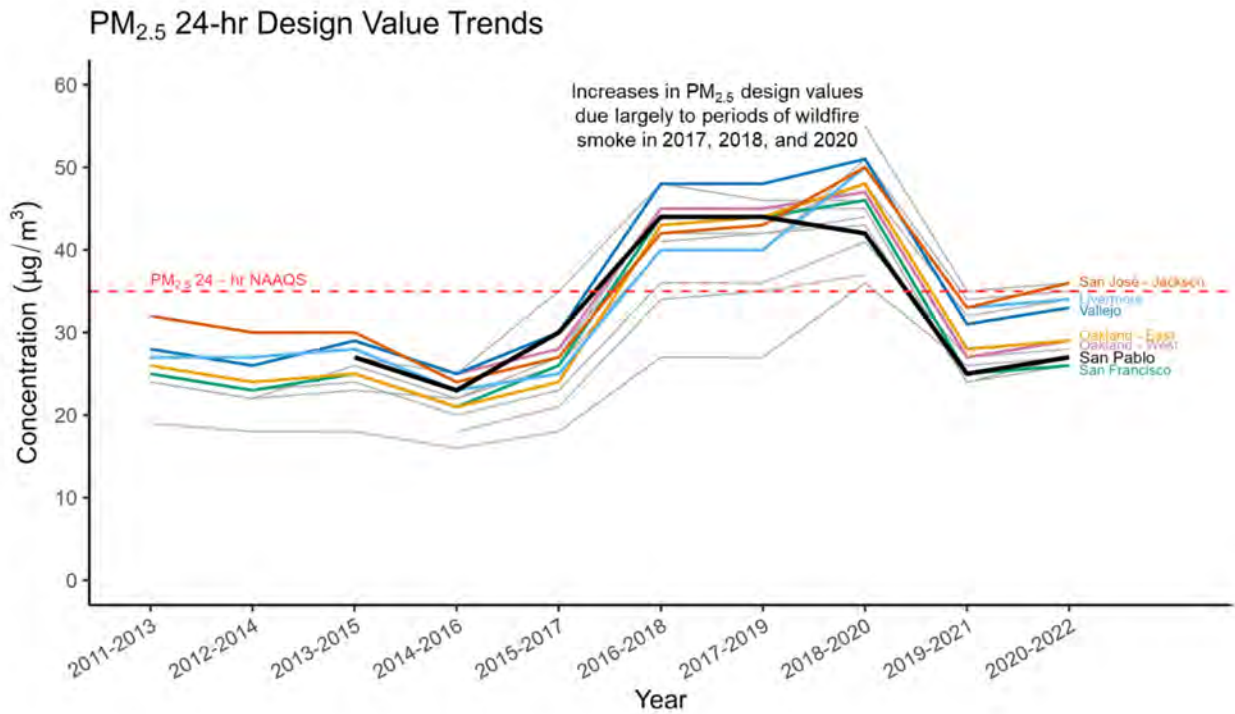


Figure 5-5. Design values for 24-hr PM_{2.5} at Air District monitoring sites. Each design value represents three years of data. Grey lines denote design values for Air District monitoring sites that are not otherwise labeled. Smoke from wildfires was the main driver for increases in 24-hr PM_{2.5} design values in recent years.

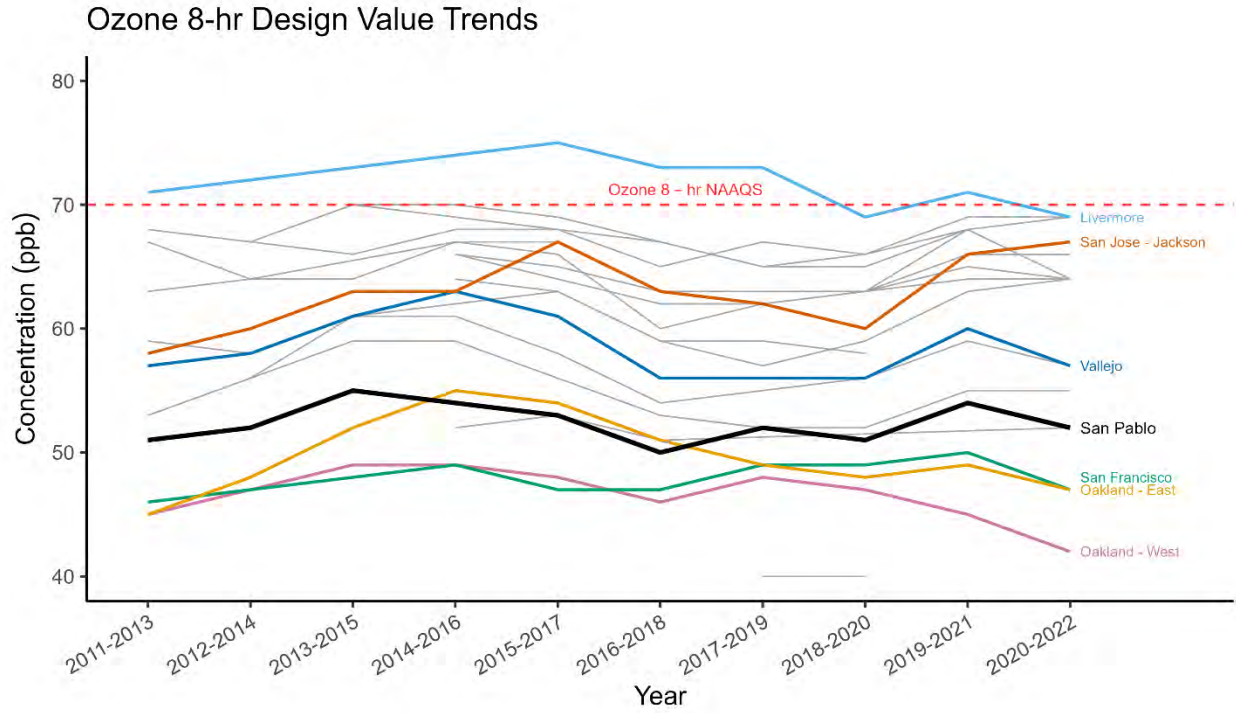


Figure 5-6. Design values for 8-hr ozone at Air District monitoring sites. Grey lines denote design values for Air District monitoring sites that are not otherwise labeled. Design values for 8-hr ozone at the San Pablo monitoring site have remained well below the NAAQS for the past ten years.

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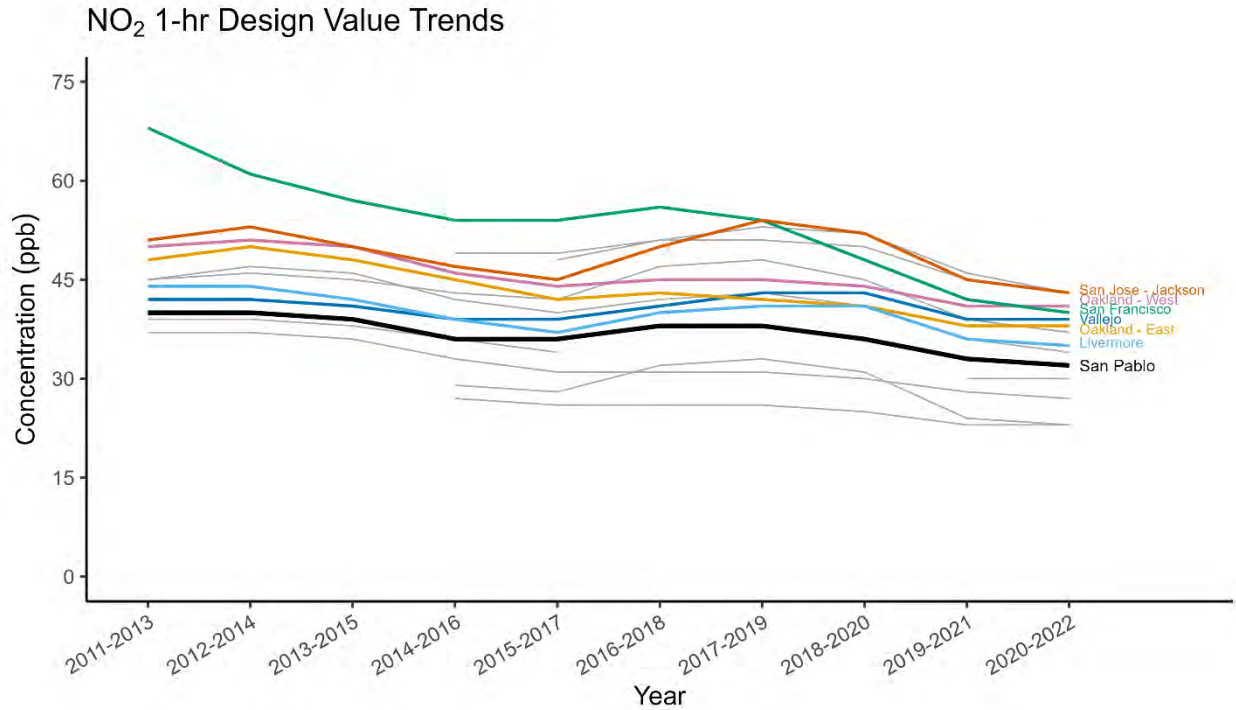


Figure 5-7. Design values for 1-hr nitrogen dioxide (NO₂) at Air District monitoring sites. Grey lines denote design values for Air District monitoring sites that are not otherwise labeled. Design values for 1-hr NO₂ at the San Pablo monitoring site have remained well below the NAAQS for 1-hr NO₂ of 100 ppb for the past ten years.

While design values (using 3-year averages) are intended for comparisons with the NAAQS, assessing air quality measurements on shorter time scales, such as on an annual, daily, and even hourly basis, reveals additional information about how air quality changes over time in different locations. Annual average PM_{2.5} concentrations at the Air District’s monitoring sites from 2013-2022 are shown in Figure 5-8, and the bold blue line represents PM_{2.5} concentrations at the San Pablo monitoring site. Over the 10-year period shown, annual PM_{2.5} concentrations fluctuate due to changes in emissions and meteorology. In some recent years, smoke from wildfires caused significant air quality impacts in the Bay Area and contributed to higher PM_{2.5} concentrations, notably in 2017, 2018, and 2020. The site with the highest annual average PM_{2.5} concentration, or peak site, varies from year to year. San Pablo has often been one of the sites with higher annual average PM_{2.5} concentrations. The NAAQS for annual-average PM_{2.5} of 12 µg/m³ is shown for reference as well, though having one year, or one value, over that standard does not in itself indicate a violation of the standard.

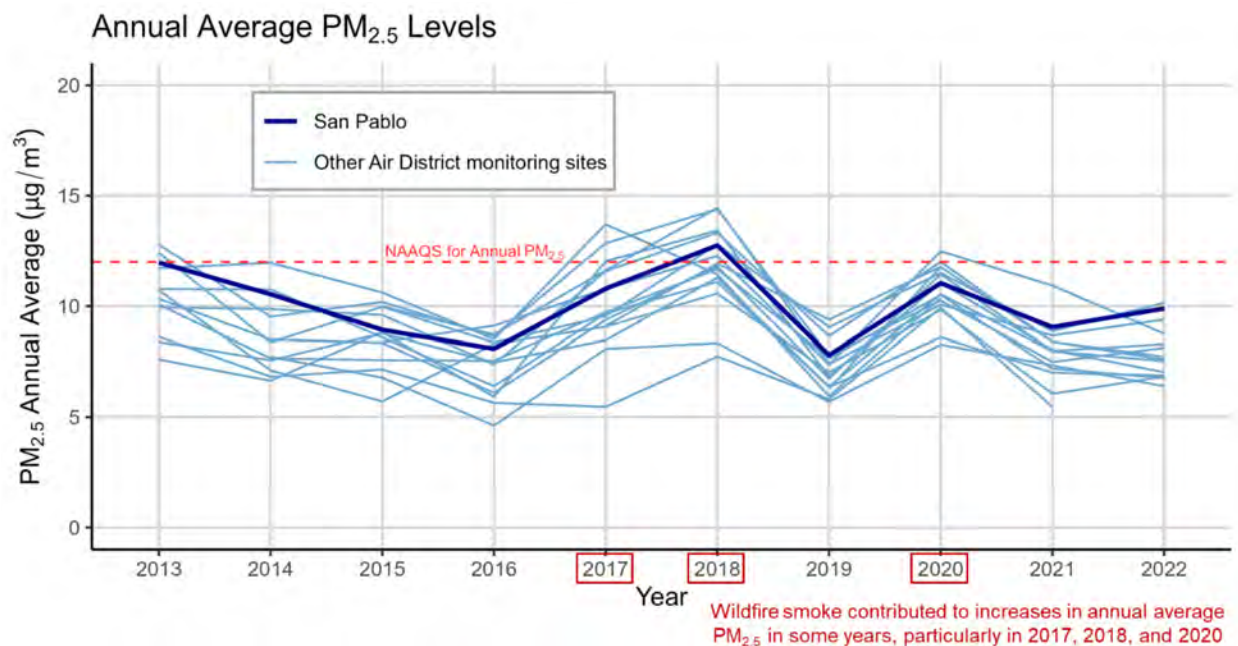


Figure 5-8. Annual average PM_{2.5} levels at Air District monitoring sites. Year to year fluctuations in PM_{2.5} levels are due largely to changes in emissions and meteorology. Wildfires contributed to higher PM_{2.5} levels at times, notably in 2017, 2018, and 2020.

Local Variability in PM_{2.5} Levels

Data from the Air District’s long-term monitoring sites provide important information on how air quality has varied over time and compares with air quality standards in the PTCA area. However, this data alone cannot fully explain the complex air pollution impacts found throughout the PTCA area given the complex mix of local air pollution sources in proximity to where people spend time. Additional measurement data, such as from monitoring efforts under the PTCA Community Air Monitoring Plan (CAMP), provide additional information that can help build a more complete picture of air quality and exposure burden in the community. The CAMP and additional information on these air monitoring projects, including quarterly monitoring updates with initial analyses, can be found on the Air District’s website.²⁵

Networks of lower-cost air quality sensors can provide data in more locations than is feasible with long-term monitoring sites. An example of data from one project in the CAMP, a network of about 50 air quality sensors operated by Groundwork Richmond/Ramboll under a CARB Community Air Grant, is shown in Figure 5-9. The data shown are from late December 2020 and illustrate how PM_{2.5} concentrations can fluctuate regionally and locally over hours and days. PM_{2.5} concentrations across the sensor network follow very similar day-to-day variations, driven by regional emissions and weather patterns. Many factors influence particulate matter measurements at a specific location, including instrumentation (regulatory monitor vs. sensor), proximity to emissions sources, sensor installation considerations (such as airflow obstructions), sensor calibration, meteorology, and topography. Sometimes, transport of pollution from other areas or events like wildfires are large contributors on the worst PM_{2.5} days. However, it’s also

²⁵ Air District website with materials for the Path to Clean Air Community Air Monitoring Plan: <https://www.baaqmd.gov/community-health/community-health-protection-program/richmond-area-community-health-protection-program/community-air-monitoring>

important to note that many common in-community sources, such as industrial facilities, smaller businesses, trains, and vehicles on roads contribute to PM_{2.5} concentrations year-round and can be responsible for shorter-duration periods of higher concentrations of PM_{2.5} in specific places. At times, higher PM_{2.5} concentrations are observed only at one or a few nearby sensors, indicating a local contribution to PM_{2.5} that may not be captured by long-term monitoring networks with less spatial density. More examples of insights from the Groundwork Richmond/Ramboll sensor network data can be found in Chapter 7 of this document and in the CAMP quarterly monitoring updates.

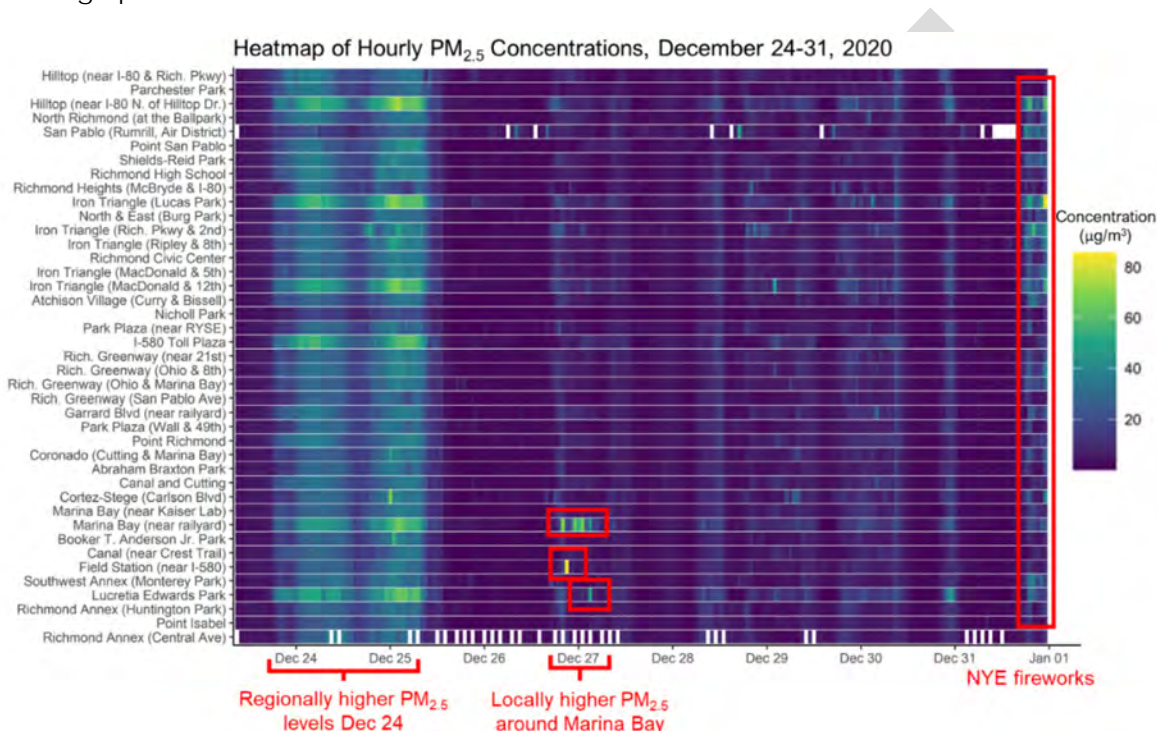


Figure 5-9. PM_{2.5} concentrations measured across a network of lower-cost sensors operated by Groundwork Richmond/Ramboll, and at the Air District's San Pablo monitoring site.

Data from another sensor network project in the CAMP, operated by Physicians, Scientists, and Engineers for Healthy Energy (PSE) and the Asian Pacific Environmental Network (APEN), highlighted variability in several pollutants (including PM_{2.5}, NO₂, and black carbon) and impacts of pollution from traffic, among additional key findings.²⁶ This project also consisted of about 50 air quality sensors located across the PTCA area.

Mobile monitoring (collecting air quality data from moving vehicles) can also provide information on spatial variability in different air pollutants. Aclima conducted a mobile monitoring project from August-October 2019 and collected data for several pollutants along repeated drives throughout the PTCA area.²⁷ Data from that project showed higher concentrations of NO₂ and CO near busy roadways, which are pollutants commonly associated with traffic, as well as areas of higher PM_{2.5} around Parchester Village, North Richmond, and the I-580 corridor and Harbor areas (Figure 5-10). Many of these locations are at the interface

²⁶ PSE website for the Richmond Air Monitoring Network and Final Report: <https://www.psehealthyenergy.org/our-work/programs/environmental-health/richmond/>

²⁷ Aclima's Richmond-San Pablo PM_{2.5} Hotspot Report: <https://rspreport.aclima.tools/>

between industrial and residential areas, highlighting the potential increased air pollution burden and exposure in these locations.



Figure 5-10. Screenshot from Aclima’s Richmond-San Pablo PM_{2.5} Report, annotated with areas where higher levels of PM_{2.5} were found. Air monitoring for this specific project was conducted from August to October 2019.

Trends and Variability in Air Toxics Data

The Air District measures selected volatile organic compounds (VOCs), many of which are TACs, at its San Pablo (Rumrill Blvd.) and Richmond (7th St. and Hensley St.) monitoring sites. These VOCs are measured by collecting air into a canister over 24 hours, and the collected samples are then analyzed at the Air District’s laboratory. VOC samples are collected at these monitoring sites every twelfth day.²⁸ VOCs can come from many kinds of facilities, operations, processes, and consumer products. Some sources of VOCs in outdoor air include:

- Combustion of fuels (like gasoline, diesel, wood, coal, and cooking oils)
- Evaporation (vapors) from certain products, such as gasoline, paints, solvents, and cleaners
- Oil and gas refining, processing, transport, and storage
- Landfills, scrapyards, and water treatment facilities

- Smoke from wildfires, agricultural fires, and prescribed fires

Table 5-4 lists the maximums, minimums, and averages of the VOC samples as measured at the San Pablo and Richmond monitoring sites from 2016-2020 in comparison to measurements across all Air District monitoring sites. In general, concentrations of most measured VOCs were higher at the San Pablo monitoring site compared to the Richmond monitoring site. Some of the higher measured concentrations were during recent periods of wildfire smoke. Average concentrations of several compounds were also higher at the San Pablo monitoring site compared to the network-wide average, including benzene, toluene, ethylbenzene, and xylenes (BTEX compounds), possibly indicating greater emissions of BTEX locally. The San Pablo monitoring site also reported the highest 24-hour concentrations of toluene, o-xylene, and ethylene dichloride across the Air District's network for the 2016-2020 period.

Table 5-4. Maximum, minimum, and 5-year average VOC concentrations measured at the San Pablo (SP) and Richmond-7th Street (Rich.) air monitoring sites in comparison to all Air District monitoring sites (Network) from 2016-2020. 5-year averages for a VOC that were higher than the network-wide average are in blue. Maximum individual samples that were the highest across the network in the five years are in red. Underlined concentrations denote values that are below the method detection limit (MDL).

Volatile Organic Compound (VOC)	SP 5-yr avg.	SP Max	SP Min	Rich. 5-yr avg.	Rich. Max	Rich. Min	Network 5-yr avg.	Network Max	Network Min
Acetone	<u>5.33</u>	15.10	1.78	<u>5.29</u>	59.97	1.11	4.96	71.52	0.03
Acetonitrile	0.03	1.01	<u>0.00</u>	0.02	1.05	<u>0.00</u>	0.04	18.86	<u>0.00</u>
Acrylonitrile	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	0.32	<u>0.01</u>
1,3-Butadiene	<u>0.01</u>	0.11	<u>0.00</u>	<u>0.01</u>	0.13	<u>0.00</u>	0.01	0.54	<u>0.00</u>
Benzene	<u>0.20</u>	1.46	<u>0.00</u>	0.14	1.37	<u>0.00</u>	0.19	3.12	<u>0.00</u>
Carbon tetrachloride	0.10	0.13	0.08	0.10	0.13	0.08	0.10	0.16	0.07
Chloroform	0.01	0.05	<u>0.00</u>	0.01	0.05	<u>0.00</u>	0.02	0.38	<u>0.00</u>
Dichloromethane	<u>0.12</u>	5.75	0.01	0.09	0.95	<u>0.01</u>	0.09	5.75	0.01
Ethyl alcohol	2.23	8.20	0.35	1.74	12.32	0.24	4.09	119.64	0.02
Ethylbenzene	<u>0.13</u>	1.14	<u>0.00</u>	0.07	0.34	<u>0.00</u>	0.09	1.20	<u>0.00</u>
Ethylene dibromide	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
Ethylene dichloride	<u>0.00</u>	0.02	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	0.02	<u>0.00</u>
Freon-113	0.07	0.08	0.05	0.07	0.08	0.05	0.07	0.24	0.04
Methyl chloroform	<u>0.00</u>	0.02	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	0.01	1.27	<u>0.00</u>
Methyl ethyl ketone	0.22	0.74	0.01	0.20	0.79	<u>0.01</u>	0.25	5.74	<u>0.01</u>
Tetrachloroethylene	<u>0.00</u>	0.05	<u>0.00</u>	<u>0.00</u>	0.04	<u>0.00</u>	0.00	0.34	<u>0.00</u>
Toluene	<u>0.59</u>	3.93	<u>0.01</u>	0.34	1.23	<u>0.01</u>	0.42	3.93	<u>0.01</u>
Trichloroethylene	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	0.01	0.38	<u>0.00</u>
Trichlorofluoromethane	0.23	0.28	0.17	0.23	0.30	0.19	0.24	0.67	0.16
Vinyl chloride	<u>0.01</u>	<u>0.01</u>	<u>0.00</u>	<u>0.01</u>	<u>0.01</u>	<u>0.00</u>	<u>0.01</u>	0.04	<u>0.00</u>
m/p-Xylene	<u>0.29</u>	2.93	0.01	0.16	0.90	<u>0.01</u>	0.21	3.15	<u>0.01</u>
o-Xylene	<u>0.13</u>	1.45	0.01	0.06	0.32	<u>0.01</u>	0.08	1.45	<u>0.00</u>

Benzene, a carcinogen, is a TAC of particular concern due to its known health impacts even at relatively low concentrations. Most of the measured benzene concentrations have been below 0.5 ppb across the network, which is below OEHHA's chronic reference exposure level for benzene of 1 ppb (Figure 5-11). Most of the measurements above 1 ppb occurred during periods of wildfire smoke. Some monitoring sites, including San Pablo, have recorded instances of relatively higher benzene concentrations (over 0.5 ppb) outside of periods of wildfire smoke, possibly indicating local emissions of benzene.

Several monitoring sites, including San Pablo, recorded more occurrences of relatively higher toluene concentrations compared to other sites in the network (Figure 5-12). In fact, the highest 24-hour concentration of toluene measured throughout the network from 2016-2020 was at the San Pablo site, and that measurement was not during a wildfire smoke period. This may indicate greater emissions of toluene from local sources near the San Pablo monitoring site. While benzene and toluene share similar sources, toluene is now often used as a replacement for benzene in certain products, such as solvents. Although some of toluene concentrations measured at the San Pablo site were higher than in other typical urban areas, they were well below OEHHA’s chronic and acute reference exposure levels (RELs) of 110 ppb and 1300 ppb, respectively.

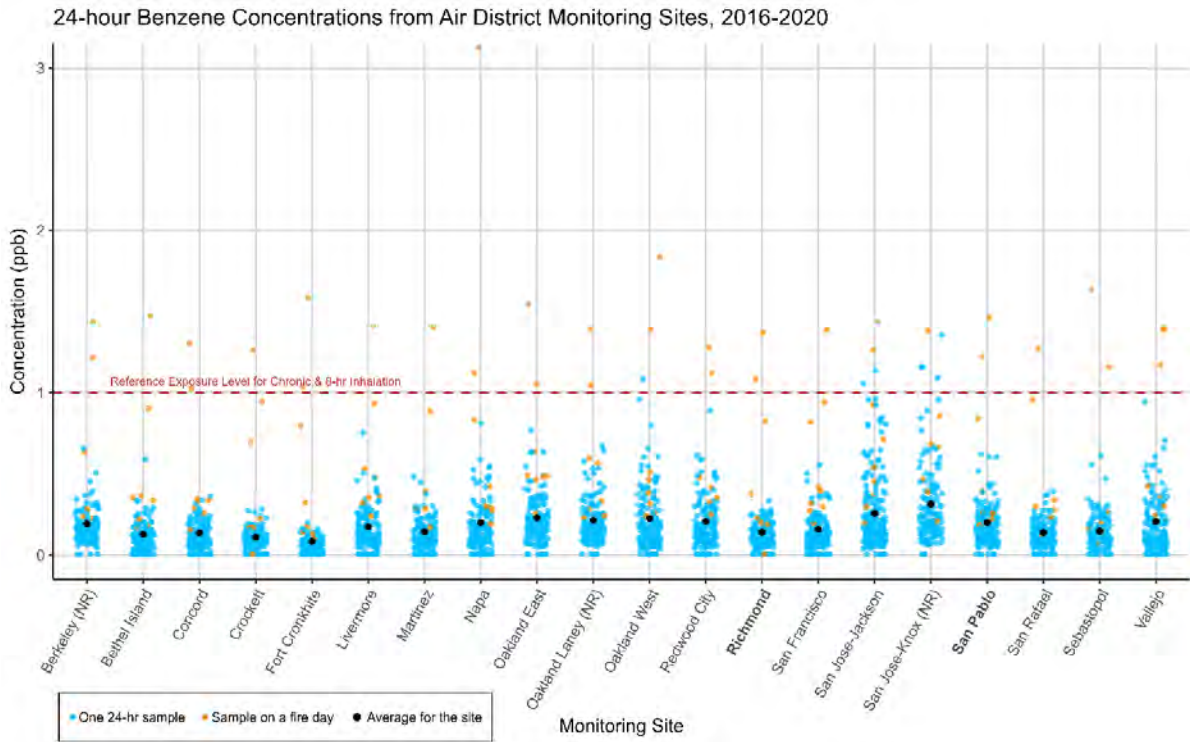


Figure 5-11. 24-hour benzene concentrations at Air District monitoring sites, 2016-2020. Each blue or red dot represents an individual 24-hour measurement, where orange dots indicate measurements during wildfire smoke periods. The larger black dot indicates the 5-year average concentration.

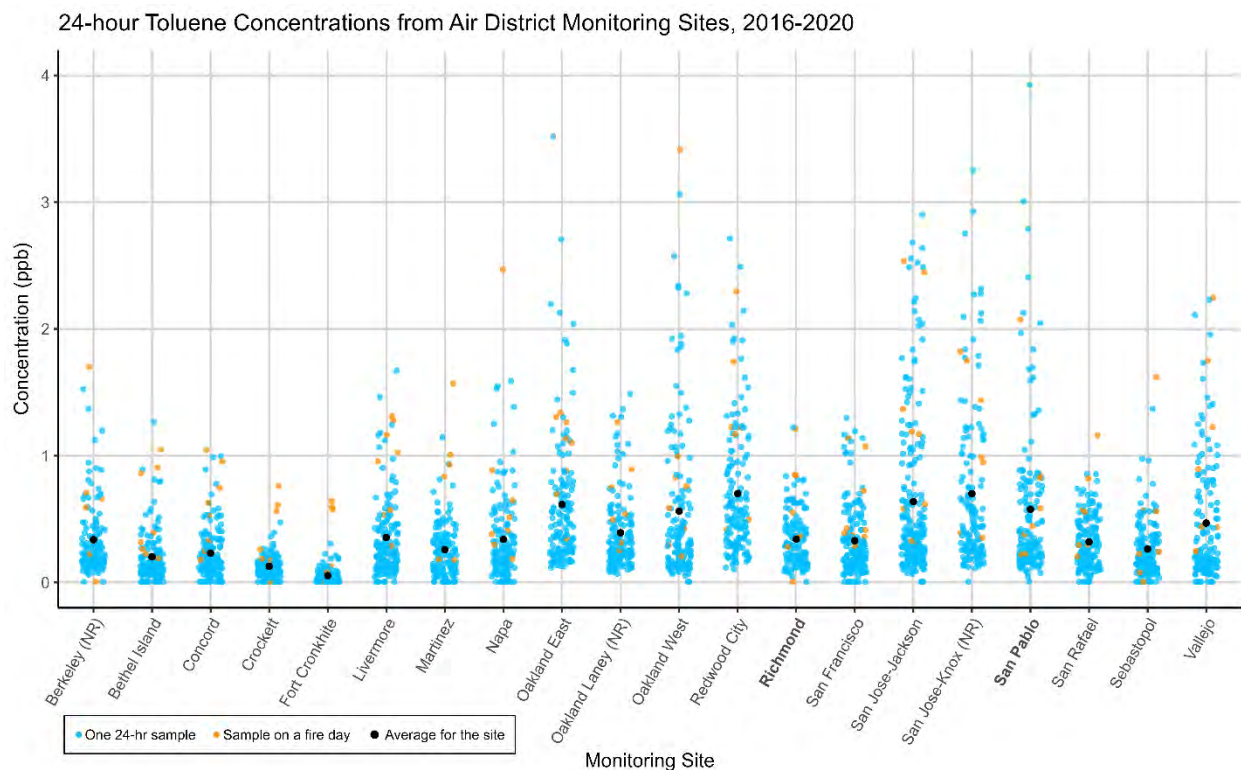


Figure 5-12. 24-hour toluene concentrations at Air District monitoring sites, 2016-2020. Each blue or red dot represents an individual 24-hour measurement, where orange dots indicate measurements during wildfire smoke periods. The larger black dot indicates the 5-year average concentration.

Annual average concentrations of several monitored VOCs have decreased (improved) since routine monitoring began at Air District long-term air monitoring sites, but those decreases in concentrations have leveled off in recent years. Figure 5-13 and Figure 5-14 show annual average concentrations of benzene and toluene, respectively, at the San Pablo, Richmond, and Vallejo monitoring sites. Vallejo is shown for reference since that monitoring site has a longer data record, and until the early 1990s reported annual average benzene concentrations above 1.0 ppb, which is the REL for chronic and 8-hour inhalation of benzene. After considerable decreases (improvements) in annual average benzene and toluene concentrations from the 1980s to early 2000s, concentrations have generally remained steady for the most recent decade.

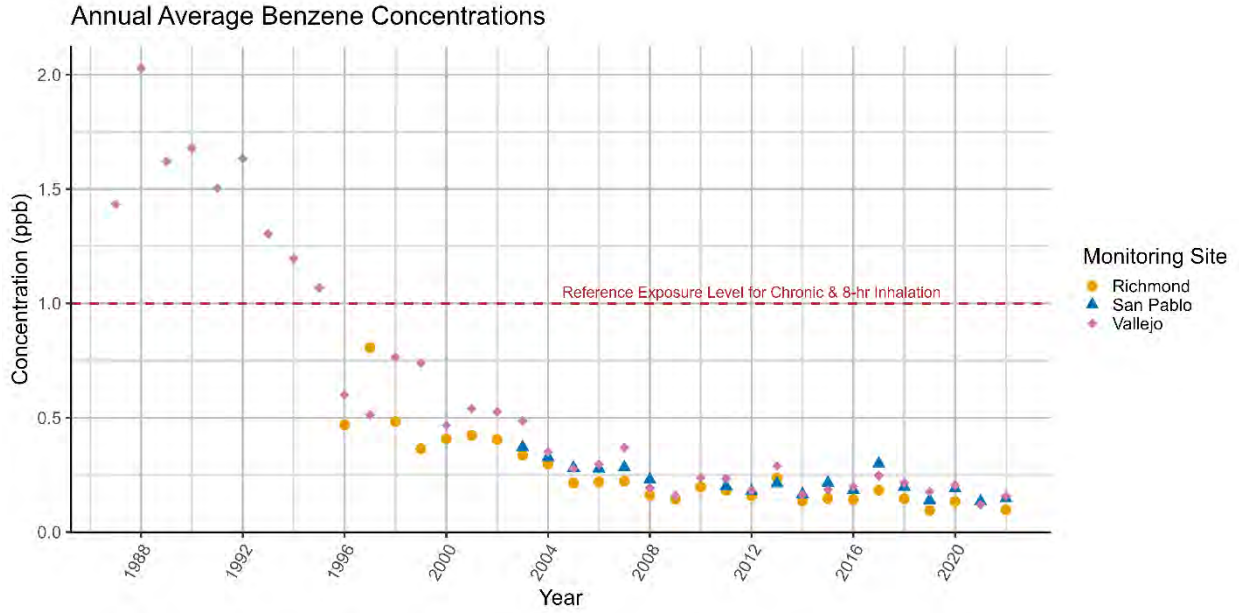


Figure 5-13. Annual average benzene concentrations at selected Air District monitoring sites. Data for the year 2021 are unavailable at the Richmond-7th Street monitoring site due to pandemic-related site access restrictions. Note that the monitoring sites have different periods of record; the first years with complete data for the Richmond and San Pablo air monitoring sites were 1996 and 2003, respectively.

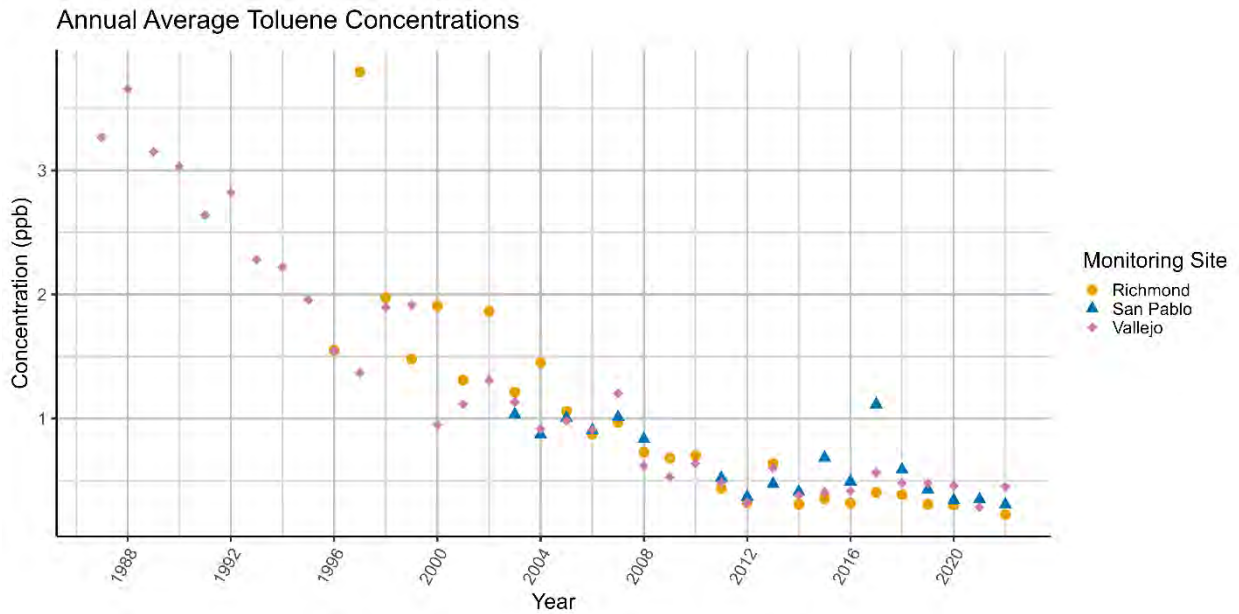


Figure 5-14. Annual average toluene concentrations at selected Air District monitoring sites. Data for the year 2021 are unavailable at the Richmond-7th Street monitoring site due to pandemic-related site access restrictions. Note that the monitoring sites have different periods of record; the first years with complete data for the Richmond and San Pablo air monitoring sites were 1996 and 2003, respectively.

One of the projects included in the PTCA CAMP was an air toxics monitoring project conducted using the Air District's air monitoring van. The primary purpose of this project was to screen areas selected by the CAMP's Community Steering Committee for certain VOCs and identify locations with higher levels of those VOCs that may be opportunities for reducing pollution emissions and

exposure (Figure 5-15). This project found numerous occurrences of higher than typical levels of different VOCs. Figure 5-16 shows instantaneous (1-second) measurements of benzene by drive date and target monitoring area. While most of the measurements were relatively low, there were several occurrences of higher benzene levels on different dates and in different areas. Instantaneous measurements are not directly comparable to health metrics for acute exposures, as those metrics are based on 1-hour exposure periods; however, these short-duration observations of higher VOC levels can still point to air quality issues that warrant actions to reduce pollution emissions and exposure. Examples of occurrences of higher VOC levels that may be associated with certain facilities and operations are described in Appendix D: Air Monitoring.

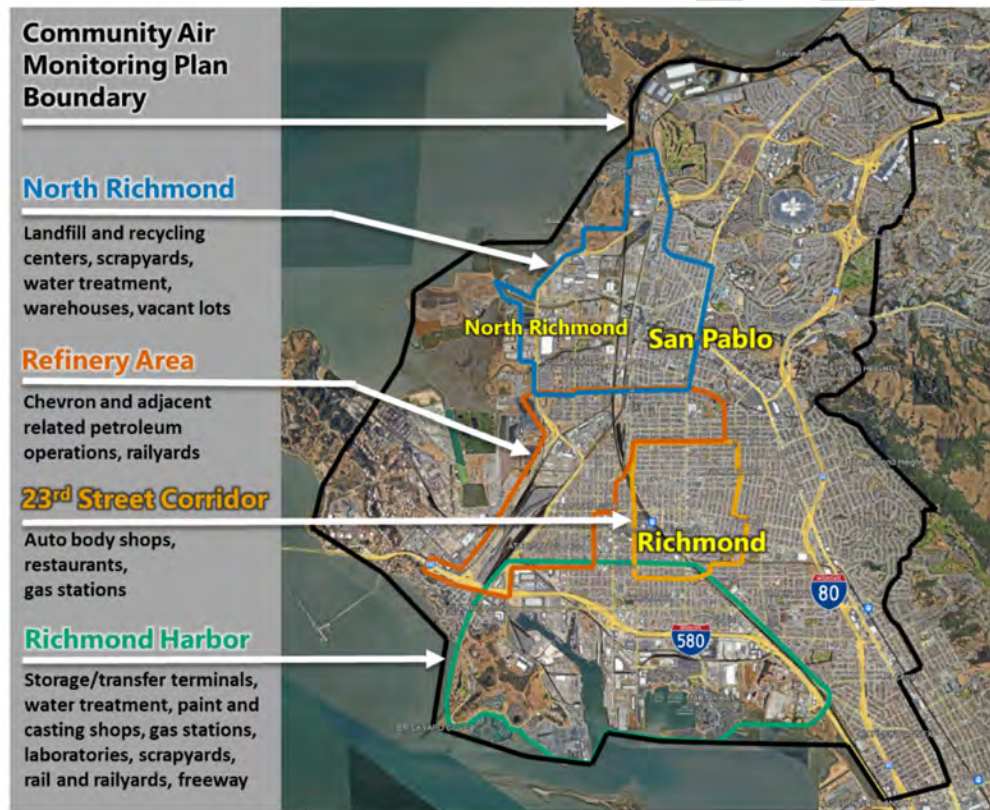


Figure 5-15. Map of the target monitoring areas for the PTCA CAMP air toxics monitoring study.

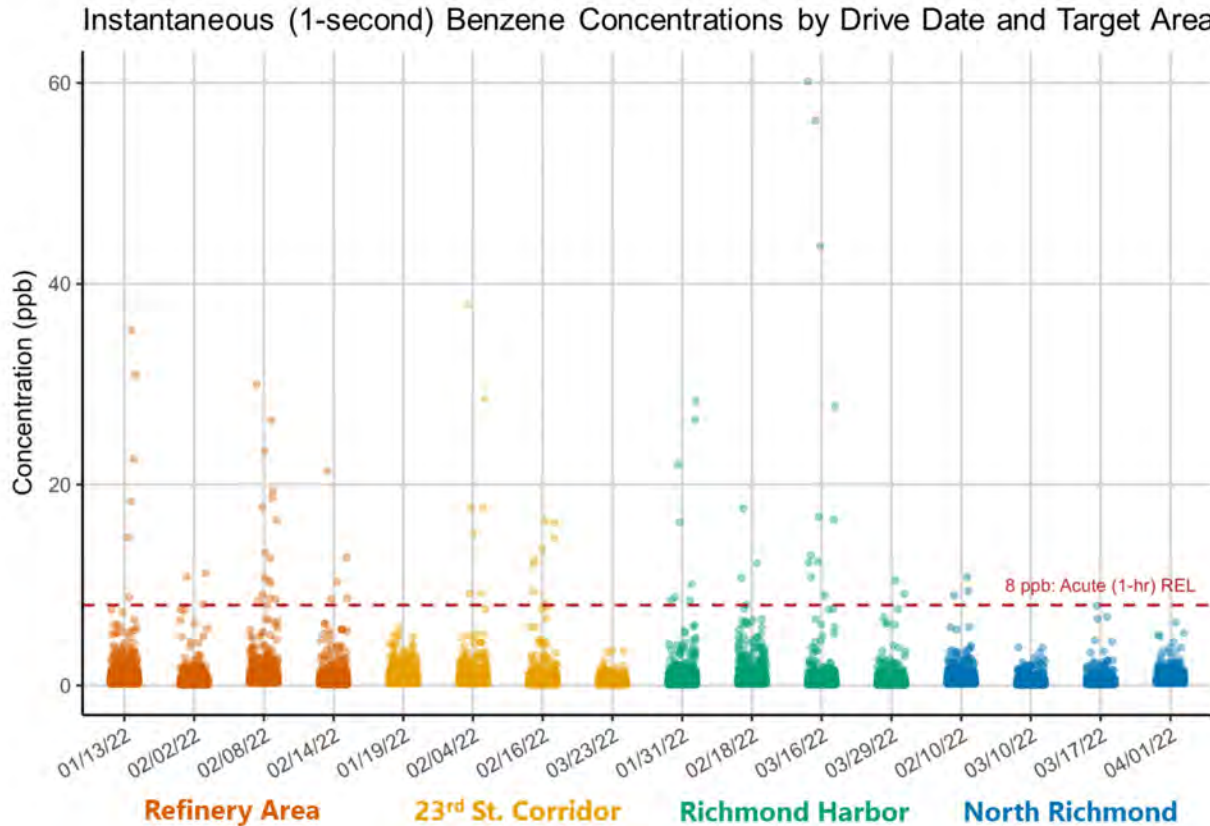


Figure 5-16. Benzene concentrations by drive date and target area, as measured during the air toxics monitoring study. Each dot represents a 1-second benzene measurement. The acute (1-hour) REL is shown for reference, but note that 1-second measurement data is not directly comparable to the acute REL.

Emissions Inventory Development

For the PTCA technical assessment, a baseline emissions inventory was developed for the year 2019 that included the two main categories of air pollutants – criteria air pollutants (CAPs) and toxic air contaminants (TACs) – as well as toxicity-weighted emissions (TWE) information. As discussed in the section below on TACs, toxicity weighting provides a useful means of accounting for the relative toxicity of the different TACs in an inventory, which is important because individual TACs have different toxicity levels and health effects. By converting mass-based emissions into TWE, it is easier to determine which TACs and sources may be of most concern.²⁹ This inventory covered stationary sources (e.g., permitted facilities) and mobile sources (e.g., ships, cars, and trucks) operating in and around the PTCA area (see Figure 5-17 for locations of permitted sources and roadways included in the inventory). Importantly, the emissions inventory development and exposure assessment described in this chapter relate to direct emissions from local sources only and do not address pollution that is transported from outside the community and/or formed through secondary processes in the atmosphere. For the Chevron refinery, the baseline 2019 inventory was supplemented with an updated 2021 inventory that includes recent test data and other information. This section summarizes the 2019

²⁹ Note that TWE do not quantify health risks, which requires additional information on pollutant concentrations and human exposures.

baseline inventory, with more detailed information provided in Appendix C, including an overview of updates to the Chevron inventory.

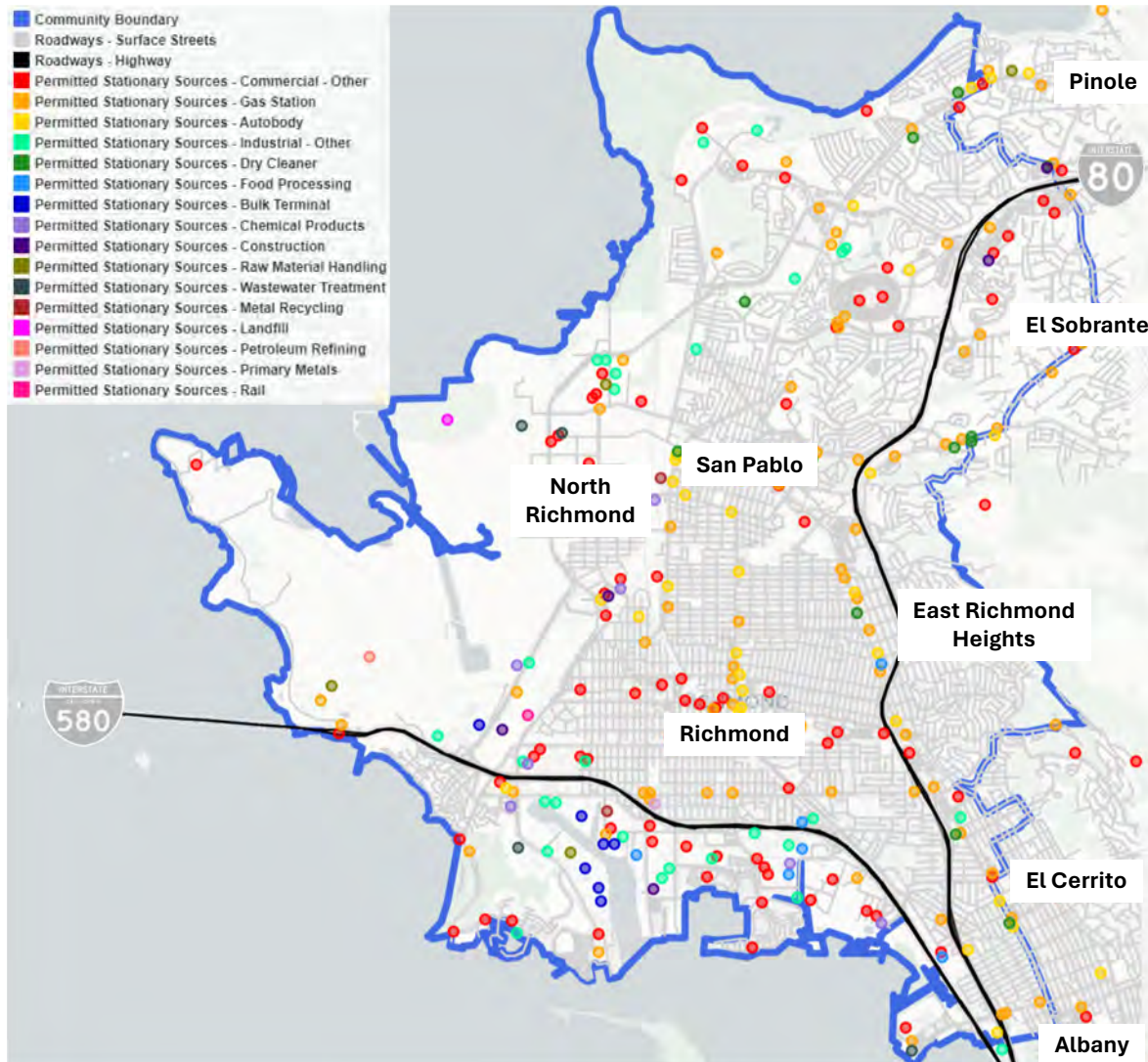


Figure 5-17. Map of permitted sources and roadways included in the PTCA emissions inventory. Note that the inventory includes some sources located outside the community boundary that are likely to impact air quality within the community.

Note that the 2019 emissions estimates were organized around the six community concerns described in Chapter 2. Table 5-5 lists these community concerns and the sources associated with each of them. Analysis of emissions and modeling results focused on the first four concerns in Table 5-5: fuel refining, commercial and industrial sources near communities, vehicles and trucks, and marine and rail operations. The remaining concerns are focused on issues not directly, or not comprehensively, addressed by emissions inventory development and modeling (e.g., odors and smells, wildfire smoke, accessible health data).

Table 5-5. Community concerns and associated emissions sources.

Community Concern	Sources Included in Emissions Inventory
Fuel Refining, Support Facilities, Storage, and Distribution	Chevron Richmond Refinery Chemtrade Kinder Morgan Liquids Terminals Phillips 66 Marine (Bulk) Terminal TransMontaigne IMTT Richmond Products Terminal Qualawash Holdings LLC Gas Stations
Commercial and Industrial Sources Near Communities	Permitted sources not included under <i>Fuel Refining</i> (e.g., Levin Terminal, autobody shops, food processing facilities, aggregate facilities) Construction activities Restaurants Fugitive dust from vacant lots and other unstable surfaces)
Vehicles and Trucks, Streets and Freeways, and Logistics	Cars and trucks operating on freeways and surface streets (including road dust) Warehouses and truck-related businesses Diesel truck idling and congestion
Marine and Rail	Ocean going vessels Harbor craft (e.g., tugs) Ferries Cargo handling equipment Railyards Rail lines
Odors and Smells ^a	Fuel Refining City of Richmond Wastewater Treatment Plant West Contra Costa County Landfill AAK Oil Others (e.g., cannabis growing and processing, site remediation)
Addressing Public Health and Reducing Exposure	Wildfire smoke Residential wood smoke Accessible health data Sensitive receptor sites Incompatible land use development

^a Note that “Odors and Smells” did not end up being a separate category for which strategies were developed.

Criteria Air Pollutant Emissions

Table 5-6 summarizes emissions of nitrogen oxides (NO_x), total organic gases (TOG), reactive organic gases (ROG), sulfur oxides (SO_x), particulate matter with aerodynamic diameter less than or equal to 10 microns (PM₁₀), particulate matter with aerodynamic diameter less than or

equal to 2.5 microns (PM_{2.5}), carbon monoxide (CO), and ammonia (NH₃)³⁰. Note that some of these pollutant designations refer to classes of compounds. For example, ROG consists of organic compounds assumed to be reactive at urban scales, including toxic species such as benzene. These pollutants are either criteria air pollutants (CAPs) or species that serve as precursors to the formation of CAPs in the atmosphere. This table shows that fuel refining is a significant source of CAPs in the PTCA area, emitting more than half the SO_x and PM_{2.5} emissions from sources in the PTCA emissions inventory. PM_{2.5} is of particular concern in the community, as this pollutant is known to have health effects at concentration levels below the NAAQS. The Chevron Refinery alone accounts for 63% of local PM_{2.5} emissions, with key PM_{2.5} sources at Chevron including the fluidized catalytic cracking unit, cogeneration, and cooling towers (see Table 5-7, which is a detailed breakout of the “Permitted Fuel Refining Sources” row in Table 5-6).

Sources in the Vehicles & Trucks area of concern account for about 7% of the PM_{2.5} emissions in the 2019 inventory, with road dust emissions emerging as the most significant source in this area of concern. Road dust accounts for 65% of PM_{2.5} emissions from on-road mobile sources in the study area, which reflects recent trends showing that sharp reductions in tailpipe emissions have increased the relative influence of non-exhaust processes (such as road dust and brake wear) with respect to total on-road emissions.

Table 5-6. Criteria pollutant emissions from all sources in the PTCA community (units = tons/year).

Emissions Source	NO _x	TOG	ROG	SO _x	PM ₁₀	PM _{2.5}	CO	NH ₃
Permitted Fuel Refining Sources	500.1	635.8	504.4	483.8	498.3	476.5	210.7	56.0
Marine & Rail	1,167.0	92.8	81.0	41.6	28.3	26.7	391.4	0.8
- OGV Berthing – Chevron	161.7	9.4	7.9	21.4	6.2	6.0	15.7	0.2
- OGV Berthing – Phillips 66	9.0	0.5	0.4	1.2	0.3	0.3	0.9	<0.1
- OGV Berthing – IMTT	5.0	0.3	0.2	0.7	0.2	0.2	0.5	<0.1
- Other OGV	412.1	27.7	24.1	18.0	6.2	5.9	32.5	0.4
- Ferries	122.9	17.4	15.3	<0.1	3.3	3.1	106.8	
- Commercial Harbor Craft	259.4	32.2	28.3	<0.1	8.3	7.9	182.7	
- Cargo Handling Equipment	5.7	0.8	0.7	<0.1	0.1	<0.1	4.1	<0.1
- Railyards	44.4	0.6	0.6	<0.1	1.2	0.9	9.7	<0.1
- Rail lines	146.8	3.9	3.4	0.2	2.6	2.4	38.5	0.1
Industrial & Commercial Sources	73.9	2,473.9	466.7	7.8	241.7	107.2	402.0	6.7
- Permitted (non-refining)	66.6	2,158.6	227.8	5.0	59.8	26.3	84.0	6.7
- Restaurants		1.1	0.4		12.0	12.0		
- Construction (non-mobile) ^a		199.6	186.4		109.7	11.0		
- Residential wood combustion	7.4	114.7	52.1	2.8	60.2	57.9	317.9	
Vehicles & Trucks	635.3	421.1	383.5	6.3	261.8	52.2	3,166.3	46.3
- Trucks	472.8	197.4	179.5	3.5	22.3	12.0	1,451.5	26.5
- Light Duty Passenger Vehicles	108.0	161.3	148.0	2.7	12.9	5.4	1,370.9	19.5
- Buses	10.9	1.4	1.2	<0.1	0.4	0.2	9.4	0.1
- Motor Homes	2.5	1.0	1.0	<0.1	0.2	0.1	3.3	0.1
- Motorcycles	12.2	56.6	50.8	<0.1	0.2	0.1	295.0	0.1

³⁰ Note that NH₃ is also an air toxic, so its emissions are accounted for in the calculation of toxicity-weighted TAC emissions presented in the section that follows.

Emissions Source	NO _x	TOG	ROG	SO _x	PM ₁₀	PM _{2.5}	CO	NH ₃
- Road Dust					225.2	33.7		
- Transportation Refrigeration Units	28.8	3.4	3.0	<0.1	0.7	0.7	36.2	<0.1
Misc. Sources	605.2	2,385.3	1,398.0	47.7	104.6	93.2	3,595.3	133.4
- Offroad Equipment	179.1	181.2	169.4	0.4	15.0	14.3	2,209.9	0.4
- Recreational Boats	76.0	246.9	227.8	0.1	15.1	14.4	1,092.3	0.2
- Fuel Combustion (non-permitted)	318.5	95.6	42.8	5.9	55.6	55.5	241.1	<0.1
- Other	31.7	1,861.6	958.0	41.4	18.8	8.9	52.1	132.8
Total – All Sources	2,981.5	6,008.9	2,833.5	587.2	1,134.6	755.8	7,765.8	243.1

^aThe non-mobile portion of construction emissions refers to fugitive dust generated by construction activities. Construction equipment emissions are included under the “Offroad Equipment” subcategory.

Table 5-7. Criteria pollutant emissions from permitted fuel refining sources (units = tons/year).

Process Type	NO _x	TOG	ROG	SO _x	PM ₁₀	PM _{2.5}	CO	NH ₃
Chevron Refinery	485.04	399.28	310.83	322.08	494.73	473.01	206.86	55.96
- Backup Generator (BUG)	1.63	0.04	0.04	<0.01	0.11	0.10	0.36	
- Barge Loading					0.13	0.12		
- Boilers/Process Heaters	300.21	37.11	26.48	43.05	54.18	54.18	172.42	14.63
- Fluidized Catalytic Cracking Unit	101.96	7.72	4.94	200.46	241.98	228.61	28.84	40.44
- Coating and Cleanup		0.01	0.01					
- Cogeneration	33.47	15.36	1.43	4.16	91.36	91.17	0.63	
- Cooling Towers		6.13	6.13		83.91	76.34		
- Fugitives	0.02	86.09	55.65				0.07	0.15
- Gasoline Dispensing		0.18	0.18					
- Generators	0.66	0.06	0.05	<0.01	0.01	0.01	0.11	
- Other	8.44	53.69	44.13	0.30	1.02	0.75	3.20	
- Storage Tanks		119.43	114.67	0.10	0.20	0.12		0.69
- Sulfur Plants	28.83	0.20	0.17	68.09	19.76	19.54		
- Tank Cars and Trucks – Working Losses		29.21	29.21			0.00		
- Tanker Loading					0.71	0.68		
- Vacuum Distillation		0.02	0.02					
- Vapor Recovery/Flares	9.82	30.70	15.00	5.92	1.36	1.36	1.23	
- Wastewater Treatment		13.32	12.71					0.05
Other Permitted Sources	15.08	236.51	193.56	161.71	3.54	3.49	3.86	
- Chemtrade West	2.05	0.13	0.06	161.65	2.88	2.85	0.68	
- Richmond Products Terminal	0.04	12.80	12.80	<0.01	<0.01	<0.01	0.01	
- Phillips 66 Company	<0.01	178.19	138.31	<0.01	0.34	0.32	0.01	
- TransMontaigne	3.50	6.85	5.75	0.01	0.08	0.08	0.87	
- IMTT Richmond CA	0.48	1.06	1.02	0.01	0.04	0.04	0.14	
- Kinder Morgan	8.88	14.07	12.26	0.04	0.20	0.20	2.12	

Process Type	NO _x	TOG	ROG	SO _x	PM ₁₀	PM _{2.5}	CO	NH ₃
- Qualawash Holdings LLC	0.13	0.37	0.31	<0.01	<0.01	<0.01	0.02	
- Gas Stations		23.04	23.04					
Permitted Fuel Refining Total	500.12	635.79	504.39	483.79	498.26	476.50	210.72	55.96

Toxic Air Contaminants

The 2019 inventory for the PTCA area includes emissions estimates for 158 TACs. Because these compounds have different toxicity levels and health effects, toxicity-weighted emissions (TWE) were also calculated in two ways. For TACs listed as carcinogens, the mass emissions for each TAC were multiplied by cancer potency factors from the Office of Environmental Health Hazard Assessment (OEHHA), and then summed. For TACs listed as causing other kinds of health impacts, emissions were divided by chronic reference exposure levels (RELS), and then summed.³¹ For some TACs, both kinds of TWE were calculated. The resulting TWE provide a useful means of comparing the relative toxicity of TACs in an inventory; however, TWE do not quantify health risks, which also require the consideration of how many people are exposed, for how long, and at what levels (concentrations).

Table 5-8 summarizes cancer and chronic TWE for sources in the study area. This table shows that permitted fuel refining sources³² account for about 52% of total chronic TWE and about 11% of total cancer TWE in the PTCA community. Mobile sources (Marine & Rail + Vehicles & Trucks) account for about 61% of total cancer TWE; however, it should be noted that some vessel emissions are attributable to Chevron and other fuel refining facilities. When those emissions are considered, fuel refining accounts for about 15% of total cancer TWE and about 55% of total chronic TWE in the PTCA community.

Table 5-8. Cancer and chronic TWE from all sources in the PTCA community.

Emissions Source	Cancer TWE		Chronic TWE	
	Value	%Contribution	Value	%Contribution
Permitted Fuel Refining Sources	23,598.9	10.5%	1,531.0	51.9%
Marine & Rail	99,005.8	44.1%	248.2	8.4%
- OGV Berthing - Chevron	8,884.7	4.0%	78.4	2.7%
- OGV Berthing - Phillips 66	495.3	0.2%	4.4	0.1%
- OGV Berthing - IMTT	272.3	0.1%	2.4	0.1%
- Other OGV	19,528.7	8.7%	59.3	2.0%
- Ferries	15,220.7	6.8%	22.6	0.8%
- Commercial Harbor Craft	38,490.9	17.1%	57.1	1.9%
- Cargo Handling Equipment	241.9	0.1%	0.4	0.0%
- Railyards	4,035.1	1.8%	6.2	0.2%
- Rail lines	11,836.3	5.3%	17.5	0.6%
Industrial & Commercial Sources	4,403.8	2.0%	131.9	4.5%
- Permitted Sources (non-refining)	1,258.4	0.6%	19.8	0.7%
- Restaurants	38.3	0.0%	2.1	0.1%

³¹ Note that one or more of the OEHHA health values were available for 96 of the 158 TACs in the PTCA inventory. Emissions for the remaining compounds could not be included in the TWE calculations.

³² Individual sources associated with fuel refining are listed in Tables 5-5 and 5-9.

Emissions Source	Cancer TWE		Chronic TWE	
	Value	%Contribution	Value	%Contribution
- Construction (non-mobile)	2,417.1	1.1%	88.7	3.0%
- Residential wood combustion	690.0	0.3%	21.3	0.7%
Vehicles & Trucks	37,945.8	16.9%	325.9	11.0%
- Trucks	29,067.9	13.0%	130.6	4.4%
- Light Duty Passenger Vehicles	4,325.2	1.9%	76.1	2.6%
- Buses	649.1	0.3%	1.7	0.1%
- Motor Homes	280.7	0.1%	0.8	0.0%
- Motorcycles	1,565.5	0.7%	32.2	1.1%
- Road Dust	792.7	0.4%	82.7	2.8%
- Transportation Refrigeration Units	1,264.7	0.6%	1.9	0.1%
Misc. Sources	59,500.0	26.5%	714.0	24.2%
- Offroad Equipment (Construction, etc.)	36,857.0	16.4%	163.5	5.5%
- Recreational Boats	10,317.8	4.6%	231.2	7.8%
- Fuel Combustion (non-permitted)	4,871.8	2.2%	135.4	4.6%
- Other	7,453.3	3.3%	183.9	6.2%
Total (All Sources)	224,454.3	100.0%	2,951.0	100.0%

Table 5-9 provides a breakdown of cancer and chronic TWE from permitted fuel refining sources, with Chevron emissions shown by process type. The data in Table 5-9 show that Chevron accounts for about 96% of chronic TWE and 99% of cancer TWE from permitted fuel refining sources. Furthermore, four process types at Chevron (the fluidized catalytic cracking unit, boilers/process heaters, cogeneration, and the sulfur plant) account for 92% of chronic TWE and 87% of cancer TWE from permitted fuel refining sources. It should also be noted that the Chemtrade facility accounts for 4% of chronic TWE from permitted fuel refining sources.

Table 5-9. Cancer and chronic TWE from permitted fuel refining sources.

Emissions Source	Cancer TWE		Chronic TWE	
	Value	%Contribution	Value	%Contribution
Chevron Refinery	23,465.71	99.44%	1,464.10	95.63%
- Fluidized Catalytic Cracking Unit	1,064.00	4.51%	592.81	38.72%
- Boilers/Process Heaters	18,728.09	79.36%	144.98	9.47%
- Cogeneration	722.86	3.06%	469.47	30.66%
- Sulfur Plants			195.35	12.76%
- Vapor Recover/Flares	1,064.79	4.51%	21.92	1.43%
- Fugitives	231.91	0.98%	15.02	0.98%
- Storage Tanks	633.95	2.69%	12.53	0.82%
- Wastewater Treatment	82.67	0.35%	5.15	0.34%
- Other	153.03	0.65%	4.25	0.28%
- Backup Generators (BUG)	507.60	2.15%	0.75	0.05%
- Coating AND Cleanup	0.75	<0.01%	0.61	0.04%
- Barge Loading	12.30	0.05%	0.42	0.03%
- Cooling Towers	214.68	0.91%	0.35	0.02%
- Tank Cars and Trucks – Working Losses	10.46	0.04%	0.27	0.02%

Emissions Source	Cancer TWE		Chronic TWE	
	Value	%Contribution	Value	%Contribution
- Storage/Transport Container Cleaning	4.33	0.02%	0.15	0.01%
- Generators	34.24	0.15%	0.05	<0.01%
- Surface Blasting	0.05	<0.01%	0.01	<0.01%
- Gasoline Dispensing	<0.01	<0.01%	<0.01	<0.01%
- Tanker Loading			<0.01	<0.01%
Other Permitted Sources	133.24	0.56%	66.92	4.37%
- Chemtrade West	11.12	0.05%	64.40	4.21%
- Richmond Products Terminal	17.40	0.07%	0.36	0.02%
- Phillips 66 Company	10.87	0.05%	0.24	0.02%
- TransMontaigne Operating Company LP	11.87	0.05%	0.23	0.02%
- IMTT Richmond CA	17.77	0.08%	0.09	0.01%
- Kinder Morgan Liquids Terminals, LLC	0.98	<0.01%	0.04	<0.01%
- Qualawash Holdings LLC	0.02	<0.01%	<0.01	<0.01%
- Gas Stations (Retail and Non-Retail)	63.22	0.27%	1.57	0.10%
Permitted Fuel Refining Total	23,598.94	100.00%	1,531.02	100.00%

Tables 5-10 and 5-11 provide information on individual TACs that contribute significantly to cancer and/or chronic TWE in the PTCA community. These tables include emissions data for 12 TACs that, when combined, account for 97% of the cancer TWE and 93% of the chronic TWE at Chevron, and 96% of the cancer TWE and 92% of the chronic TWE among all local sources combined.³³ The data shown in these tables reflect the raw mass of emissions in lbs/year, with no weighting factors applied. However, in the last two rows (shown in beige), total emissions for each TAC have been toxicity weighted to help identify which pollutants most contribute to cancer and chronic TWE.

Table 5-10 shows that the fuel refining sector accounts for 100% of hydrogen cyanide and sulfuric acid emissions and the majority of emissions for other key TACs, including hydrogen cyanide manganese (77%), nickel (64%), and hydrochloric acid (93%). Manganese and nickel are the two pollutants with the highest total chronic TWE in the inventory, closely followed by benzene. The fuel refining sector is also a key source of formaldehyde (19%) and arsenic (27%) emissions.

Table 5-11 shows more detailed information for Chevron and other permitted fuel refining sources. This table shows that the TACs with the highest emissions at Chevron are hydrogen cyanide, hydrochloric acid, sulfuric acid, and formaldehyde. However, the TACs with the highest chronic TWE are manganese, nickel, and sulfuric acid.

³³ Though these 12 TACs are being highlighted for summary purposes, note that all TACs which have been assigned cancer potency factors and or chronic RELs are accounted for in the TWE shown in Tables 5-8 and 5-9.

Table 5-10. Emissions of selected TACs from all sources in the PTCA community.

Emissions Source	Diesel PM	Formaldehyde	Benzene	Hydrogen Cyanide	1,3-butadiene	Acrolein	Manganese	Nickel	Arsenic	Hydrochloric Acid	Sulfuric Acid	Hexavalent Chromium
Permitted Fuel Refining Sources	247.49	21,418.75	6,450.02	91,667.17	501.88	24.71	2,282.79	269.65	32.22	31,431.78	18,134.12	15.40
Marine & Rail	41,873.84	25,531.65	3,734.00		329.53		1.92	7.54	77.31			0.05
- OGV Berthing – Chevron	3,211.53	1,615.71	388.02		20.76			4.59	49.75			
- OGV Berthing – Phillips 66	179.02	90.07	21.63		1.16			0.26	2.77			
- OGV Berthing – IMT	98.42	49.51	11.89		0.64			0.14	1.52			
- Other OGV	8,158.28	7,614.16	1,113.43		98.27			2.14	23.18			
- Ferries	6,589.06	5,128.74	697.47		66.23		0.33	0.06	0.01			0.01
- Commercial Harbor Craft	16,662.73	9,481.43	1,289.41		122.43		0.84	0.15	0.03			0.03
- Cargo Handling Equipment	104.70	223.64	30.41		2.89		0.01	<0.01	<0.01			<0.01
- Railyards	1,746.15	179.40	25.48		2.31		0.54	0.11	0.02			<0.01
- Rail lines	5,123.93	1,148.99	156.25		14.84		0.20	0.10	0.03			<0.01
Industrial & Commercial Sources	161.15	10,287.01	423.93		8.73	40.41	256.64	17.98	5.56	2,414.54		<0.01
- Permitted (non-refining)	161.15	484.86	334.53		0.95	40.41	0.04	0.53	0.02	2,414.54		<0.01
- Restaurants		102.49	6.16		7.79		3.07	0.85	0.06			
- Construction (non-mobile)			83.25				251.52	16.60	5.25			
- Residential wood combustion		9,699.66					2.01		0.24			
Vehicles & Trucks	13,182.10	14,960.78	19,826.81		2,704.30	123.22	400.19	26.33	6.07			0.22
- Trucks	10,955.16	8,524.36	9,012.18		1,154.42	18.16	32.88	13.27	0.26			0.14
- Light Duty Passenger Vehicles	393.43	3,128.91	7,403.54		1,014.51	9.74	17.29	7.12	0.14			0.07
- Buses	275.96	287.51	64.01		6.12	0.04	0.77	0.30	<0.01			<0.01
- Motor Homes	117.21	24.20	34.81		1.21	0.05	0.30	0.12	<0.01			<0.01
- Motorcycles		1,994.53	3,176.11		515.12	95.23	0.35	0.20	<0.01			<0.01
- Road Dust							348.52	5.30	5.66			
- Transportation Refrigeration Units	1,440.35	1,001.27	136.17		12.93		0.07	0.01	<0.01			<0.01
Misc. Sources	14,996.74	48,041.73	64,321.88		7,928.99	6,586.15	30.33	102.40	0.42			0.96
- Offroad Equipment	13,759.67	12,014.92	8,720.58		1,892.71	402.61	3.43	16.84	0.03			0.34
- Recreational Boats	63.67	13,512.37	15,540.10		3,743.85	826.85	5.05	32.00	<0.01			0.60
- Fuel Combustion (non-permitted)	944.51	15,492.08	7,571.26		5.79		20.77	45.76	0.38			0.02
- Other	228.89	548.47	7,412.51		116.82	1,088.19	1.08	7.81	0.01			<0.01
Total	70,461.31	113,766.02	69,679.21	91,667.17	9,303.62	2,505.99	2,971.87	423.90	121.59	33,846.32	18,134.12	16.63
Total (Cancer TWE)	162,765.63	3,503.28	14,407.31		11,537.18			847.06	3,085.57			19,009.07
Total (Chronic TWE)	241.31	144.27	368.26	174.40	75.46	122.60	564.93	517.50	138.62	64.40	310.52	1.41

Table 5-11. Emissions of selected toxics from permitted fuel refining sources (lbs/year).

Process Type	Diesel PM	Formaldehyde	Benzene	Hydrogen Cyanide	1,3-butadiene	Acrolein	Manganese	Nickel	Arsenic	Hydrochloric Acid	Sulfuric Acid	Hexavalent Chromium
Chevron Refinery	234.56	21,331.10	6,256.31	91,667.17	498.77	24.71	2,282.78	269.59	32.22	31,431.78	14,384.27	15.40
- Backup Generators (BUG)	219.74											
- Barge Loading		2.90	41.23				0.31		0.06		<0.01	
- Boilers/Process Heaters		4,377.75	2,341.13				107.95	11.42	21.11	18,358.35	879.34	15.00
- Fluidized Catalytic Cracking Unit		1,226.59	0.06	91,667.17	0.82	24.71	35.36	257.84	10.44	13,073.42		<0.01
- Coating AND Cleanup								<0.01				<0.01
- Cogeneration		9,988.85	855.17		0.61		2,137.92	0.14	0.39		2,106.95	
- Cooling Towers			28.16									
- Fugitives			120.33		96.44							
- Gasoline Dispensing			<0.01									
- Generators	14.82											
- Other		12.64	616.66				1.13	<0.01	0.21		0.27	
- Storage/Transport Container Cleaning		1.02	14.50				0.11		0.02		<0.01	
- Storage Tanks			897.11		321.92							
- Sulfur Plant											11,397.70	
- Surface Blasting							<0.01	<0.01				
- Tank Cars and Trucks – Working Losses			45.77		0.03							
- Vapor Recover/Flares		5,721.33	1,231.47		46.98			0.18				0.39
- Wastewater Treatment			64.73		31.98							
Other Permitted Sources	12.93	87.65	193.71		3.11		<0.01	0.06	<0.01		3,749.85	<0.01
- Chemtrade West	1.38	56.14	4.31		3.11						3,749.85	
- Richmond Products Terminal	1.83	0.05	57.56				<0.01	0.01	<0.01			<0.01
- Phillips 66 Company	0.86	0.02	38.94				<0.01	0.00	<0.01			<0.01
- TransMontaigne	1.45	7.48	34.01				<0.01	0.01	<0.01			<0.01
- IMT Richmond CA	7.42	3.79	1.03				<0.01	0.03	<0.01			<0.01
- Kinder Morgan		19.78	0.28									
- Qualawash Holdings LLC		0.40	0.01									
- Gas Stations			57.58									
Total (lbs/yr)	247.49	21,418.75	6,450.02	91,667.17	501.88	24.71	2,282.79	269.65	32.22	31,431.78	18,134.12	15.40
Total (Cancer TWE)	571.71	989.55	1,485.01		656.96			539.83	818.82			17,782.92
Total (Chronic TWE)	0.85	40.75	37.96	174.40	4.30	1.21	434.32	329.80	36.79	59.80	310.52	1.32

Model-based Exposure Assessment

While the emissions inventory is a valuable tool, additional information is required to fully understand human exposures to air pollution. For example, a source's proximity to residences and its emissions release characteristics (e.g., an elevated stack vs. a low-level release) influence the source's contributions to pollutant concentrations and exposures. Therefore, the District performed air dispersion modeling to provide a more complete picture of air quality issues and source impacts from local sources in the PTCA area. The community-scale modeling was generally conducted with U.S. EPA's AERMOD model, which can produce fine-grained pollutant concentration estimates near emissions sources. AERMOD was used to estimate concentrations at receptors spaced 50 meters apart to provide hyper-local, block-by-block information.³⁴ Importantly, dispersion modeling was performed for each emissions source separately to allow the contributions from each source to impacts at a given location to be tracked and compared. Finally, it should be noted that this modeling analysis focused on long-term average exposures and did not assess exposure to shorter variations in pollutant concentrations, which are better characterized by monitoring and other modeling approaches (for example, the flaring analysis presented in Appendix C).

This section summarizes the modeling results, providing maps of pollutant concentrations and human exposures and further assessing the contributions of specific local sources to exposures and health risks across the PTCA community. The modeling and source attribution analyses presented here focus on PM_{2.5}, DPM, cancer risk,³⁵ and chronic hazard index (HI, or CHI),³⁶ and it should be noted that cancer risk and chronic HI values were essentially derived by combining cancer and chronic TWE with dispersion model outputs. As a result, these metrics reflect the additive impact of all TACs with established cancer potency factors or chronic RELs.

Mapping Exposures

Total pollutant exposures in the PTCA community are the result of many factors, including local emissions sources, the transport of pollution from outside the community, and chemical and physical processes in the atmosphere. To support Plan strategy development, local-scale air quality modeling was performed for sources within the PTCA emissions boundary to generate the local source portion of annual average pollutant concentrations across the community at 50-meter resolution. These modeling results provide information on the relative impact of various local sources that are the target of Plan actions, and Appendix C provides additional

³⁴ For assessing PM_{2.5} impacts from the Chevron Refinery, existing results from the California Puff (CALPUFF) model were used in place of AERMOD outputs. The CALPUFF modeling was originally conducted to support amendments to District Rule 6-5, which limits emissions from refinery fluidized catalytic cracking units.

³⁵ The cancer risk metric used in this PLAN represents an estimate of the chance that a person might develop cancer as a result of exposure to emitted carcinogens at a given residential location, assuming 30 years of exposure beginning at the third trimester of pregnancy, and considering, where appropriate, Age Sensitivity Factors to account for inherent increased susceptibility to carcinogens during infancy and childhood. This is consistent with the way that cancer risk is defined in the Air District's Regulation 2, Rule 5. Although a population-weighted version of this metric can be informative (Figure 5-18, and throughout the text), it is not an estimate of a net or average impact on the number of cases of cancer among the local population.

³⁶ In contrast to cancer risk, the chronic Hazard Index (HI) does not represent a probability. It is a score created by comparing modeled levels of multiple toxic air contaminants (TACs) to officially established reference levels (RELs), above which there is reason to anticipate some harmful effects. Conventionally, a Hazard Index above 1.0 indicates that the modeled level is not expected to be safe for all individuals. Because the Plan modeling holds aside exposures from non-local sources, and does not consider exposures from other pathways such as food or drinking water, a Hazard Index less than 1.0 may still present reason for concern or action, especially if there is reason to believe that including those other exposures would lead to a score above 1.0, or to a body burden (dose) that is cumulatively significant.

information on how these local source impacts compare with a modeled estimate of total pollutant concentrations that accounts for pollutant transport and other factors.

These modeled concentrations resulting from local source emissions were averaged across each Census block in the PTCA area. To characterize long-term residential exposures, these block-level concentrations were then multiplied by the number of people residing in each Census block. Either perspective (unweighted ambient concentration, or concentration multiplied by population) can be informative, depending on the question or issue at hand.

As an example, Figure 5-18 shows contributions to ambient $PM_{2.5}$ concentrations, both with and without population weighting, resulting from all sources modeled in the PCTA community. The left panel depicts unweighted concentrations, which are highest within the Chevron Refinery, the West Contra Costa County Landfill, and the harbor channel. However, these areas generally have low population density, with few if any residents. When population density is taken into account (right panel), the emphasis shifts toward areas where more people reside, with greater total exposure (concentration times population). Such areas include neighborhoods in and around the Iron Triangle, where high population densities coincide with relatively elevated $PM_{2.5}$ concentrations. Densely populated stretches along transportation corridors also receive more emphasis. All else being equal, a densely populated neighborhood with the same level of exposure (i.e., concentration) will likely experience a larger number of attributable health impacts from $PM_{2.5}$ than a sparsely populated neighborhood, simply because it has more people. On the other hand, the worst levels of $PM_{2.5}$ might be found in a sparsely populated neighborhood—and regardless of the number of people involved, this situation is also important.

Similarly, Figures 5-19 and 5-20 show cancer risk and chronic HI values (left panels, “concentrations”) and corresponding population-weighted values (right panels, “exposures”) resulting from all sources modeled in the PTCA community. Areas with higher cancer risk values can be seen where diesel sources operate, such as along freeways and near railyards and construction projects. Areas with higher chronic HI values can be seen around Chevron, Chemtrade, the West Contra Costa County Landfill, and along I-80. When residential population density is taken into account (right panels of Figures 5-19 and 5-20), neighborhoods in and around the Iron Triangle, as well as along I-80 and Carlson Boulevard (which also runs parallel to a rail line), are emphasized for both cancer risk and chronic HI exposures.

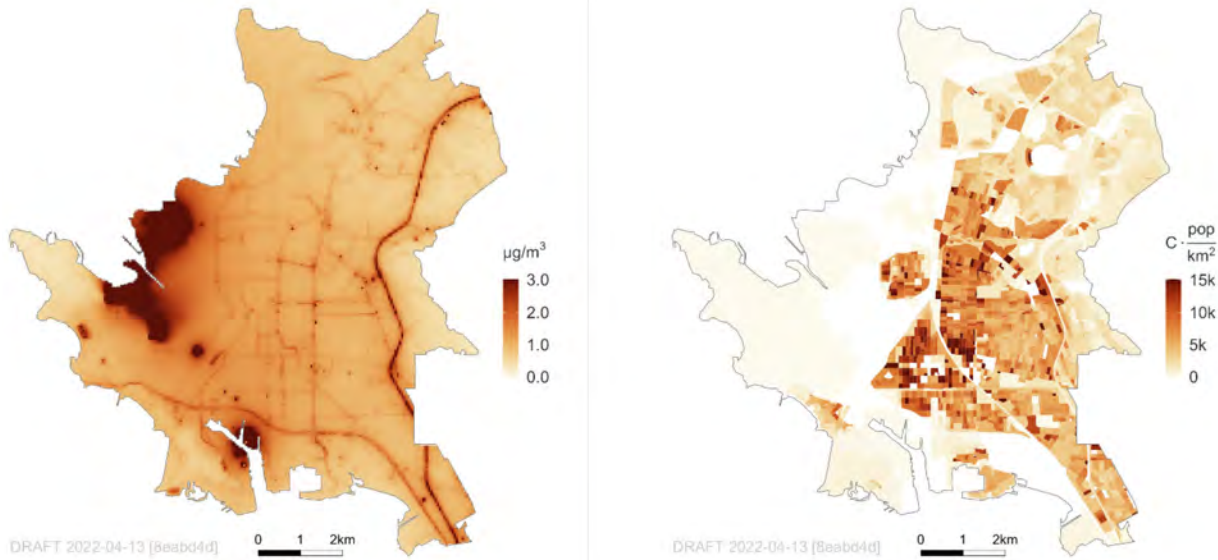


Figure 5-18. Left panel: modeled contributions, from local sources, to ambient $PM_{2.5}$ concentrations. (Maps do not depict total concentrations, which would include contributions from other sources that were not modeled, including sources outside the PTCA area.) Right panel: after population weighting is applied. “C” is the metric shown in the left panel ($\mu\text{g}/\text{m}^3$), which is multiplied by residential population density (pop/km^2). A value of 10k means that, over a 1 km^2 area, the total impact is estimated to be equivalent to 10,000 people being exposed to $1.0\ \mu\text{g}/\text{m}^3$ above background. It could be that 5,000 people are exposed to $C = 2.0\ \mu\text{g}/\text{m}^3$, or that 20,000 people are exposed to $C = 0.5\ \mu\text{g}/\text{m}^3$, above background. In either case, using conventional approaches to modeling long-term effects, the population health impacts—that is, the number of attributable adverse events—are expected to be similar.

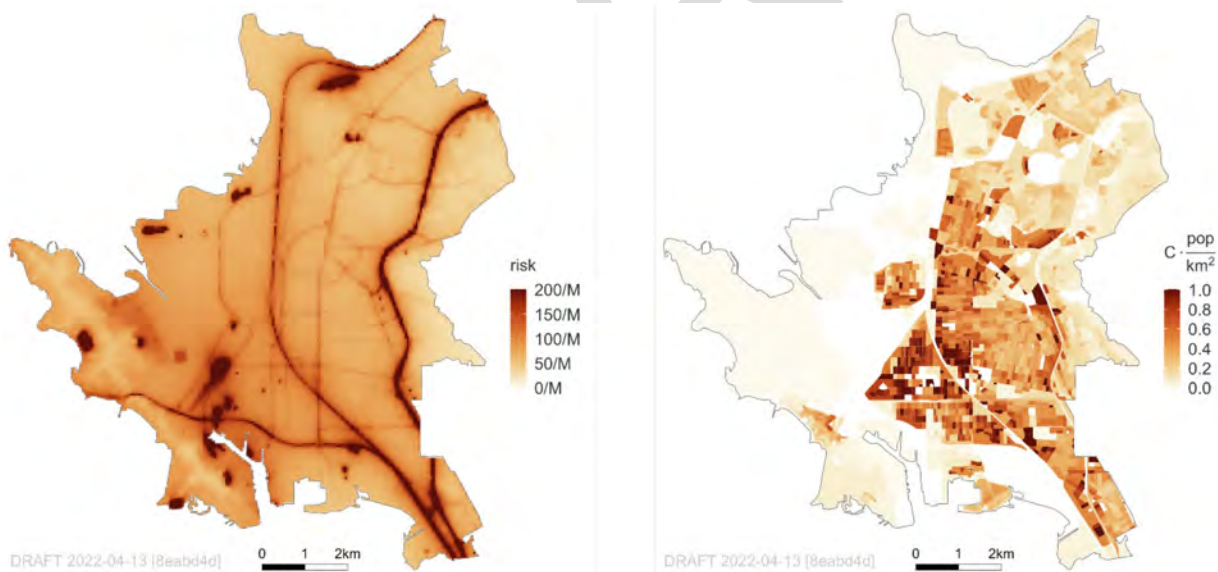


Figure 5-19. Left panel: modeled contributions from local sources to cancer risk. Right panel: after population weighting is applied. As in Figure 5-18, “C” is the metric shown in the left panel (“cancer risk”), which is multiplied by residential population density (pop/km^2). Note that scaling C by population is not intended to yield an estimate of attributable cases of cancer, or the probability of developing cancer, in the local population. One reason for this is that the cancer-risk metric used herein is calculated by assuming a health-protective scenario (30 years of exposure beginning at the 3rd trimester), consistent with the Air District’s Regulation 2, Rule 5.

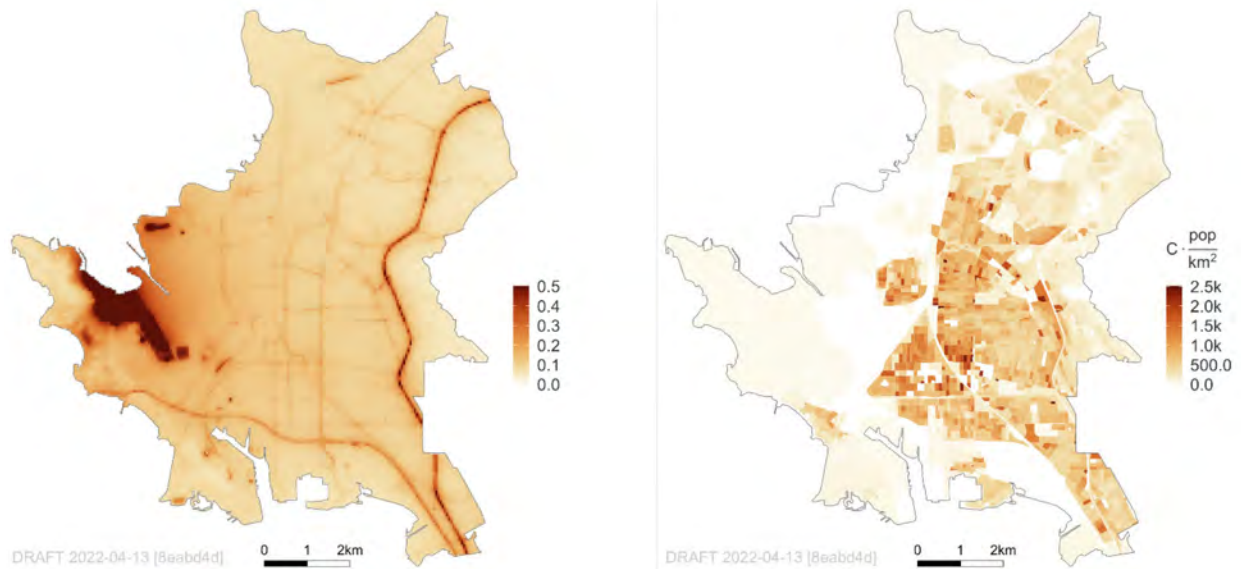


Figure 5-20. Left panel: modeled contributions from local sources to chronic hazard index (HI). Right panel: after population weighting is applied. As in Figure 5-18, “C” is the metric shown in the left panel (“chronic hazard”), which is multiplied by residential population density (pop/km²). In contrast to Figure 5-18, the units in the right panel do not have a straightforward interpretation (see text; a primary reason is that chronic HI values do not follow a ratio scale, so HI = 2 is not necessarily twice as impactful as HI = 1). Nevertheless, the right panel may be helpful to indicate where a larger number of people might be affected, if contributions from other sources and pathways were cumulatively significant.

Source Attribution Analyses

In addition to mapping exposure from all local sources, contributions of individual sources or groups of sources to pollutant exposures were quantified as a further aid to strategy development. In this sub-section, source contributions are evaluated according to the areas of concern identified by the community, with a focus on fuel refining, commercial and industrial sources near communities, vehicles and trucks, and marine and rail operations. As previously noted, this evaluation of local source impacts was intended to support Plan strategy development and does not represent total pollutant exposures within the community. For example, modeling results indicate that local source emissions result in an average residential PM_{2.5} exposure of 1.06 µg/m³, which is about 15% of total PM_{2.5} exposure in the PTCA community based on regional modeling results (see Appendix C for more details). For air toxics, local sources account for 40% of population-weighted DPM exposure in the PTCA community and 36% of average residential cancer risk.

For the four areas of concern considered, Figure 5-21 shows local source contributions to annual average residential exposures for PM_{2.5} concentrations, cancer risk, and chronic HI. As noted above, the average resident of the PTCA community is exposed to a population-weighted PM_{2.5} concentration of 1.06 µg/m³ (Figure 5-21, left panel).³⁷ The vehicles and trucks and fuel refining categories combine to account for three-fourths of this value, with commercial and industrial sources contributing 20% (0.21 µg/m³). For chronic HI, vehicles and trucks and fuel refining are again important, accounting for about 90% of the average residential value of 0.11 that is

³⁷ Note that this PM_{2.5} concentration and other modeling results shown in this sub-section reflect local source impacts only.

attributable to local sources (Figure 5-21, middle panel). Key TACs that contribute to chronic risks in the PTCA community are manganese, nickel, benzene, sulfuric acid, and DPM.

For cancer risk, vehicles and trucks account for over half of the average residential value of 84.3 per million, and marine and rail operations account for another 43% of that value (36.4 out of 84.3 per million). This means that on-road and off-road mobile sources combine to account for over 90% of the average residential cancer risk attributable to local sources. Key TACs that contribute to cancer risks in the PTCA community are DPM, benzene, and hexavalent chromium.

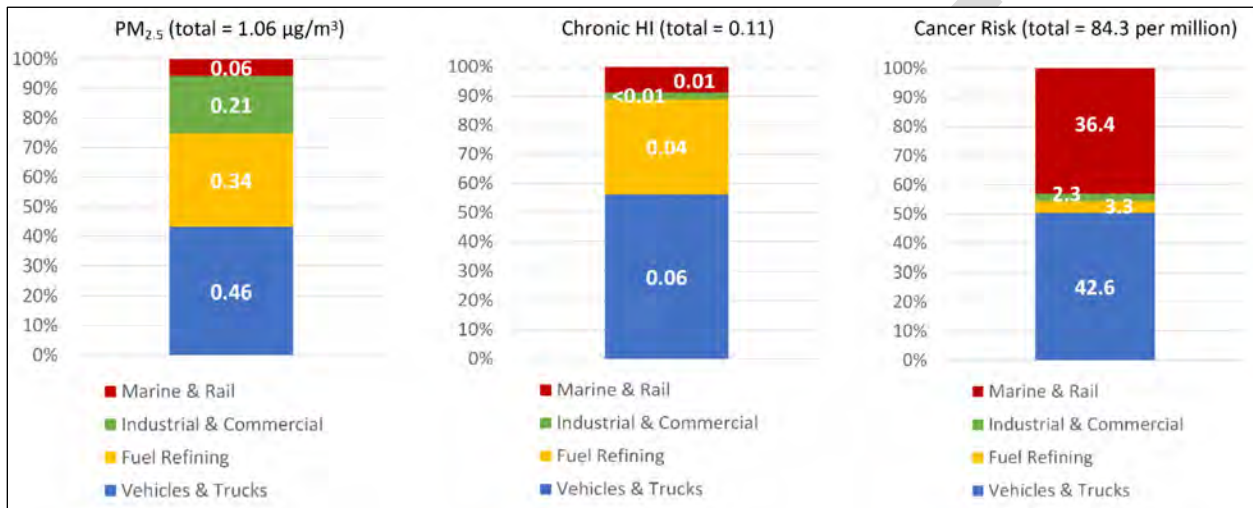


Figure 5-21. Source contributions to modeled impacts for the PTCA community; values shown within the stacked bars represent annual average residential exposures attributable to local sources (i.e., the value to which the average community resident would be exposed).

Of course, the community concerns shown in Figure 5-21 represent broad sectors covering many individual sources, as highlighted in Table 5-1. Therefore, more detailed analyses were performed to identify specific facilities and processes that are driving the source contributions shown in Figure 5-21.

A Closer Look at PM_{2.5}

On-road mobile sources (vehicles and trucks) account for about 43% of the PM_{2.5} exposure attributable to local sources within the PTCA community (0.46 of 1.06 µg/m³). In Figure 5-22, the PM_{2.5} stacked bar chart from Figure 5-21 is expanded using a pie chart that provides greater detail for on-road mobile source emissions. The pie chart portion of the figure shows that road dust emissions account for more than two-thirds of total PM_{2.5} impacts from on-road mobile sources. Contributions from vehicle categories labeled as “Truck”³⁸ and “Non-Trucks”³⁹ are roughly equal and include exhaust emissions, tire wear, and brake wear. This finding highlights a recognized trend in emissions inventories for on-road sources: as exhaust emissions have declined through the implementation of stringent emissions standards, non-exhaust emission sources like road dust represent a greater share of the PM_{2.5} emissions. Due to the growing importance of road dust emissions, Caltrans has funded a study of this source category that is

³⁸ The “Trucks” category includes light-heavy duty, medium-heavy duty, and heavy-heavy duty trucks.

³⁹ The “Non-Truck” category includes all vehicles not treated as “Trucks,” including passenger cars, light and medium duty trucks, and buses.

being conducted by UC Riverside, with staff from CARB, EPA, and BAAQMD serving on the project's review panel.⁴⁰

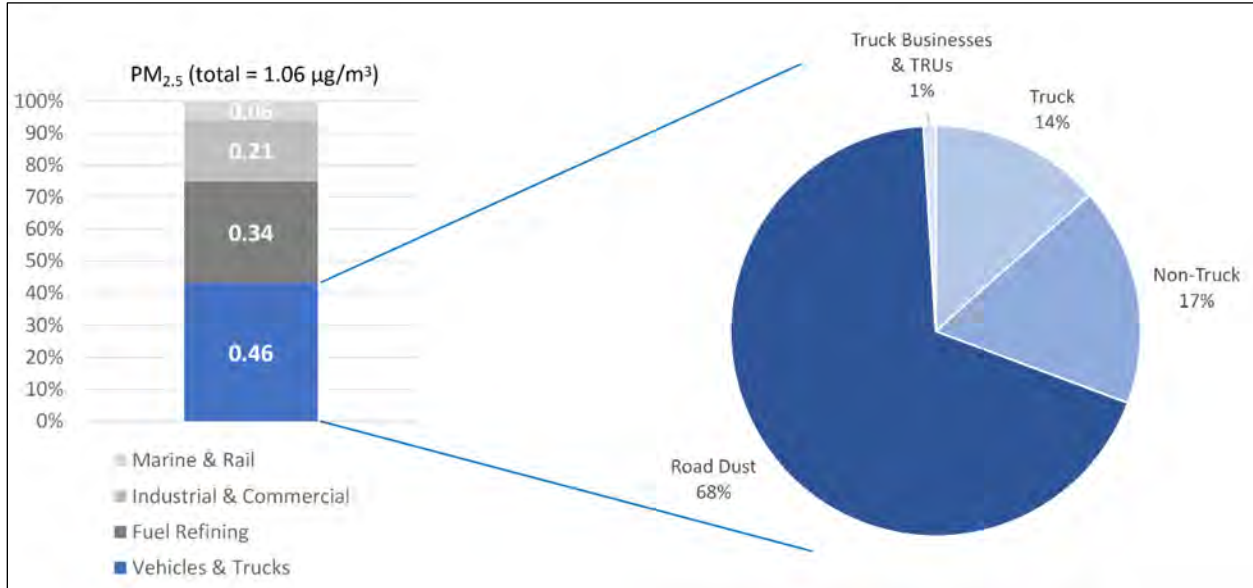


Figure 5-22. Source contributions to average residential PM_{2.5} exposures, with the vehicles and trucks source category shown in detail.

For fuel refining sources, Figure 5-21 shows that this area of concern accounts for an average residential PM_{2.5} exposure of 0.34 µg/m³, or about one-third of the PM_{2.5} exposure attributable to local sources within the PTCA community. The Chevron Refinery is responsible for 94% of this value (0.32 µg/m³), and as previously shown in Table 5-7, the fluidized catalytic cracking unit (FCCU) is currently the largest PM_{2.5} source at Chevron, accounting for 229 of the 479 tons of PM_{2.5} emitted by the facility. Though District Rule 6-5 is slated to sharply reduce emissions from the FCCU, analyses conducted in support of amendments to that rule showed that other PM_{2.5} sources at Chevron will continue to drive disparities in impacts from that facility.⁴¹ Figure 5-23 shows per capita PM_{2.5} exposures by race/ethnicity and by Chevron source type (FCCU, non-FCCU), highlighting the role of non-FCCU emissions in creating exposure inequities.

⁴⁰ Research notes on this project are available at: <https://dot.ca.gov/-/media/dot-media/programs/research-innovation-system-information/documents/research-notes/task3785-rns-9-21-a11y.pdf>.

⁴¹ See: https://www.baaqmd.gov/~media/dotgov/files/rules/reg-6-rule-5-particulate-emissions-from-refinery-fluidized-catalytic-cracking-units/2020-amendment/documents/20210525_11_fsr_0605_app_a1-pdf.pdf.

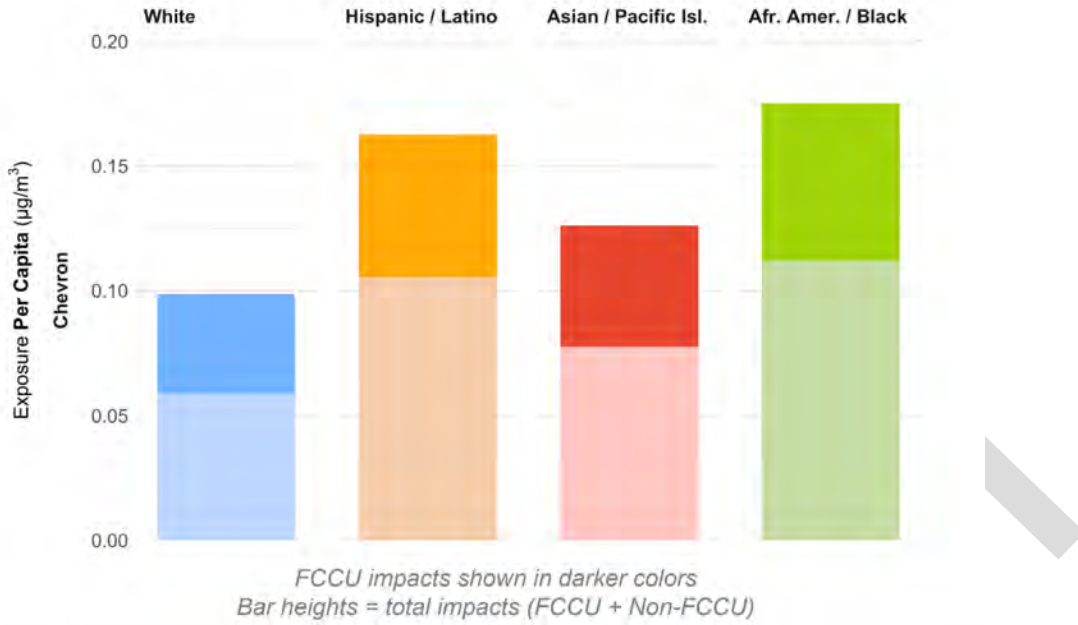


Figure 5-23. Disparities in PM_{2.5} exposure resulting from emissions from the Chevron Refinery.

A Closer Look at Chronic HI

On-road mobile sources (vehicles and trucks, streets and freeways, logistics and warehouses) account for about 55% of the chronic HI attributable to local sources within the PTCA community (0.06 of 0.11). In Figure 5-24, the chronic HI stacked bar chart from Figure 5-21 is expanded using a pie chart that provides greater detail for on-road mobile sources. The pie chart portion of the figure shows that the “Non-Truck” and “Road Dust” categories are roughly equal and combine to account for more than three-fourths of total chronic HI from on-road mobile sources. Key TACs emitted by on-road mobile sources that contribute to chronic risks in the PTCA community are benzene (from non-truck vehicles) and manganese (from road dust).

The fuel refining area of concern accounts for 33% of the chronic HI exposure attributable to local sources in the PTCA community (0.036 of 0.11). The Chevron refinery alone accounts for 29% of this exposure (0.032 of 0.11), so Figure 5-25 expands the chronic HI bar chart to show greater detail for Chevron processes. This figure shows that 80% of Chevron’s chronic HI impact is attributable to three processes: cogeneration,⁴² the sulfur recovery unit (SRU), and the FCCU. Key TACs emitted by these processes include manganese (HRSG), sulfuric acid (SRU), nickel and hydrogen cyanide (FCCU).

⁴² The cogeneration process shown in Figure 5-25 includes two gas turbines, each with an associated heat recovery steam generator (HRSG).

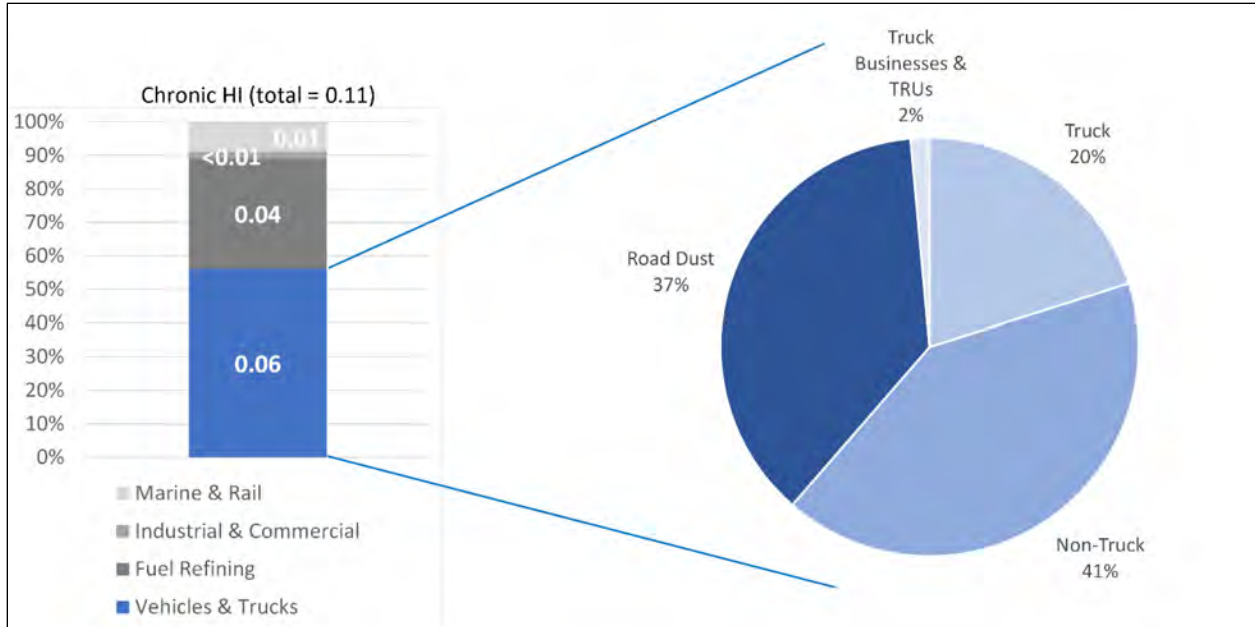


Figure 5-24. Source contributions to average residential chronic HI values, with the vehicles and trucks source category shown in detail.

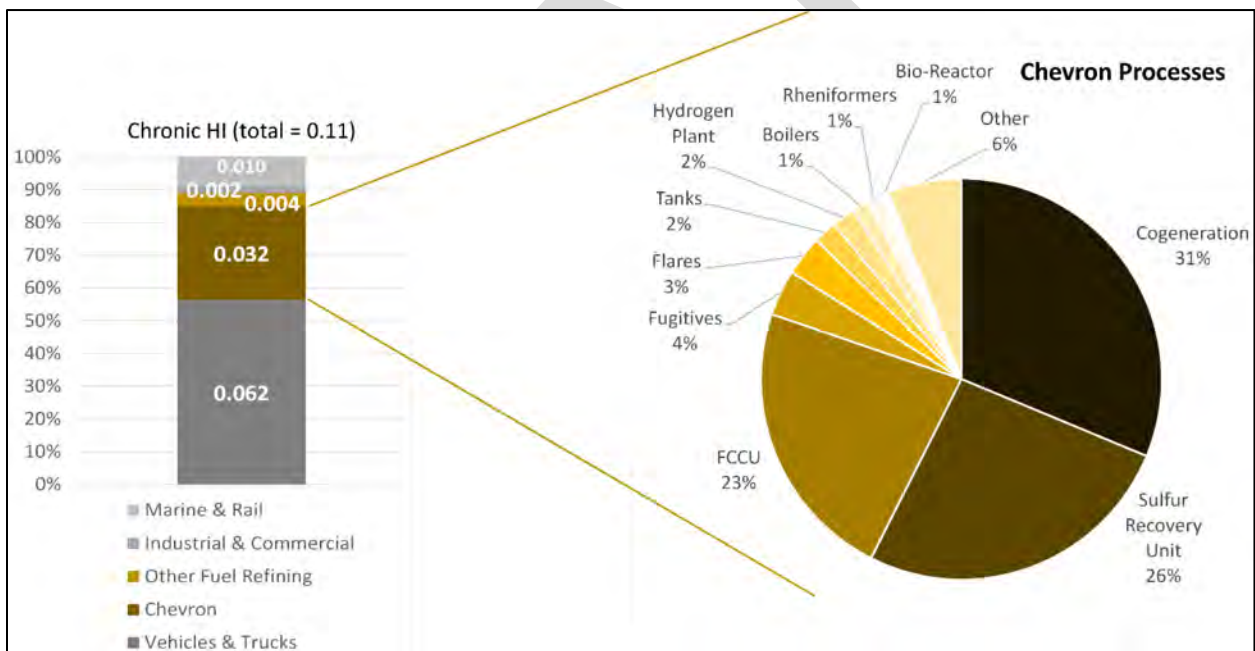


Figure 5-25. Source contributions to average residential chronic HI values, with Chevron processes shown in detail.

A Closer Look at Cancer Risk

On-road mobile sources account for just over half of the cancer risk attributable to local sources within the PTCA community (42.6 of 84.3 in a million). In Figure 5-26, the stacked bar chart for cancer risk from Figure 5-21 is expanded using a pie chart that provides greater detail for on-road mobile sources (vehicles and trucks). The pie chart portion of the figure shows that the "Truck" category accounts for almost three-fourths of total cancer risk from on-road mobile

sources operating within the PTCA community. This category focuses on trucks operating on roadways, and another 8% of the total cancer risk from on-road mobile sources is attributable to trucks and transportation refrigeration units (TRUs)⁴³ operating at warehouses and other business locations. Virtually all the cancer risk associated with these categories is due to DPM, as these trucks and TRUs are largely diesel powered.

Figure 5-27 shows that the marine and rail area of concern accounts for 43% of the cancer risk attributable to local sources in the PTCA community (36.4 of 84.3 in a million). The pie chart in Figure 5-27 shows that the locomotives operating on rail lines and at railyards account for just under half of the cancer risk impact from this area of concern. Commercial harbor craft (e.g., tugboats) account for almost one quarter (23%) of the impact. It should be noted that approximately half of harbor craft and other marine vessel activity in the PTCA area are connected to Chevron and other fuel refining operations.

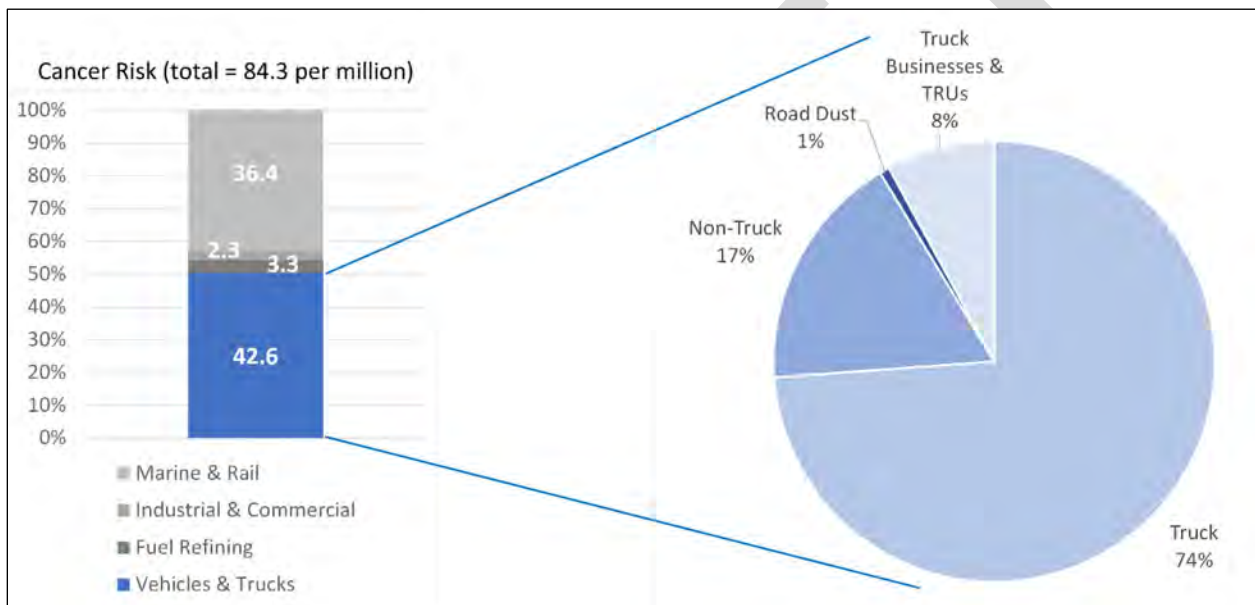


Figure 5-26. Source contributions to average residential cancer risk, with the vehicles and trucks source category shown in detail.

⁴³ TRUs are refrigeration systems powered by diesel engines that are installed in truck trailers, vans, or shipping containers used to transport perishable products.

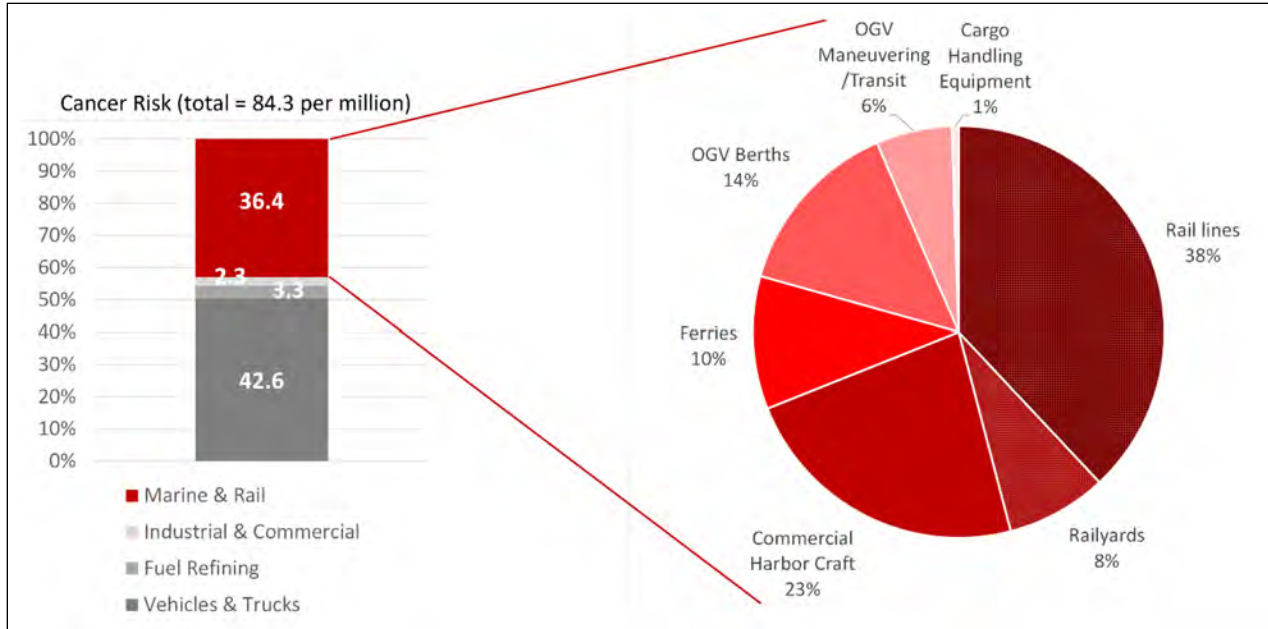


Figure 5-27. Source contributions to average residential cancer risk, with the marine and rail area shown in detail.

Summary

Trends in air quality monitoring data show that levels of several pollutants, including PM_{2.5} and some TACs, have not shown improvements in the past ten years (Figures 5-4, 5-5, 5-8, 5-13, and 5-14). Monitoring data also revealed spatial variability in levels of different pollutants across the PTCA area and illustrated examples of short-term air pollution events that may indicate contributions from local pollution sources (Figures 5-9, 5-10, and 5-16).

The baseline emissions inventory assembled for the PTCA area shows that the Chevron refinery and related fuel refining sources account for over half of local emissions of CAPs such as SO_x and PM_{2.5}; key TACs such as manganese, nickel, and hydrochloric acid; and total chronic TWE (Tables 5-6, 5-8, and 5-10). In addition, these sources account for 100% of local emissions of the TACs hydrogen cyanide and sulfuric acid (Table 5-10). Mobile sources (i.e., marine and rail, vehicles and trucks) are also important local emitters, accounting for 61% of local cancer TWE (Table 5-8).

From an exposure standpoint, the fuel refining and vehicles and trucks areas of concern combine to account for about three-fourths of average residential PM_{2.5} exposure and about 90% of the average residential chronic HI value attributable to local sources (Figure 5-21). Road dust emissions from vehicular traffic are a leading contributor to PM_{2.5} exposure due to the proximity of roadways to residences (Figure 5-22). Vehicles and trucks also account for about half of average residential cancer risk attributable to local sources (Figure 5-26).

Supplementary technical information on air quality monitoring, emissions inventories, and air quality modeling can be found in Appendix C (modeling) and Appendix D (monitoring).

Chapter 6 – Enforcement Overview & Findings

This chapter provides an enforcement overview and the data findings of regulated sources from the past four years to better understand the local air quality issues in the PTCA area, specifically in the local zip codes of 94801, 94802, 94803, 94804, 94805, 94806, 94807, and 94564. The Air District and the California Air Resources Board (CARB) share enforcement responsibilities in the PTCA area, with the Air District primarily responsible for regulating stationary sources and CARB primarily responsible for regulating mobile sources. Stationary and mobile source enforcement may be conducted jointly by the two agencies. This chapter summarizes stationary and mobile source enforcement data from 2019 to 2022, used to help identify and develop enforcement strategies that aim to address community concerns and align with the AB617 goals to reduce emissions in the area.

ENFORCEMENT AUTHORITY

The enforcement programs of the Air District and CARB strive to ensure compliance and minimize local and regional impacts from air pollution. This section explains the enforcement authorities over stationary and mobile sources.

STATIONARY SOURCES

The California Health and Safety Code grants Air Districts the authority to adopt and enforce air pollution regulations to achieve state and federal air quality standards. The Air District's Compliance and Enforcement Division (C&E) enforces local, state, and federal regulations for a variety of stationary sources in the PTCA area. The following are a few examples of stationary sources in the PTCA area and corresponding Air District regulations for those types of operations:

- Petroleum Refining (subject to the Title V program that encompasses a wide range of Air District, state, and federal regulations)
- Bulk Terminals (Rule 8-33)
- Landfill (Rule 8-34)
- Sewage treatment plants (source specific rule under development, Rule 9-1 and Rule 9-2)
- Gasoline stations (Rule 8-7)
- Stationary and portable engines and generators (Rule 9-8)
- Boilers (Rule 9-7)
- Auto body shops (Rule 8-45)
- Coating operations (Rule 8-4, Rule 8-19, Rule 8-31, and Rule 8-32)
- Asbestos renovation and demolition projects (Rule 11-2 and Rule 11-14)
- Other sites/facilities with sources that have the potential for particulate emissions are subject to Rule 6 (e.g., Cement and Asphalt Plants, Metal Recyclers, Construction Sites, Bulk Material Handling Facilities, etc.)

MOBILE SOURCES

CARB is the primary authority for developing and enforcing regulations to control emissions from portable and mobile sources and consumer products in California, except in cases where federal law preempts CARB's authority. The Air District may refer to or partner together with CARB to investigate air quality concerns relating to the following mobile sources listed below:

- Portable equipment
- Heavy-duty idling
- Cargo handling equipment
- Off-road construction equipment
- Commercial harbor craft
- Ocean-going vessels (OGV)
- At-Berth (Shore Power)
- Drayage trucks
- Transport refrigeration units
- On-board incineration on cruise ships
- Fuel sulfur and operational requirements within 24 nautical miles for ocean-going vessels

Although CARB has authority to regulate emissions from these sources, it does not have regulatory authority over where vehicles drive or park. The authority to regulate and enforce parking and truck routes within the PTCA area is held by the City's Police and Transportation Services departments. It will be the responsibility of those departments to apply any truck parking or traffic strategies in the PTCA area.

ENFORCEMENT OF STATIONARY SOURCES AIR DISTRICT ENFORCEMENT PROGRAM

The C&E Division at the Air District is responsible for administering the core enforcement programs of the agency. Approximately 40 Air District staff are currently in the field and assigned to the C&E inspection program to enforce applicable Air District, state, and federal rules and regulations, and ensure compliance with air quality rules and regulations within the jurisdiction of the nine Bay Area counties.

Approximately 10% of C&E's inspection staff (staff), or 5 staff, are assigned to provide daily coverage in the PTCA area. Additional staff from other regions of the Air District may be temporarily reassigned to help respond to air quality complaints or assist during incidents. Staff assigned to the area help conduct inspections and perform other enforcement program activities, including:

- Investigations of community complaints and general air quality concerns,
- Unannounced compliance inspections of Air District permitted facilities and investigations at sites that may not have a permit,
- Investigations of excess emissions and Title V deviations reported to the Air District, and
- Responding to and investigating major incidents such as fires associated with manufacturing or industrial processes, or other major air emission releases.

Staff may take enforcement action through the issuance of a Notice of Violation or Notice to Comply when a facility is discovered to be in violation of an air quality regulation. Staff will work together with other divisions at the Air District and or other regulatory agencies, when applicable, to ensure that the facility takes corrective actions to prevent recurrences of the violation. As part of this process, staff will track the progress of the corrective actions and provide compliance assistance, as necessary. Occasionally, staff may discover unpermitted sources that fall within the Air District’s jurisdiction. In these situations, staff will issue a Notice of Violation for any unpermitted sources or operations and will facilitate discussions with the facility owner and Air District Engineer to begin the permitting process.

Stationary Sources in the PTCA Area

Staff conduct routine, unannounced inspections of stationary sources of air pollution. Figure 6-1 provides a closer look at the different types of Air District permitted facilities located in the PTCA area (see also Figure 5-17). The chart also shows the number of each type of facility in the area. See Appendix E in the enforcement plan for a complete list of Air District permitted facilities located in the 94801, 94802, 94803, 94804, 94805, 94806, 94807, and 94564 zip codes.

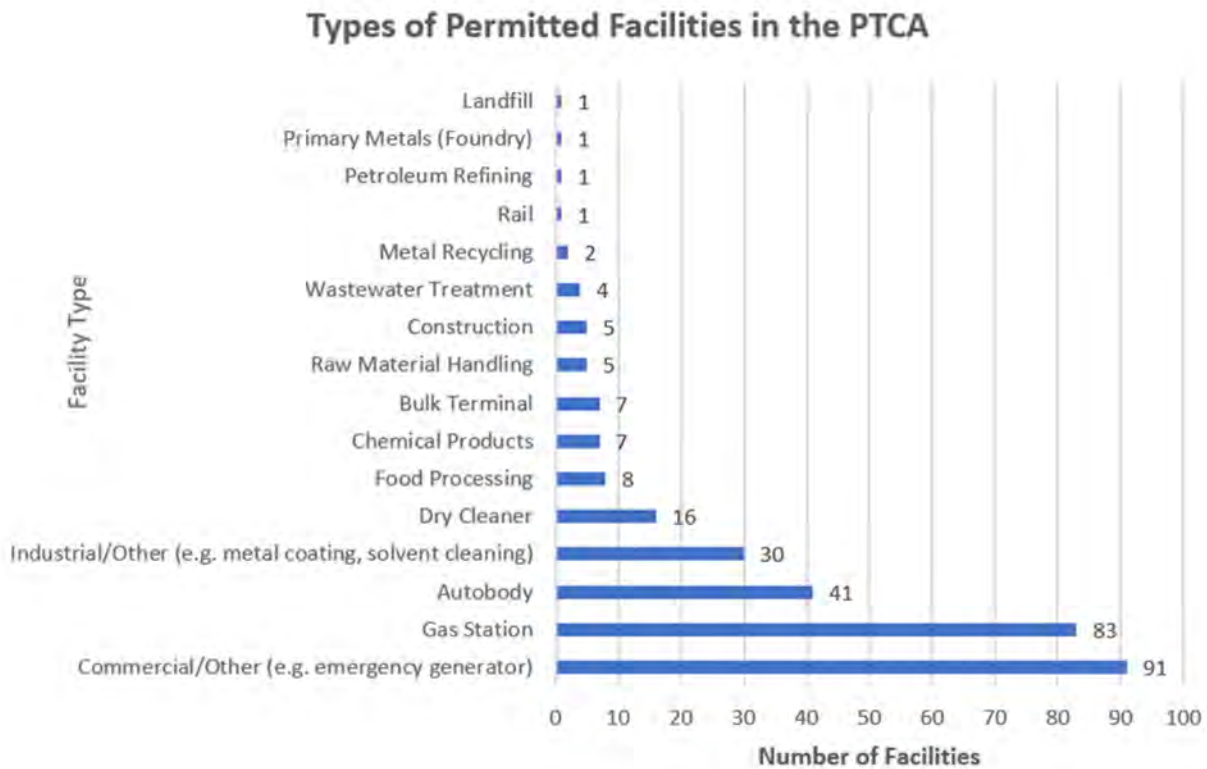


Figure 6-1. Types of Permitted Facilities in the PTCA area

4-Year Enforcement History of Stationary Sources

The Air District compiled a 4-year enforcement history in the PTCA area for stationary sources. This data includes a 4-year summary of compliance inspections, complaint investigations, and violations from January 2019 through December 2022.

Compliance Inspections

The PTCA area has over 300 Air District permitted facilities as of December 2022. Unannounced compliance inspections are conducted at sites or facilities that have an Authority to Construct or a Permit to Operate. As part of an inspection, staff meet with the owner or operator of a facility to ensure sources are operating in compliance with Air District regulations, permit requirements, and other state and/or federal rules and regulations. Staff review equipment, operational processes, and records to determine a facility's compliance status. In the 4-year period, staff have completed 938 area source inspections at Air District permitted facilities in the PTCA area. These inspections often include a comprehensive review of the of the following when determining whether a facility is operating in compliance with air quality rules and regulations:

- Permit review and conditional requirements,
- Air District, state and federal rules that may apply,
- Process upsets and equipment malfunctions at permitted facilities,
- Deviations from a facility's permit, operating parameters, monitoring and recordkeeping requirements,
- Major incidents such as fires or other air emission releases, and
- Facilities and sites of operation that do not already have an Air District permit where there may be an air quality concern.

There are three facilities in the PTCA area subject to the Clean Air Act, Major Facility Review Program (Title V). These facilities include the West Contra Costa County Landfill, Chemtrade West US LLC, and the Chevron Refinery. The Title V Program requires large industrial facilities that trigger certain emissions thresholds to operate under a single comprehensive operating permit that covers all applicable Air District, state, and federal air quality requirements. The thresholds that trigger Title V Program permitting include facilities that have a potential to emit:

- 100 tons per year of a criteria pollutant,
- 10 tons per year of a Hazardous Air Pollutant (HAP); or
- 25 tons per year of any combination of HAPs.

All instances of non-compliance of a facility's Title V permit must be reported to the Air District as a Title V permit deviation. From 2019 to 2022, 841 Title V permit deviations were reported between the three Title V facilities in the PTCA area, with 800 of those deviations reported by the Chevron Refinery. Staff investigate each Title V permit deviation and take the appropriate enforcement action following the conclusion of the investigation.

In addition to inspections at permitted facilities, staff also conduct compliance inspections subject to the Air District's Asbestos Demolition and Renovation Program and Gasoline Dispensing Facility (GDF) Program. Asbestos and GDF programs are specialty programs that encompass the entire jurisdiction of the Air District, including the PTCA area. In the 4-year period

between 2019 and 2022, staff completed 192 asbestos demolition and renovation site inspections, and 53 GDF inspections. Staff assigned to these programs cover large geographical areas and conduct frequent inspections and may concentrate on specific Air District regions at a time, as opposed to other staff that have general area assignments and focus specifically on the PTCA area.

Reportable Compliance Activities

Permitted facilities within the PTCA area may be subject to Air District monitoring requirements. Excess emissions registered on a continuous emissions monitor, ground level monitor, parametric monitor, and/or a pressure relief device, are required to be reported to the Air District as a Reportable Compliance Activity (RCA). Permitted facilities experiencing an inoperative monitor or requesting breakdown relief, must also submit an RCA notification. Figure 6-2 summarizes the RCA categories and number of RCAs received by the Air District. In the 4-year period between 2019 and 2022, a total of 1,127 RCAs were reported to the Air District in the PTCA area. Air District staff are responsible for investigating each RCA reported to the Air District. See Appendix E for a complete list of RCAs from 2019 to 2022.

Reportable Compliance Activities (RCA) Data

Type	2019	2020	2021	2022	Total
Excess	115	162	168	197	642
Breakdown	12	10	15	11	48
Inoperative Monitor	98	108	118	111	435
Pressure Relief Valve	1	0	1	0	2
Total	226	280	302	319	1127

Figure 6-2. PTCA area 4-year RCA Data

Air Quality Complaint Investigations

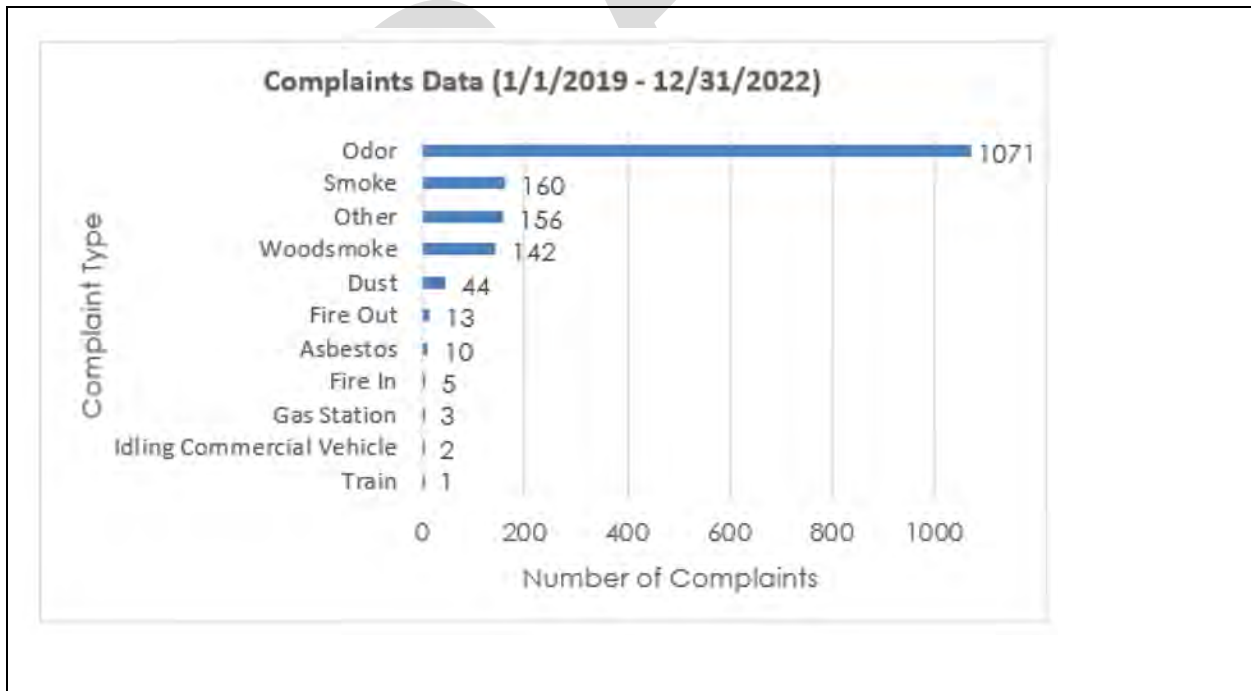
The Air Quality Complaint Program is a key program of the Air District. Community members are often the first to notice an air pollution concern, such as visible emissions or odors, and reporting a complaint allows the Air District to address the concern in a timely manner. While Air District staff are not first responders, staff investigate every air pollution complaint and strive to achieve early intervention to address air quality concerns to protect public health.

The Air District aims to respond to air quality complaints expeditiously, often within 30 minutes. In situations where complaints are received after business hours or on weekends, staff will

respond on the next business day. During an air quality complaint investigation, staff conduct a thorough inspection at the alleged facility/site or potential source of emission to ensure it is operating in compliance with air quality regulations. Investigations may result in Air District enforcement actions, including public nuisance and/or violations of other applicable Air District regulations and requirements. Staff works with the facility/site contact to resolve any air quality issue and notifies the complainant of the investigation outcome.

The Air District updated the Air Quality Complaint Program in early 2021 after hosting five public workshops to seek community feedback and input on improving the program. Based on community feedback, the Air Quality Complaint Policy and Procedures have been updated to expand Air District's ability to confirm complaints, provide clarity and additional guidance on the complaint response and investigation process, clarify public nuisance authority, explain different types of enforcement actions, address confidentiality concerns, and enhance accessibility to information and resources. In addition to updating the Air Quality Complaint Policy and Procedures, supplemental program materials were also developed and/or updated, such as the emissions log, a video series explaining the complaint process, and a helpful tips sheet on reporting an air quality complaint. A new online Air Quality Complaint Reporting system was also developed to better capture information provided by members of the public regarding air quality concerns.

Air quality complaint investigations make up a large portion of the enforcement activities in the PTCA area. In the 4-year period between 2019 and 2022, a total of 1,607 air quality complaints were received by the Air District. Figure 6-3 shows the complaint summary by type. Within the PTCA area, odors are the greatest concern of the community, followed by complaints of smoke. The "Other" complaint type is mostly associated with allegations of flaring activities.



Calendar Year	Number of Complaints
2019	449
2020	410
2021	392
2022	356
Total	1607

Figure 6-3. Types of Air Quality Complaints in PTCA area

Figure 6-4 below is a breakdown of the odor complaints in the PTCA area. Of the odor complaints that did allege a specific site or facility, Chevron Refinery, a petroleum refining facility, received the most odor complaints, approximately 28 percent of odor complaints, followed by Veolia/City of Richmond wastewater treatment plant, which received 16 percent of odor complaints in the PTCA area during the period between 2019 and 2022. Approximately 33 percent of the odor complaints filed by complainants during the 4-year period did not allege a specific source. Additionally, 5 percent of the odor complaints in the PTCA area were one, or two-time, single complaints. See Appendix E for a complete list of complaints received in the PTCA area.

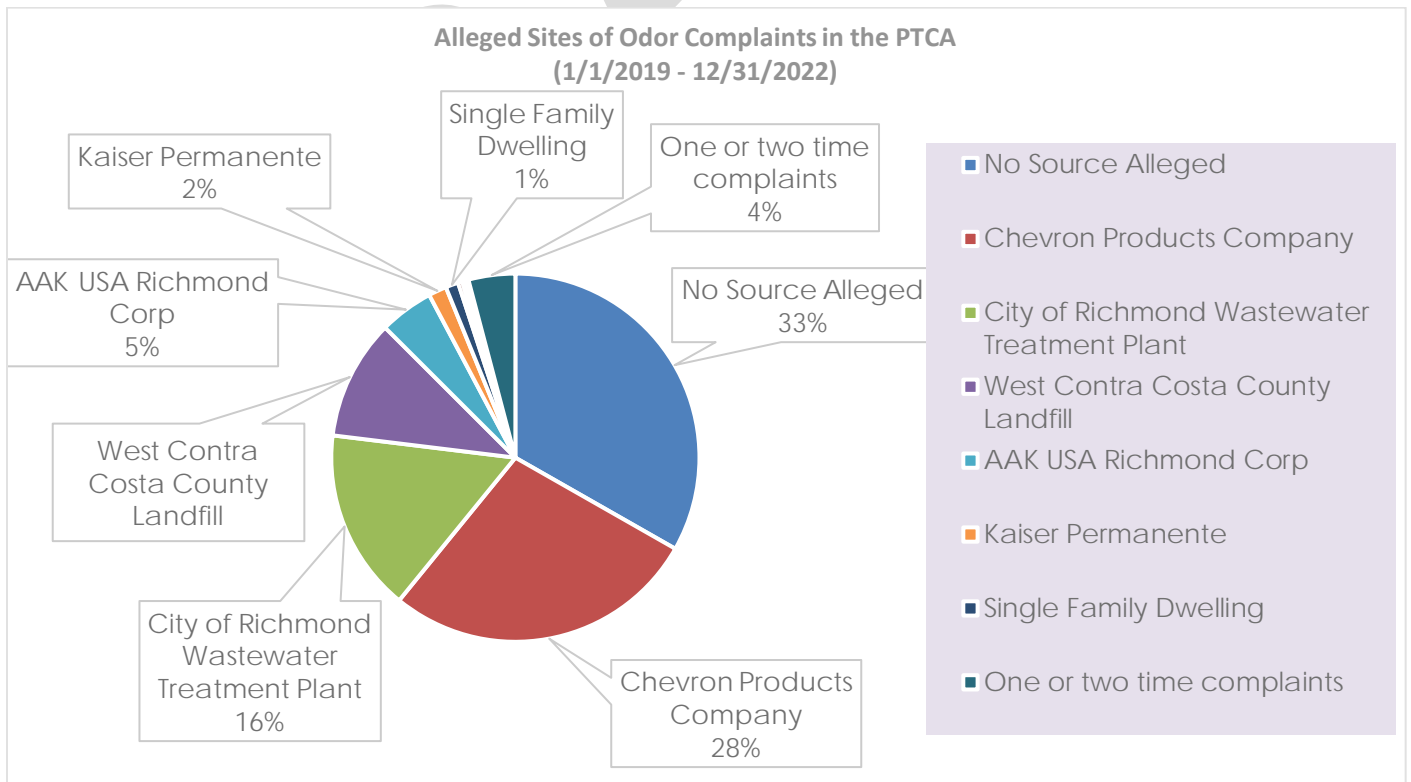


Figure 6-4. Alleged Sites of Odor Complaints in the PTCA area

It is important to note that at the time an air quality complaint is filed, the source of alleged emissions may not be known by the complainant, as seen by the 33% of complaints without an alleged source. While not all information may be known, the Air District encourages complainants to be as descriptive as possible when reporting a complaint, especially for odors. Descriptors such as “bad” or “terrible,” although true, are not as helpful to an air quality complaint investigation as descriptors such as “burnt plastic” or “rotten eggs.” Providing specific details, observations and information about the potential source can help locate the source of emissions and identify compliance issues more quickly.

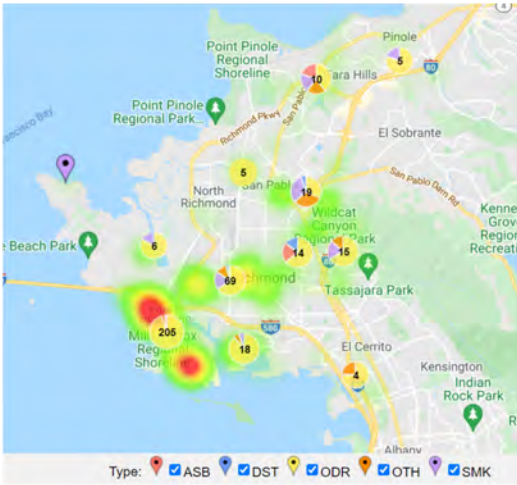
Staff achieved a confirmation rate of 18.2%* for all air quality complaints received in the PTCA area during the 4-year period between 2019 and 2022. This is in comparison to a 10.2%* air quality complaint confirmation rate for the entire 9-county Air District jurisdiction during the same reporting period. The confirmation rates in the PTCA area and throughout the Bay Area are expected to continue to increase as a result of the updates made to the Air Quality Complaint Program in early 2021, expanding the Air District’s ability to confirm air quality complaints.

The heat maps found in Figure 6-5 illustrate the distribution of reported air quality complaints by complainant location in the PTCA area over the last four years. Areas appearing in darker colors (red, orange) indicate locations within the PTCA area where a higher volume of air quality complaints have been received by the Air District and are further distinguished by complaint type as indicated on the bottom of each figure. The heat maps indicate that areas surrounding the heavy industrial locations of the PTCA area, including locations of the Chevron Refinery and the Veolia/City of Richmond wastewater treatment plant, have reported the most air quality complaints, with vast majority being odor concerns.

**Air quality complaint confirmation rates exclude woodsmoke complaints.*

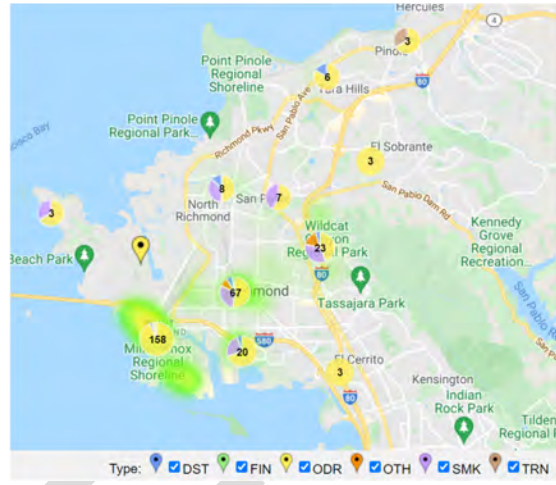
2019

Total Complaints: 449



2020

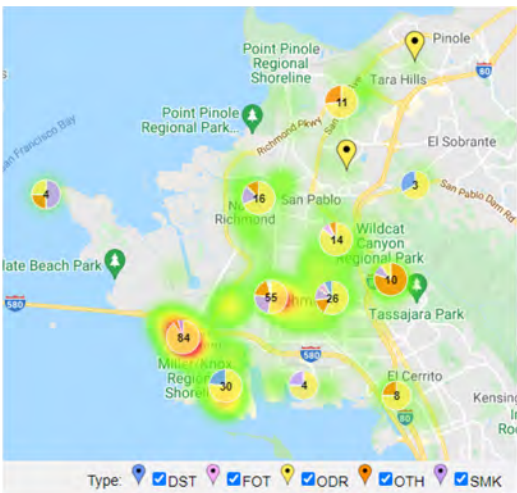
Total Complaints: 410



2021

Total Complaints: 392

Anonymous Complaints: 54



2022

Total Complaints: 356

Anonymous Complaints: 46

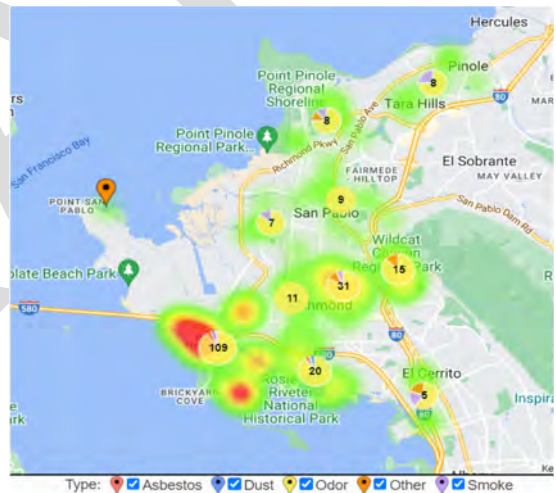


Figure 6-5. Heat Maps of Filed Air Quality Complaints in the PTCA area by Complainant Location (anonymous complaints and woodsmoke complaints are not shown on maps)

Notice of Violations and Notice to Comply

Notice of Violation (NOV) and Notice to Comply (NTC) are mechanisms used by staff to cite facilities discovered to be operating a source in violation of Air District, state, or federal air quality regulations. A single NOV or NTC may be issued to document one or more violations.

An NTC may occasionally be issued for minor or de-minimis violations that are administrative in nature and do not cause or are associated with emissions. An NTC is an enforcement action to

place the facility on notice that there is a compliance concern. In the 4-year period between 2019 and 2022, 25 NTCs were issued, see Figure 6-6.

Notice to Comply:

- Total number issued between 2019 and 2022: 25
 - Chevron Products Company: 9
 - Gas Stations: 5
 - Others: 11

Calendar Year	Number of NTCs
2019	18
2020	0
2021	6
2022	1

Figure 6-6. PTCA area 2019-2022 Notice to Comply Summary

With an NOV, staff cite the type of source(s) and regulation(s) violated and document the compliance issue and cause, the number of regulatory violations associated with the NOV, the extent of harm associated with the violation(s), and how the violation(s) was stopped or corrected in a detailed NOV report.

When an NOV is issued, the facility is required to take immediate corrective actions, including taking steps to prevent it from happening again. Facilities that do not correct violations or take measures to prevent them risk increased penalties for repeat or continuing violations. In the 4-year period between 2019 and 2022, a total of 602* NOV's were issued. Over 80% of the NOV's issued were operational violations, followed by monitoring violations at 12% of violations, over the reporting period.

The table below summarizes the different types of violations. Operational violations are associated with excess emissions typically caused by failure to follow permit conditions and improper use of equipment. Monitoring violations include exceedances discovered from monitoring devices such as continuous emissions monitors, parametric monitors, and ground level monitors, and other recordkeeping or maintenance requirements specified in regulations. Permit violations are issued to facilities discovered to be operating equipment without a valid

Authority to Construct or Permit to Operate. Administrative violations cover issues such as late reporting and missing reports. See Figures 6-7 and 6-8.

Type	2019	2020	2021	2022	Total	Percentage
Permits	10	0	4	4	18	3.0%
Administrative	6	3	2	8	19	3.2%
Monitoring	5	6	17	41	69	11.5%
Operational	74	55	175	192	496	82.4%
Total	95	64	198	245	602*	100%

Figure 6-7. PTCA area 2019-2022 Violation Summary

*11 NOVs were cancelled over the reporting period and are not reflected in the 602 total tally of NOVs.

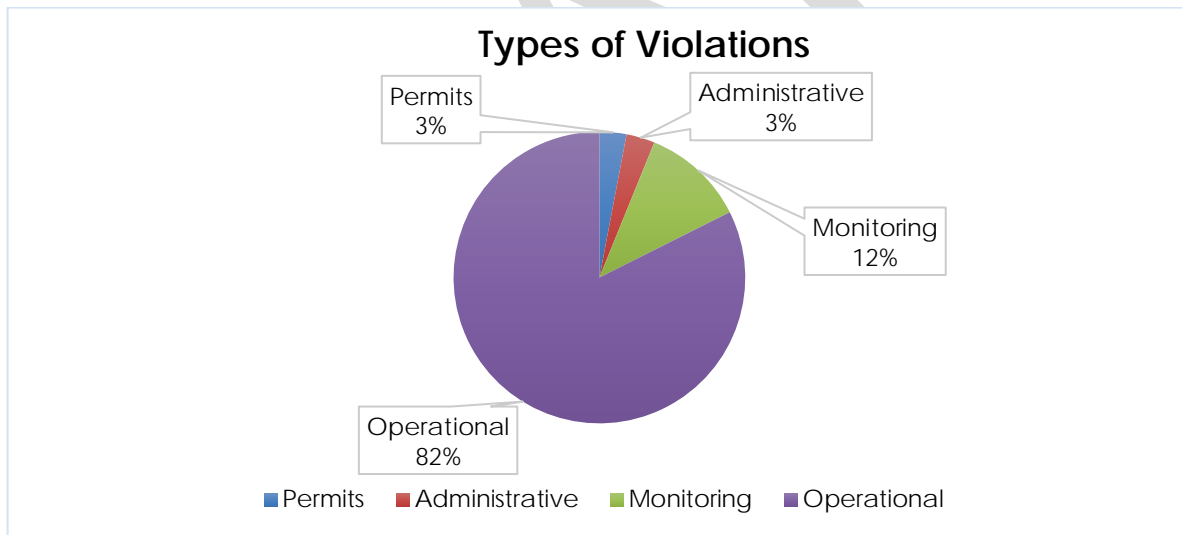


Figure 6-8. PTCA area 2019-2022 Violation Summary by Type

Figure 6-9 shows the sites or facilities in the PTCA area that received more than one NOV from 2019 to 2022.

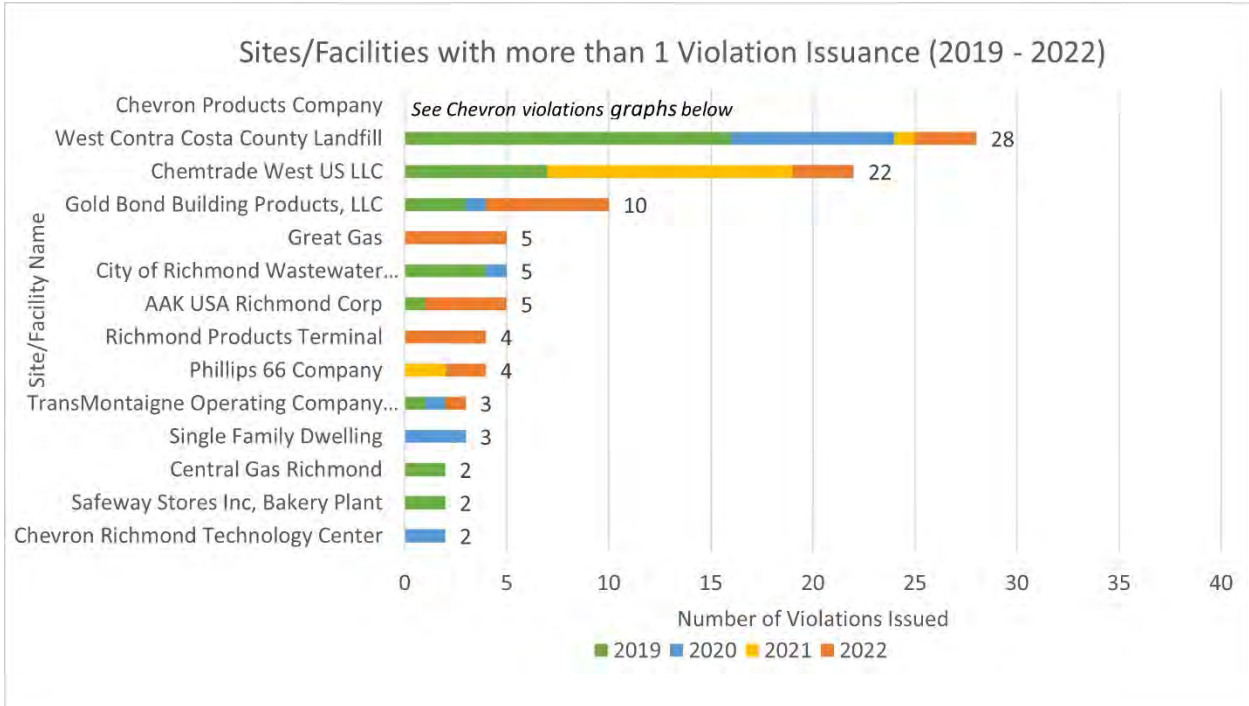


Figure 6-9. PTCA area 2019-2022 Violation Summary by Facility

A closer look at the Chevron Refinery in the graph and chart below (Figures 6-10 and 6-11) shows that the Chevron Refinery was issued a total of 486* violations in the past 4 years. The majority of citations issued to the Chevron Refinery were for operational violations.

*8 cancelled NOV's for the PTCA area were associated with the Chevron Refinery and are not reflected in the 486 total tally.

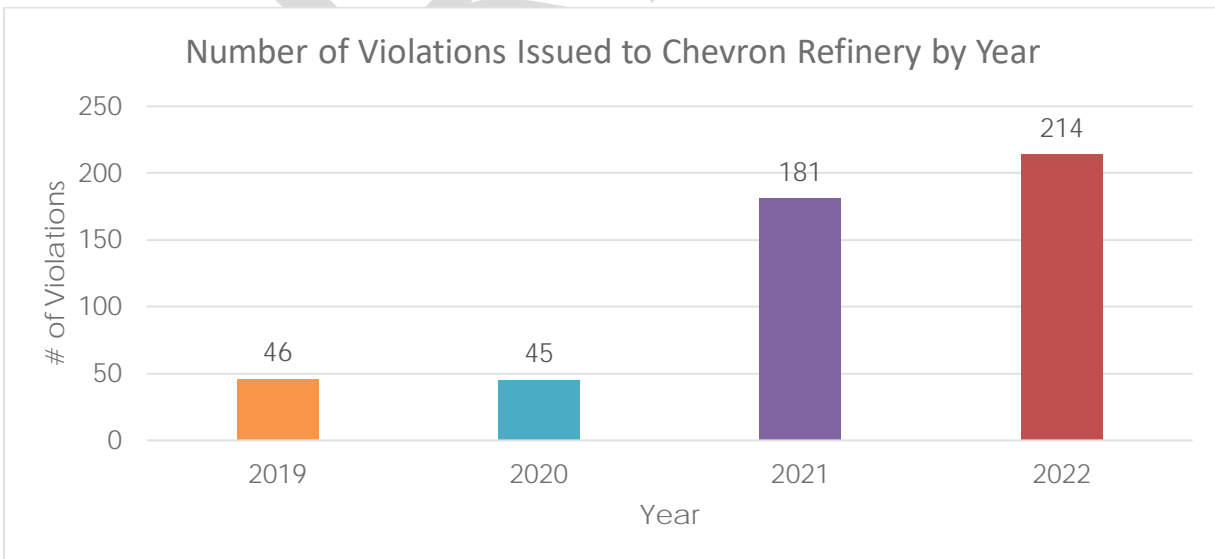


Figure 6-10. PTCA area 2019-2022 Total Violations Issued to the Chevron Refinery by Year

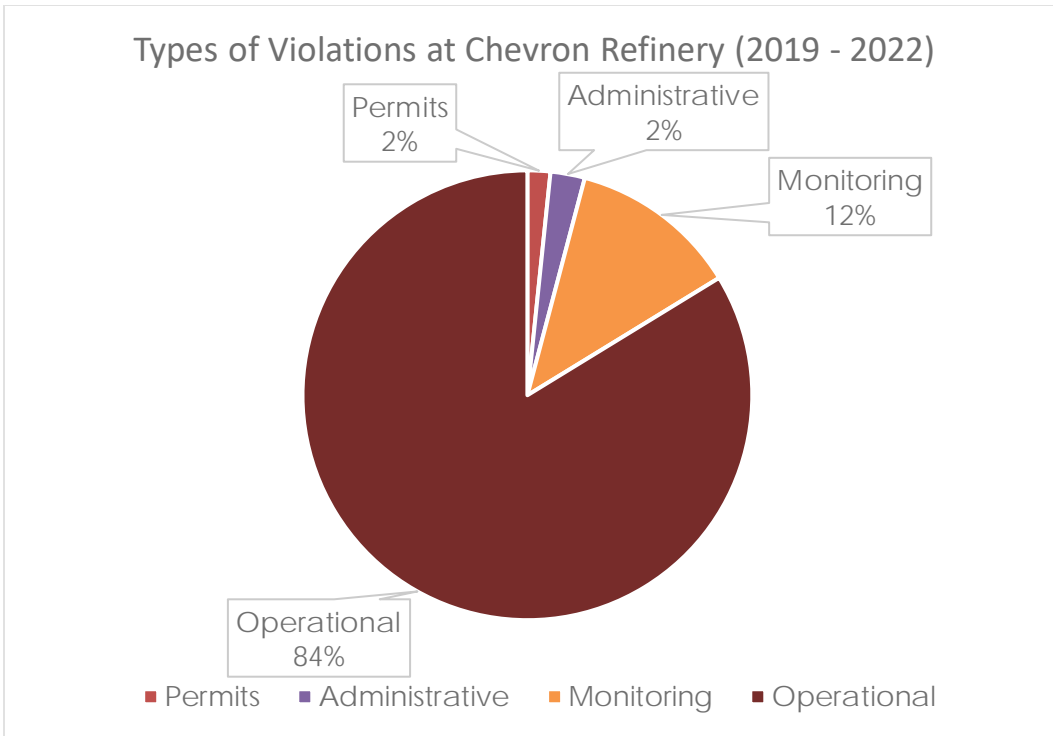


Figure 6-11. PTCA area 2019-2022 Violation Summary for the Chevron Refinery by Type

A violation of the Air District's, Rule 1-301, Public Nuisance, is categorized as an operational violation. The Chevron Refinery was cited eight times for Public Nuisance violations between 2019 and 2022. Figure 6-12 provides additional information for each Public Nuisance occurring in the reporting period.

RULE CITED	OCCURRENCE DATE	ISSUANCE DATE	VIOLATION DETAILS
1-301	11/06/2021	8/01/2022	Public nuisance due to odor impacts in the community.
1-301	10/24/2021	10/24/2021	Multiple confirmed complaints due to flaring activity.
1-301	8/10/2021	8/27/2021	Complaints confirmed to flaring event, 8/10/2021.
1-301	5/27/2021	6/09/2021	Public nuisance due to flaring and black smoke.
1-301	2/09/2021	4/07/2021	Public nuisance due to oil spill from the long wharf.
1-301	11/02/2020	3/01/2021	Flaring incident with visible emissions that resulted in 16 confirmed public complaints.
1-301	8/14/2020	10/01/2020	Complaints confirmed to flare event, 8/14/2020.

RULE CITED	OCCURRENCE DATE	ISSUANCE DATE	VIOLATION DETAILS
1-301	3/07/2019	6/27/2019	Richmond odors (refinery-wide outage).

Figure 6-12. Public Nuisance Summary for the Chevron Refinery, 2019-2022

The increase in violations issued to the Chevron Refinery in the calendar years 2021 and 2022 was attributed to several factors. In March 2020, in response to the quickly developing pandemic, a shelter-in-place order was mandated in the state, bringing operations of businesses to a standstill. The Air District quickly shifted operations in response to the pandemic, however, the ability to conduct in-person facility inspections and investigations was limited at that time. As operations normalized, staff began processing and investigating Title V deviations and RCAs accrued during the early stages of the pandemic, with the conclusion of an investigation often resulting in the issuance of an NOV. The additional dedicated staff assigned to the Chevron Refinery in 2021 aided in the effective investigation and processing of the accrued Title V deviations and RCAs, and further contributed to the increase of violations issued in calendar years 2021 and 2022. See Appendix E for a complete list of violations issued in the PTCA area.

Reportable Flaring Events at the Chevron Refinery

A reportable flaring event is defined in Air District Rule 12-12 as a flaring event where over 500,000 standard cubic feet of gas are flared on a calendar day, or one where over 500 pounds of sulfur dioxide are emitted in a day. The Air District’s flaring regulations are designed to limit the frequency and magnitude of flaring events by requiring refineries to implement a Flare Minimization Plan as seen in Rule 12-12, and to monitor the flares, per Rule 12-11. These two Rules require refineries, including the Chevron Refinery, to conduct several action items, including, but not limited to:

- Immediately notify the Air District of a reportable flaring event.
- Monitor the volume and composition of gases burned in flares.
- Calculate the emissions based on flare data collected.
- Determine the reason for the flaring and implement prevention measures.
- Continuously monitor and record the flares.
- Submit flare data monthly to the Air District
- Implement QA/QC of flare systems including the monitoring of flare pilots, vent gas flow, and sampling systems.

Between 2019 and 2022, there have been approximately 161 total reportable flaring events across the five Bay Area refineries. More than half of the total number of reportable flaring events, or 97 of those events, were reported by the Chevron Refinery. Several notable events occurring at the Chevron Refinery in the past four years have contributed to the disproportionate distribution of the reportable flaring events. In late 2018, the Chevron Refinery commissioned the operation of a new hydrogen unit and associated hydrogen flare. More than half of refinery’s flaring events in the past four years have been associated with the commissioning of the new hydrogen unit. The flaring events at the hydrogen flare are caused by a hydrogen imbalance at the refinery, which can include downstream units going offline, and startups and shutdowns of units associated with the hydrogen plant, resulting in the combustion

of excess hydrogen along with carbon monoxide, and methane. It should be noted that the excess hydrogen streams combusted at the hydrogen flare contain a lower sulfur content as compared to flaring streams combusted at the refinery’s other flaring systems and the hydrogen plant flare is source tested to ensure at least a 98% destruction efficiency.

Other contributing events causing significant flaring at Chevron refinery include an electrical issue experienced in 2020 that caused process unit upsets, and when a major storm in 2021 knocked down the refinery steam supply, nearly causing a refinery-wide shut down and flaring. These two events alone resulted in the issuance of a significant number of NOVs for flaring related regulations. Additionally, in 2022, the Chevron Refinery went through a major turnaround, resulting in more, but brief and lower emitting, reportable flaring events.

Figure 6-13 summarizes the number of reportable flaring events from the Chevron Refinery between 2019 and 2022. It is important to note that the length of time and duration of each reportable flaring event can vary depending on what caused the flaring. Each reportable flaring event requires the refinery to submit a causal analysis report detailing the root cause of the event along with measures to prevent future occurrences per Rule 12-12. Each causal analysis event is reviewed and investigated by C&E staff.

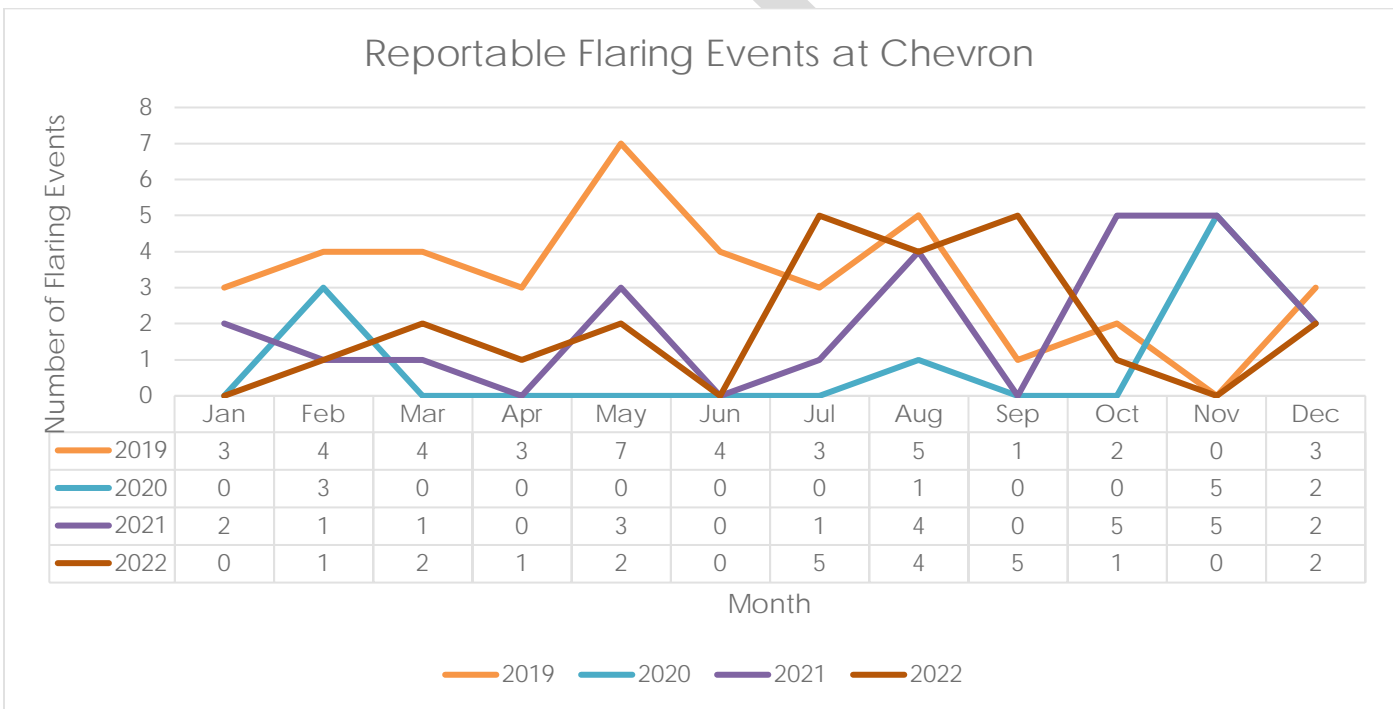


Figure 6-13. Reportable Flaring Event at Chevron Refinery, 2019-2022

Air District Rule 12-11 requires that a monthly report of flare data be submitted to the Air District for every flare subject to the Rule. This includes total daily and monthly vent gas flow and vent gas composition, among many other requirements, from refineries subject to this rule. Flare monitoring data are available on the Air District’s website, <https://www.baaqmd.gov/about-air-quality/research-and-data/flare-data>.

Centering Community Needs in Plan Enforcement

The Air District recognizes the importance of enforcement in the PTCA community. The success of a community emissions reduction plan depends heavily on a robust enforcement program. It is the goal of the Compliance & Enforcement Division to continuously enhance its enforcement efforts to target noncompliance based on community concerns and feedback, and conduct frequent inspections, investigations, and take appropriate enforcement actions upon discovery of violations, to ensure regulated facilities and sites operate in compliance with all applicable air quality rules and requirements. Based on community concerns, the Air District has developed enforcement strategies that specifically address key issues identified in the PTCA Plan. Please refer to Chapter 7 for details.

Enforcement of Mobile Sources

CARB ENFORCEMENT PROGRAMS

The California Air Resources Board's (CARB) Enforcement Division aims to develop partnerships with PTCA community organizations to co-lead the development of community-focused action plans that reduce disproportionate exposures within the Richmond, North Richmond, and San Pablo (R/NR/SP) boundary. CARB is charged with enforcing its regulations applicable to mobile sources, consumer products and other area-wide categories, such as fuels, and climate programs, while the Air District is primarily responsible for enforcement relating to stationary sources (e.g., boilers, refineries).

WHAT PROGRAMS DOES CARB ENFORCE?



Figure 6-14: Programs CARB Enforces

CARB enforcement programs cover the vehicles we drive, the diesel engines that power our economy, consumer products that we purchase, and greenhouse gas (GHG) emissions from our industries and activities. The goal of CARB enforcement programs is to achieve comprehensive compliance in every regulation that CARB adopts. Through enforcement, we work to bring responsible parties into compliance and in doing so achieve a level playing field across industry so that no company can benefit from non-compliance at the expense of another; and to deter industry from future violations.

CARB applies enforcement programs in accordance with the [enforcement policy](#), which was updated in 2017. CARB uses data and inspections to identify potential non-compliance, and then investigate each case. Once a violation is identified, CARB notifies the potential violator and evaluates what happened. CARB works with the party to achieve compliance and measure the relevant facts and circumstances of each case, relative to eight factors set in law and described in the enforcement policy, to determine an appropriate penalty. The case is settled when the responsible party has achieved compliance and paid an appropriate penalty. If the case cannot be settled, CARB works with legal staff to refer the case to California’s Attorney General for litigation.

Field inspectors are a critical component of the diesel enforcement program. The inspectors work across the state to inspect trucks and other equipment for compliance with CARB's diesel regulations, such as the Heavy-Duty Diesel Vehicle Inspection Program, Solid Waste Collection Vehicle, Drayage Truck, Statewide Truck and Bus, Tractor-Trailer Greenhouse Gas, and Transport Refrigeration Unit. Field inspectors also conduct inspections for compliance with Public Agencies and Utilities, In-Use Off-Road, and School Bus Idling regulations. CARB inspectors examine heavy-duty vehicles and equipment at numerous locations throughout California, such as at California Highway Patrol scale facilities, warehouses, fleet yards, construction sites, random roadside locations, truck stops, rest areas, ports, and rail yards.

CARB's enforcement activities can be found in CARB's Enforcement Data Visualization System (EDVS), located here: [Enforcement Data Visualization System – California Air Resources Board](#). A guide to how to use EDVS is here: [Enforcement Data Visualization System \(ca.gov\)](#).

HEAVY-DUTY DIESEL VEHICLE ENFORCEMENT

CARB regulations establish stringent emission requirements that new diesel vehicles must meet. These requirements required engine manufacturers to meet lower particulate matter (PM) and nitrous oxide (NOx) emission standards. Many manufacturers employed the installation of diesel particulate filters to meet the PM standard, as well as exhaust aftertreatment to meet the NOx emission standard. These devices remove more than 98 percent of toxic diesel emissions from Heavy Duty Diesel Trucks (HDDTs) when properly functioning. In addition, because diesel engines and equipment are designed to last decades, CARB's diesel fleet regulations require operators to replace older, higher polluting vehicles and equipment with cleaner vehicles, equipment, and technologies to provide emission reductions as quickly as possible. These regulations apply to operators of on-road diesel vehicles such as trucks, and off-road diesel vehicles and equipment including construction and cargo handling equipment, transport refrigeration units, commercial harbor craft, and other sources. As a result of these programs, CARB has greatly reduced diesel PM and NOx emissions by over 90 percent in communities statewide.

CARB developed a comprehensive heavy-duty vehicle inspection and maintenance (HD I/M) regulation to ensure that vehicles' emissions control systems are properly functioning when traveling on California's roadways. The Board approved the regulation in December 2021, with implementation to be phased in starting January 2023. Dubbed the Clean Truck Check, the program combines periodic vehicle testing requirements with other emissions monitoring techniques and expanded enforcement strategies to identify vehicles in need of emissions related repairs and ensures any needed repairs are performed. When fully implemented, the program will provide significant reductions in smog-forming and carcinogenic toxic air pollution necessary to achieve federal air quality mandates and healthy air in California's communities.

As reported in EDVS, CARB did not do any heavy-duty diesel inspections for years 2019 through 2022 within the R/NR/SP community border, including all heavy-duty vehicle inspection programs, idling, transport refrigeration units and off-road. CARB will work with the Community Steering Committee to prioritize inspection locations to ensure that sufficient enforcement is taking place in the community.

Truck and Bus RULE

Nearly all trucks and buses in California are already, or will be, required to have a certified 2010 or newer model year engines by January 2023, to comply with CARB’s Truck and Bus rule to legally operate in California. In fact, California is entering its third year where the California Department of Motor Vehicles (DMV) is holding registration for some trucks and buses that are not in compliance with CARB’s Truck and Bus rule as a requirement of Senate Bill 1. Due to CARB regulation implementation and enforcement, the compliance rate statewide for the rule was 98 percent in 2022. Trucks and buses that cannot demonstrate compliance with the statewide truck and bus rule will have registration holds placed on them at DMV and will be prevented from being driven in California. According to DMV data, in year 2022, vehicles registered in the R/NR/SP community zip codes had a 97 percent compliance rate for heavy-duty diesel vehicles and 95 percent for light-duty diesel vehicles.

Marine Enforcement

Inspection results for marine programs in R/NR/SP

	2019	2020	2021	2022
Commercial Harbor Craft	37	0	0	0
Ocean Going Vessel	6	2	2	3
Total Inspections	43	2	2	3
Total Non-compliant	5	0	0	0
Compliance rate	88%	100%	100%	100%

Figure 6-15 CARB inspection results

Analysis of the enforcement data for inspection activities in the Port of Richmond suggests that there is a high compliance rate. However, given the lack of spatial data for some programs within the marine enforcement section, CARB acknowledges the need for better data management, which will allow for higher resolution of enforcement activities within the community. While most commercial harbor craft inspections were conducted across the Oakland Inner Harbor in Alameda, these vessels will often enter the Oakland Inner Harbor and can impact Richmond/San Pablo residents.

Consumer Goods

Consumer product inspections are an important regulatory tool to improve public health in the community. Consumer products, such as hairsprays, deodorants, and flooring, are widely used but can be sources of toxic air containments (TACs) and volatile organic compounds (VOC) that community members bring into their homes. From 2019 to 2022, CARB conducted 20 consumer products inspections in 7 locations within the PTCA community. All 20 inspection results are pending further investigation.

In January 2021, CARB and Lexfloor Incorporated, (Lexfloor), of Richmond, reached a settlement agreement in the amount of \$5,000. Lexfloor sold, supplied, and offered for sale in California noncompliant laminate flooring that contained medium density fiberboard. The flooring products contained formaldehyde emissions above the limits set forth in the Airborne Toxic Control Measure to Reduce Formaldehyde Emissions from Composite Wood Products, which has been in effect since January 1, 2009. To come into compliance, Lexfloor has since stopped sales of the noncompliant flooring and no longer imports laminate flooring. More information here:

<https://ww2.arb.ca.gov/lexfloor-inc-settlement>

Fuels

CARB is authorized to adopt standards, rules, and regulations to achieve the maximum degree of emission reduction possible from vehicular and other mobile sources in order to accomplish the attainment of the state ambient air quality standards at the earliest practicable date.

CARB's fuels effort is made up of several components which broadly fall into two categories: (1) adopting and enforcing fuel specifications, and (2) controlling emissions from marketing and distributing fuels in California.

Fuel inspections 2019-2022

Fuel	Inspections
Gas	171
Diesel	30

Figure 6-16 CARB fuel inspections

From 2019 through 2022, CARB conducted 201 fuel inspections which resulted in zero violations. Although there is a high compliance rate, CARB will continue to inspect for fuel violations to ensure continued compliance.

Landfill

California's Landfill Methane Regulation requires municipal solid waste landfills to reduce methane and other air pollutant emissions through emissions monitoring and through capturing fugitive methane. In August 2022, an inspection of 38 wells found 4 exceedances at the West Contra Costa Landfill. Per a CARB and the Air District memorandum of understanding, these inspection results were referred to the Air District for follow-up.

Oil and Gas

In 2017, CARB approved the Oil and Gas Regulation to reduce emissions of methane from oil and gas production, processing, storage, and transmission compressor stations, which account for four percent of methane emissions in California. The regulation requires:

- Owners/operators of oil and natural gas facilities to conduct quarterly leak detection and repair (LDAR) surveys to monitor components for leaks and requires detected leaks to be repaired within a specified time frame.
- Take actions to limit intentional (vented) and unintentional (leaked or fugitive) emissions from equipment and operations.

It is also important to remember that locating and repairing leaks from the oil and gas sector may provide additional benefits because the same leaks also have the potential to release air toxins and volatile organic compounds, such as benzene. CARB and the Air District have a Memoranda of Agreement between the two agencies for the Oil and Gas Regulation, which is primarily enforced by the Air District.

Other Areas of Mobile Enforcement

CARB enforces many areas related to mobile vehicles including engines, fuel containers, refrigerants, and windshield washer fluids. All these programs contribute to CARB’s overall efforts to tackle emissions of all types from all sources. All 16 inspections listed below resulted in no violations. See appendices for more information on these programs.

Other mobile enforcement programs 2019-2022

Program	Inspections
49-State Vehicle Program	3
On-Road Motorcycles	1
Off-Highway Recreational Vehicle	1
Portable Fuel Container	4
HFC-134a Refrigerant	1
Recreational Marine Engines	1
Automotive Windshield Washer Fluid	1

Figure 6-17 CARB mobile enforcement programs

Complaints Received

CARB staff responds to all complaints within 24 hours, or the next business day. The complainant gets a complaint ID number, and an email is sent to the complainant when the complaint is opened and when it is closed. Phone calls are made to the complainant if more info is needed. Often details cannot be discussed during the inspection process but every attempt to resolve the complaint will be made. CARB takes enforcement action based on the investigation of the complaint which can lead to a notice of violation. Sometimes the investigations can take long and remain pending until resolved, other times the complaints are not actionable because CARB did not receive enough information to initiate an investigation. Based on the nature of the complaint, we may refer the complaint to another agency that has the appropriate jurisdiction. CARB received 10 mobile complaints from the R/NR/SP community between 2019-2022. Most of the complaints CARB received were for smoking vehicles. CARB also received 24 non-mobile complaints from 2019-2022, mostly consisting of odors, open burning, and issues from stationary source facilities, which were referred to the Air District for action.

Complaints Received at CARB 2019-2022

Complaint/Program Type	Number	Action Taken
Light-duty vehicles	1	Referred to another agency
Off Road	1	Found to be in compliance. No further action
Smoking vehicle	7	Under investigation (6), Referred to another agency (1)
Truck and Bus	1	Referred to another agency

Figure 6-18 CARB complaints received

An important part of AB 617 is increasing community awareness of the tools that are available to residents. Reporting complaints to both the Air District and CARB enables members of the public to play an active role in addressing air pollution concerns in their community. Both agencies rely on community input for identifying additional locations and sources of concern. CARB accepts

and addresses all air quality complaints as they come into the system, including mobile sources and oil and gas facilities. To report a complaint to CARB regarding environmental concerns, please go to CalEPA's online complaint system at:

[About the Environmental Complaint System | CalEPA \(For all complaints, including air, water, and soil\).](#)

Supplemental Environmental Projects

CARB has a Supplemental Environmental Project (SEP) policy that allows community-based projects to be funded from a portion of the penalties received, up to 50 percent, during the settlement of enforcement actions. SEPs can improve public health, reduce pollution, increase environmental compliance, and bring awareness to communities most burdened by environmental harm. Currently, SEPs have funded the installation and maintenance of air filtration systems in the West Contra Costa School District. CARB staff can help community members or organizations identify where SEPs would be more impactful and assist with the submittal of proposals.

For more information on SEPs, please visit: [Supplemental Environmental Projects \(SEP\)](#).

Or Email us at: SEP@arb.ca.gov.

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Chapter 7: Key Issues and Strategies

Introduction

This chapter describes the approach used by the Community Steering Committee (CSC) and the Air District to develop community concerns, key issue statements, strategies, and actions. This chapter also presents the Plan's strategies, organized by community concern or by cross-cutting issue, and a summary of the actions to achieve each strategy. Detailed information about each action, including implementation information can be found in Appendix A: Actions.

Community Concerns

A list of community concerns was developed with CSC input based on a variety of public engagement efforts conducted from 2018 through 2021, including the Path to Clean Air Social Pinpoint platform, Community Town Hall, community input during development of the monitoring plan, and CSC review of the PTCA community-scale emissions inventory (See Appendix J: List Of Community Concerns For The Path To Clean Air Community Emissions Reduction Plan). The full list of community concerns was summarized into six categories that reflected major recurring themes. These thematic community concern areas served as a foundation for creating Key Issue Statements, the first step in developing the Plan's strategies and actions.

Community Concern Thematic Areas

- Commercial and Industrial Sources Near Community
- Fuel Refining, Support Facilities, Storage, and Distribution
- Public Health and Reducing Exposure
- Marine and Rail
- Vehicles and Trucks, Streets and Freeways, Warehouses and Logistics
- Odors and Smells from Industry

Key Issue Statements

Key issue statements are summary statements that describe the PTCA community concerns and priorities. They are grounded in the information and findings from the PTCA Plan technical assessment, community profile, enforcement findings, and community lived experience. The CSC and the Air District worked together to gather and consider information including community history, emissions inventory, air modeling data, air pollution measurements, Air District compliance and enforcement data, and other sources of information to understand community-identified concerns. These data helped provide a common understanding of the causes of air pollution emissions and exposure, as well as the extent and scope of impacts on the health and quality of life for people in the PTCA area.

Key issue statements were developed for the community concern thematic areas described above. The CSC and the Air District worked together to organize the following into said statements:

- Community Concerns: priority issues and challenges identified by the community
- Existing Conditions: pollutants or risks of concern identified in the Emission Inventory or by air modeling, compliance or enforcement issues based on 3-year enforcement history summaries, data, and maps

- Source (type, amount, pollutant): specific source of the pollutant or risk associated with the concern
- Risk to People (sensitive receptors, health, demographics): at-risk population or sensitive receptors in proximity to the concern, information about that group’s health (e.g., rates of asthma), as well as demographics (e.g., age).
- Consequence: the “so what” statement that explains the outcome or impact on people or other types of impacts (e.g., “second order effects”)

CSC members and Air District staff used the following framework and format to develop draft and then final key issue statements:

KEY ISSUE STATEMENT FRAMEWORK	
_____ is a concern because it is _____	
Community Concern	Existing Conditions/Activities
that results in _____, which impacts _____	
Source (Type, Amount, & Pollutant)	Risk to People (Sensitive Receptors, Health, & Demographics)
and causes (or leads to) _____	
Consequence	

Writing and Reviewing Key Issues and Strategies

In June 2022, the Problems to Solutions (P2S) Ad Hoc of the CSC convened. The P2S Ad Hoc led the research, writing, and review of key issues, strategies, and actions addressing six community concern thematic areas. The P2S Ad Hoc helped ensure key issues and strategies were developed following a community driven process rather than a top-down government process (see Chapter 2: Steering Committee Members for more details about the P2S Ad Hoc).

The P2S initially formed six writing groups – one for each of the community concern thematic areas. Writing groups were supported by Air District staff. As needed, the groups consulted with other experts, e.g. CARB or local agency staff. All writing teams were guided by the PTCA Strategy Writer’s Guide (see Appendix K). The Writer’s Guide is a tool that was developed with the CSC to provide a common framework for developing and reviewing strategies and actions. The Writer’s Guide includes descriptions of the necessary strategy and action components and provides criteria for writing and reviewing teams to assess whether strategies are feasible and aligned with the PTCA Visions and Principles (See Chapter 3: Vision and Principles).

During the writing process it was identified that one thematic area – Odors and Smells from Industry – should be broadened to more generally cover compliance and enforcement issues relevant to the entire PTCA area. Additionally, three other issue areas relevant to the entire PTCA area were also identified: Land Use, Promoting Urban Greening, and Resource PTCA Plan Implementation. Small writing teams were formed to develop strategies and actions for these broader “cross-cutting” issues – that is, issues that have an impact on the entire PTCA area or that cut across several community concerns.

All P2S Ad Hoc writing groups sought input from the full CSC to develop key issues and get feedback on the types of strategies and actions that would best address the community concerns identified (see Chapter 2: Steering Committee Members for more details about the P2S Ad Hoc writing teams). Finally, the P2S Ad Hoc writing team leads worked with volunteers from the CSC to review and comment on the initial draft key issues, strategies, and actions. Concurrently, Air District staff from all Divisions and the Executive Office provided review and feedback on the initial draft strategies.

The process to develop key issues and strategies began in June 2022 and concluded in September 2023. The following is a snapshot view of the writing and reviewing timeline:

- June 2022 - P2S Ad Hoc Convenes
- Sept 2022 to Nov 2022 - Key Issues developed in CSC monthly meetings
- Oct 2022 to Sept 2023 - P2S Ad Hoc focus on strategies and actions for community concerns
- March 2023 to Sept 2023 - P2S Ad Hoc focus on cross-cutting strategies and actions
- June 2023 to Aug 2023 - initial draft strategies and actions complete
- July 2023 to Sept 2023 - CSC Review Teams and Air District Review
- Oct 2023 - draft strategies and actions complete

Key Issue Statements, Strategies and Actions

The PTCA Plan key issue statements, strategies, and a summary of the actions under each strategy, as well as introductory and background information, are presented for each of the five community concern thematic areas in alphabetical order. Strategies and a summary of the actions for each of the cross-cutting issues follow the community concern thematic areas. Complete details about each action, including how the action is suggested to be implemented and progress evaluated, can be found in Appendix A: Actions.

1. Commercial and Industrial Sources Near Community
2. Fuel Refining, Support Facilities, Storage, and Distribution
3. Public Health and Reducing Exposure
4. Marine and Rail
5. Vehicles and Trucks, Streets and Freeways, Warehouses and Logistics
6. Compliance and Enforcement
7. Land Use
8. Resource PTCA Plan Implementation
9. Urban Greening

Commercial and Industrial Sources Near Community

Introduction

Commercial and Industrial Sources Near Community includes large industrial facilities as well as smaller industrial and commercial sources. Generally, for these facilities, there are issues surrounding particulate matter exposure and toxic air contaminants, as well as challenges surrounding the diversity of sources that fall into this category. Emissions of air pollutants from some businesses and activities can have a significant exposure impact on the nearby areas, even if the contribution is just a small percentage of the area's total emissions of that pollutant. This can be especially true for businesses located near where people live or spend time. There

are also larger industrial operations that contribute in varying degrees to both local and area-wide impacts, depending on the activity at the facility generating the emissions.

Many emissions in this sector are associated with activities and processes where the emissions are not collected by an air pollution control device or emitted from a stack, and are referred to as fugitive emissions. Since these emissions may occur at ambient temperatures and near the ground, they can have significant near facility impacts. Common types of fugitive emissions are 1) VOC emissions from evaporation of fuels, solvents, or paints and 2) PM emissions from stockpiles of materials or disturbed surfaces. Restaurants are also a significant source of PM_{2.5}.

Additionally, some of the larger facilities in the PTCA area are of concern in terms of health risk from toxic air contaminants (TACs). Facilities with sources that emit TACs may be subject to risk-related requirements via the Air District's Rule 11-18, which was adopted to reduce health risks from emissions of TACs from existing facilities. In the PTCA emissions inventory, the "Commercial & Industrial Sources Near Community" category contributes more than 5% of the total burden for the following TACs: formaldehyde, manganese, naphthalene, and cadmium as well as the following CAPs: TOGs and PM_{2.5}.

Key Issues

Key Issue 1: PM Exposure: Fine Particulate Matter

"Commercial and Industrial Sources Near Community" are responsible for 20% of the modeled local PM_{2.5} (or "fine particulate matter") exposure for community members within the PTCA area. Exposure to PM_{2.5}, in the short term and long term, can result in health impacts such as premature mortality, increased hospital admissions, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, restricted activity days, and reduced lung development in youth. The most adverse impacts are experienced by vulnerable and sensitive populations, including infants and children and those suffering from heart and lung diseases.

Key Issue 2: PM Exposure: Fugitive Dust

Operations and facilities that process or house materials that produce or release fugitive dust are a concern because particulate matter entrained into the air results in PM_{2.5} and PM₁₀ exposure that has negative health impacts for the community. Sources of fugitive dust in the PTCA area include, but are not limited to, concrete batch plants, rock crushing operations, and other raw/loose material operations. They can also include construction/demolition activities, nurseries, dust from trackout, and vacant lots (including those with a history of containing hazardous soil). Some fugitive dust can also have toxic components.

Key Issue 3: Cumulative Impacts from Local Facilities: Diverse Sources

The Commercial and Industrial Sources Near Community category, as a whole, generates cumulative impacts that are challenging to address because the impacts come from a variety of sources, including both permitted and non-permitted sources and small and large businesses. Sources can be spread throughout the community in varying patterns and emissions can be sometimes sporadic in nature. Regulation, understanding impacts, and ensuring compliance can thus be more difficult. All this is a concern and finding solutions for this category will require a complex multi-pronged approach.

Key Issue 4: Cumulative Impacts from Local Facilities: Large Industrial Facilities

Large industrial facilities within this category are of concern for the PTCA community because of particulate matter emissions and other health hazards. These include facilities like Levin Terminal, Sims Metals, the West Contra Costa County (WCCC) Landfill, and Gold Bond (formerly New

NGC, Inc.). Several of these facilities are Rule 11-18 facilities required to be evaluated for health risk impacts. Levin Terminal and the WCCC Landfill are significant contributors to the modeled PM_{2.5} exposure from this category, and New NGC has been identified by community as a problematic source of visible emissions and fugitive dust. Additionally, metal recycling facilities can be sources of fugitive dust as well as highly toxic TAC emissions and have been concerns due to previous fires onsite.

Key Issue 5: Cumulative Impacts from Local Facilities: Commercial and Smaller Industrial Facilities
Commercial and smaller industrial facilities within this category are a concern because, while individual sources and businesses within the category may be small, their incremental impacts can present significant issues for the community. Restaurants in and near the PTCA area, for example, contribute 10.5% of total PM_{2.5} exposure due to localized emissions sources. Backup generators, food trucks, auto body shops, and dry cleaners are additional sources, often similarly small in size and interspersed throughout neighborhoods, and also have the potential to adversely impact nearby residences.

Strategies

Strategy 1. Control Fugitive Dust

This strategy is meant to better control sources of fugitive dust by preventing particulate matter, including toxic particulate matter, from becoming airborne (especially beyond facility perimeters) and/or reducing community exposure.

Component	Description
Strategy #	Commercial & Industrial (C&I) 1
Strategy name	Control Fugitive Dust
Key Issue (KI) Addressed	KI 1: Fine PM KI 2: Fugitive Dust KI 3: Diverse Sources KI 4: Large Industrial Facilities
Objective (intended outcome of the strategy)	Reduce fugitive dust exposure in the PTCA area via more stringent regulatory requirements. By 2025, implement the most advanced best management practices for controlling fugitive dust at the project level.
Narrative on how Strategy meets Feasibility Criteria	As this strategy mainly relies on identification and implementation of best practices, it should be able to be incorporated via existing mechanisms at the Air District (e.g., rule development) and within local government (e.g., planning departments), without requiring new sources of funding. As with any strategy, it may have some financial impacts due to additional burden for the regulated community (e.g., cost of implementing certain best practices on site); but this impact would be analyzed in greater detail via the Dust White Paper and any barriers would be addressed. Other potential areas of political concern are water use and possible housing barriers related to CEQA. Water usage can be associated with implementing certain best practices, and this can bring up concerns with drought and statewide water availability. Regarding CEQA, any barriers to housing construction that might be associated with dust control requirements could present conflict if they are perceived as limiting much needed housing

Component	Description
	<p>projects. Both water use and CEQA impacts on housing will be considered as part of rule development for any future Air District regulatory requirements, however.</p> <p>Technical feasibility is good, given that there are known control mechanisms and best practices. However, accurately measuring and/or modeling dust impacts can be challenging due to the complex mechanisms at play with dust entrainment (levels and frequency of dust-generating activity, amounts of dust, meteorological conditions, etc.). This can also present problems with respect to the enforceability of certain requirements.</p> <p>Authority is solid, given that both the Air District and local government can encourage and require best practices for dust. The Air District can serve as a champion for this and has already begun work.</p> <p>Timelines vary. The Air District is already developing a white paper. As best practices are identified and vetted, many can be implemented quickly. Local governments may be able to move faster than Air District rule development, but in both cases the knowledge from the Dust White Paper will accomplish a lot of the necessary work up front (i.e., identifying and recommending best practices).</p>
<p>Narrative on how Strategy meets Vision and Principles Criteria</p>	<p>The Dust White Paper will engage affected stakeholders. The Ad Hoc group for Commercial and Industrial Sources Near Community will be engaged for feedback as well. Any rule development pathways identified from the white paper will involve stakeholder engagement to get input from those impacted by dust exposure. Best practices implemented via several pathways (Air District white paper and rule development + Local Government) are intended to set up the strategy for the most effective and sustainable emissions reductions.</p> <p>Potential impacts on certain facilities or sites should be tracked to ensure unintended consequences, such as increased costs passed down to the consumer, are not realized (e.g., in the case of the landfill or in the case of construction projects). It should also be ensured, via C&I Action 1.3, that the best practices identified for dust are applicable to the community-identified facilities/sites that have particulate matter impacts and generate benefits for the community with respect to reduced impacts from said sites.</p>
<p>List of Actions (# and name)</p>	<p>C&I 1.1: Dust White Paper (identify Best Management Practices (BMPs), evaluate Rule Development opportunities, and implement recommendations)</p> <p>C&I 1.2: Advocate for and/or Implement Local Best Practices (locally-required BMPs; outreach/education on dust control and BMPs) with Partners</p> <p>C&I 1.3: Gap Analysis regarding Dust White Paper and BMPs for Community-Identified Sources</p>

Strategy 2. Utilize Permitting to Address Commercial and Industrial Sources Near Community

This strategy includes permitting actions to address permitted facilities in the PTCA area, including via education and outreach, continued and enhanced collaboration with internal

and external parties, reviews of Title V emissions, and potential amendments to Permitting Rules (e.g., Rule 2-1, 2-2, and/or 2-5).

Component	Description
Strategy #	Commercial & Industrial (C&I) 2
Strategy name	Utilize Permitting to Address Commercial and Industrial Sources Near Community
Key Issue (KI) Addressed	KI 3: Diverse Sources KI 4: Large Industrial Facilities KI 5: Commercial and Smaller Industrial Facilities
Objective (intended outcome of the strategy)	Make permitting processes more accessible and understandable. Strengthen permitting processes by incorporating Environmental Justice (EJ) principles and stronger protections for communities.
Narrative on how Strategy meets Feasibility Criteria	This is feasible in that it utilizes processes and expertise that is either already in place or able to be put in place within existing functions of the Air District. Challenges with feasibility exist, however, in that this strategy will require additional resources to implement each of the strategy actions, as well as strong partnerships with relevant external agencies.
Narrative on how Strategy meets Vision and Principles Criteria	This meets the vision and principles in that it is directly responding to the asks of the community with respect to a need to have greater transparency for Air District permitting (which can be addressed in part by education and outreach to shed light on current processes). It also involves bringing in community to inform rule development with respect to permitting rules.
List of Actions (# and name)	C&I 2.1: Undertake an Education, Outreach, and Communications effort with respect to Air District permitting C&I 2.2: Maintain and strengthen collaborative efforts with other Air District Divisions and external partners C&I 2.3: Conduct periodic reviews of emissions reduction progress for Title V facilities C&I 2.4: Open permitting rules for rule development. Evaluate rule amendment opportunities

Strategy 3. Reduce Exposure from Food Preparation

This strategy will identify mechanisms to reduce exposure to pollution from food preparation activities, like from charbroiling at restaurants. Strategy actions include focusing on PM_{2.5} emission reductions, as well as ensuring other food preparation activities that may have concerning impacts are addressed as needed. This approach builds on the identification of a restaurants-focused strategy in the AB617 "Owning Our Air: West Oakland Community Action Plan" (WOCAP).

Component	Description
Strategy #	Commercial & Industrial (C&I) 3
Strategy name	Reduce Exposure from Food Preparation
Key Issue (KI) Addressed	KI 1: Fine PM KI 3: Diverse Sources KI 5: Commercial and Smaller Industrial Facilities

Component	Description
Objective (intended outcome of the strategy)	<p>Reduce the 10% contribution to localized PM_{2.5} exposure that is attributed to restaurants.</p> <p>Lower community air pollution impacts from restaurants in a manner that takes into account potential burden on small businesses.</p> <p>Identify any other food preparation operations or activities that may have concerning contributions to local emissions and exposure.</p>
Narrative on how Strategy meets Feasibility Criteria	<p>A white paper approach for restaurants and evaluation of needs for other food preparation activities is a feasible and reasonable approach given that there are uncertainties surrounding technical solutions for restaurant emissions and that other food preparation facilities have not stood out as top concerns from community feedback nor from review of the emissions inventory.</p> <p>Air District Rule Development already has a restaurants white paper in their pipeline in response to the WOCAP restaurants strategy.</p> <p>Given the importance of food in daily life and culture, imposing restrictions related to food preparation could elicit strong feelings from a variety of stakeholders, including the general public. This will need to be accounted for with respect to identifying appropriate solutions.</p>
Narrative on how Strategy meets Vision and Principles Criteria	<p>Given that restaurants are embedded within the community and are located near where people live, addressing emissions from restaurants will have a direct impact on reducing exposure for community members who live near restaurants, and who may be disproportionately impacted.</p> <p>However, there could be potential unintended consequences for restaurants (as many may be small businesses) due to greater regulatory burden in regulating their emissions. Incentives may be an important mechanism to help curb these potential negative impacts.</p> <p>A white paper approach will allow for proper discussion of all aspects of the issue (i.e., pros and cons) and be a mechanism through which the Air District can gather community feedback on the best path forward.</p>
List of Actions (# and name)	<p>C&I 3.1: Restaurants White Paper</p> <p>C&I 3.2: Other Food Preparation: Evaluate the Need for Further Study and/or Additional Actions</p> <p>C&I 3.3: Evaluate potential mechanisms for achieving voluntary emissions reductions from food preparation facilities and operations (incentives and/or behavioral change campaigns) and implement promising mechanisms on a rolling basis</p>

Strategy 4. Large Industrial Sources

The goal of the Large Industrial Sources strategy is to address and reduce particulate matter and toxic air contaminant emissions and related health hazards, such as visible dust and fugitive dust, from large facilities. These facilities include Levin Terminal, the West Contra Costa County Landfill, Sims Metal, and Gold Bond (formerly New NGC, Inc.).

- Levin Terminal: Levin Terminal is one of the top 3 permitted sources of residential PM_{2.5} exposure in this category, at a 20% contribution, and because of additional unknown and/or permitted sources at this facility, including movement of uncovered bulk materials like coal and pet coke. It is also a facility subject to Rule 11-18.

- Gold Bond: Gold Bond (formerly New NGC, Inc.) is a concern because it has received complaints for particulate emissions from storage stockpiles, vessel offloading of raw gypsum, and manufacturing, and 4 Notices of Violation (NOVs) for excessive visible emissions and public nuisance in 2022. It is also a facility subject to Rule 11-18.
- West Contra Costa County Landfill: WCCC Landfill is a concern because it is in the top 3 permitted sources of residential PM_{2.5} exposure in this category (13%), it is a Title V facility, and has received complaints and 25 notices of violation (NOVs) between January 2019 and December 2021. It is also a facility subject to Rule 11-18.
- Scrap Metal and Recycling Facilities: Scrap metal and recycling facilities (Sims Metal and Pick and Pull) are concerning because of dust and fires from solid waste, scrap metal, and recycling facilities. Certain emissions data for metal facilities, such as particulate matter and TAC emissions, are not well known and are not captured in our permitted sources inventory.
- Other Large Facilities: While the above list represents large facilities that have been heard as community concerns multiple times, it is not an exhaustive list. Other facilities came up during CSC discussions as part of strategy development, which were then included under this action category. Additional large facilities may present as concerns in the future as well - these are also intended to be covered under the general actions described in the action for 'Other Large Facilities'. Facilities subject to Rule 11-18 that are not explicitly named above will also be captured under this subcategory.

Component	Description
Strategy #	Commercial & Industrial (C&I) 4
Strategy name	Large Industrial Sources
Key Issue (KI) Addressed	KI 2: Fugitive Dust KI 3: Diverse Sources KI 4: Large Industrial Facilities
Objective (intended outcome of the strategy)	Better address community concerns and impacts from large facilities including Levin Terminal, the West Contra Costa County Landfill, Sims Metal, and Gold Bond (formerly New NGC, Inc.): <ul style="list-style-type: none"> • Address and reduce particulate matter emissions and other health hazards, such as exposure from visible dust and fugitive dust. • Implement Rule 11-18 as expeditiously as possible in order to reduce toxics impacts from some of these facilities.
Narrative on how Strategy meets Feasibility Criteria	This strategy is feasible in that several of the actions rely on an adopted rule: Rule 11-18, which is already starting to be implemented. Timelines are a factor, however, in that Phase 1 facilities will be completed before Phase 2 facilities, and the pace of progress for implementing Rule 11-18 across all relevant facilities is dependent upon staff resources. Other actions rely on the results of the Dust White Paper and implementation of the recommendations from the paper, in the form of BMPs and rule development concepts. These are both feasible mechanisms for better controlling dust and PM _{2.5} exposure. For compliance-related information, the large facility reporting is being aligned with the annual reporting for the CERP, which is feasible and intended to help with streamlining. Gap analyses are intended to address any areas that specifically-identified mechanisms in the CERP do not sufficiently address.

Component	Description
Narrative on how Strategy meets Vision and Principles Criteria	This meets the vision and principles in that it focuses on large facilities of concern specifically identified by the community. It also focuses on facilities that trigger thresholds to require an HRA to be conducted as part of Rule 11-18, which is a priority for the community in terms of reducing impacts from toxics.
List of Actions (# and name)	C&I 4.1: Implement Rule 11-18 at Large Facilities (Non-Fuel Refining) C&I 4.2: Levin Terminal: Implement Rule 11-18 and Conduct Gap Analysis C&I 4.3: Gold Bond (formerly New NGC): Gap Analysis C&I 4.4: West Contra Costa County Landfill: Implement Rule 11-18 and Conduct Gap Analysis C&I 4.5: Metal Recycling (Sims, Pick n Pull): Source Evaluation C&I 4.6: Other Large Industrial Facilities: Gap Analysis

Strategy 5. Commercial and Smaller Industrial Facilities

Commercial and smaller industrial facilities within this category include backup generators, auto body shops, and dry cleaners, among others. This strategy is meant to address community concerns about impacts from these types of facilities, as well as taking into consideration that these are often small businesses.

Component	Description
Strategy #	Commercial & Industrial (C&I) 5
Strategy name	Commercial and Smaller Industrial Facilities
Key Issue (KI) Addressed	KI 3: Diverse Sources KI 5: Commercial and Smaller Industrial Facilities
Objective (intended outcome of the strategy)	This strategy is meant to address community concerns with respect to smaller facilities and sources (of a commercial or industrial nature). The objective is to reduce local and potential hyperlocal impacts from any of these sources.
Narrative on how Strategy meets Feasibility Criteria	This strategy is feasible with respect to rule development for BUGs and autobody shops. It is also feasible with respect to identifying any other smaller businesses of concern, via review of monitoring and modeling work that is ongoing as part of AB617 work in the PTCA area. In terms of timelines, depending on community priority, actions in this strategy could end up being pursued later, as the community may prefer that larger sources of emissions or exposure be addressed before smaller sources. This will need to be determined at implementation, however.
Narrative on how Strategy meets Vision and Principles Criteria	This meets the vision and principles in that it focuses on smaller sources and facilities of concern specifically identified by the community. It also takes into account the potential burden on small businesses, and the possible need for a tailored approach to helping small businesses reduce their emissions, as they can have the potential to be more significantly affected by socioeconomic impacts of regulations.
List of Actions (# and name)	C&I 5.1: Backup Generators (BUGs): Reduce localized exposure from BUGs C&I 5.2: Autobody Shops: Address Concerns with Auto Body Shops C&I 5.3: Other Smaller Businesses (Dry Cleaners, others) C&I 5.4: Enhanced Small Business Outreach

Fuel Refining, Support Facilities, Storage and Distribution

Introduction

Fuel Refining, Support Facilities, Storage, and Distribution (i.e., the fuel refining sector) is a community concern of the highest importance for the PTCA area. Emissions and exposure from sources owned by and associated with fossil fuel-centric industrial corporations, including the Chevron Richmond Refinery and Chemtrade, have polluted the community for decades. Toxic air contaminants, harmful particulate matter, and other pollution from the fuel refining sector negatively impact both public health and the environment.

Data on emissions and exposure impacts from the fuel refining sector, including specific data for the Chevron Richmond Refinery, is provided in detail in Chapter 5 – Pollution Overview - as well as in Appendix C: Supplemental Technical Information - Emissions and Modeling. Note that Appendix C has information on an updated emissions inventory for Chevron, as well as an analysis of potential short-term health impacts from flaring events at Chevron.

In alignment with the PTCA Vision and Principles, the CSC has drafted the following statement regarding the fuel refining sector:

“The PTCA community is seeking transformation from a legacy of historical and systematic redlining of communities of color and government agencies that have failed to protect our community's health. Moving beyond this reality in an era of climate chaos caused by an over-dependence on the fossil fuel industry is daunting, but essential. To confront these challenges and ensure the survival of our children and grandchildren, our community must create a bold vision for a just transition and bring it to life through our AB617 Community Emissions Reduction Plan.”

The five fuel refining sector strategies were developed to cover a broad span of impacts from Fuel Refining, Support Facilities, Storage, and Distribution, and include:

1. Move Towards a Just Transition
2. Reduce Persistent Flaring and Improve Incident Response
3. Hold Chevron and Other Emitters Accountable for Reducing Pollution and Negative Public Health Impacts from their Operations
4. Reduce Exposure and Public Health Impacts from Toxic Air Contaminants (TACs) Emitted by the Fuel Refining sector
5. Reduce Exposure and Public Health Impacts from Particulate Matter and Other CAPs Emitted by the Fuel Refining sector

Key Issues

Key Issue 1: Fuel refining sector in Richmond is the Largest Source of Emissions in PTCA Area

The Chevron Refinery and its partner operations are a concern because the Chevron Richmond Refinery is the third largest refinery - and one of the largest stationary sources of pollution - in the state of California. According to the Air District Emissions Inventory for the PTCA area, Chevron is the single largest PM_{2.5} source in the Path to Clean Air community, accounting for 63% of local PM_{2.5} emissions. It emits more fine particulate matter and sulfur dioxide than all other contributing sources in our PTCA area combined. Fuel refining and associated sources account for 33% of

local source contributions to residential exposure to both PM_{2.5} and air toxics that have chronic health effects. Furthermore, other facilities support Chevron's operations including storage and distribution; this includes Chemtrade, a large sulfuric acid production plant that emits PM_{2.5}, sulfuric acid, and other air toxics. People of color – due to historical redlining and segregation - disproportionately live in close proximity to the Chevron Refinery, the major source of air pollution in our area, and/or within 1,000 feet of a freeway or railway. More than 50% of our community members are Hispanic/Latino, Black/African American or Asian. Due to the high levels of exposure, over half of our PTCA area is designated by the State of California as being 'disadvantaged', which is defined as "communities disproportionately burdened by multiple sources of pollution and with population characteristics that make them more sensitive to pollution." Consequently, our community experiences higher-than-average rates of illness related to, and likely made worse by, air pollution: including asthma and babies with low birth weights.

Key Issue 2: Lack of accountability with Air District Regulations

The lack of accountability with respect to compliance with Air District Regulations is a major concern because 86% of Air District Notices of Violations within the PTCA area are associated with Chevron and other fuel-refining related sources. Of the 299 Notices of Violation, 79% are from the Chevron Products Company from 2019 to 2021. While these statistics are in part a factor of the large number of sources at Chevron and the number of regulations the facility is subject to, the community is nevertheless deeply concerned about compliance issues at the Chevron Richmond Refinery. In particular, the community has voiced concerns about compliance, flaring activities, and potential health risks related to the following: hydrogen unit, hydro processing unit, and crude unit. Additionally, the three processes that contribute the most to the Chronic Hazard Index at Chevron are: the heat recovery steam generator, sulfur recovery unit and Fluidized Catalytic Cracking (FCC) unit. Toxic emissions such as PM_{2.5}, NO_x, SO_x, and other pollutants can harm the community and lead to detrimental health impacts for vulnerable BIPOC community members living in high exposure areas. Thus, compliance and accountability with respect to meeting regulatory requirements are key. Proper use and resolution of Notices of Violations can help mitigate environmental regulation exceedances, which should help protect public health.

Key Issue 3: Persistent flaring

Flaring, which may involve visible emissions triggered by equipment malfunctions, process upsets, other upset conditions, and/or short-term incidents, is a concern at the Chevron Refinery because flaring events can produce higher levels of emissions of sulfur dioxide (SO₂), fine particulate matter (PM_{2.5}), air toxics such as benzene, and greenhouse gasses such as methane. Chevron is already a concern because it emits more of the criteria air pollutants fine particulate matter (PM_{2.5}) and sulfur dioxide (SO₂) than all other sources in the community-scale emissions inventory combined, and the refinery is also the largest source of numerous toxic air contaminants, such as hydrogen cyanide, sulfuric acid, manganese, and hydrogen sulfide. Constant flaring just adds another element to the problem. Flaring events have the potential to result in elevated levels of SO₂ and other compounds, which can have negative respiratory impacts on local residents, including individuals suffering from asthma and bronchitis. A staggering 1 in 4 people in Richmond have asthma, twice the average for California. Flaring activity and exposure to air pollution can also result in other concerning health outcomes, including mental health issues such as stress, anxiety, depression, and other forms of trauma. Overall, the economic, educational and health impact on the community due to flaring is an important issue that needs to be addressed.

Key Issue 4: Just Transition

A Just Transition is imperative for the people of Richmond-North Richmond-San Pablo. The PTCA community is a frontline community that has long been subject to historical and systematic racist policies and impacted by the largest refinery in Northern California, the Chevron Richmond Refinery. Fuel refining produces emissions that harm public health and destroy the environment. Government has failed to adequately protect our community's health from the impacts of a fossil fuel industry that prioritizes corporate capital gains and passes off the burden of harmful externalities to the people. In order to reach our climate and equity goals, we must end the refining and combustion of fossil fuels as soon as possible. A Just Transition must center on community health, but also address the impacts of the transition on workers and communities.

Strategies

Strategy 1. Move Towards a Just Transition

This Strategy lays foundational steps towards a Just Transition, including educating the PTCA CSC and Air District on how Just Transition would apply to the Zero Emission Future and a managed phase-down of fossil fuels in the PTCA area. It includes the formation of a Just Transition Subcommittee (JTS) that will establish Just Transition Principles and Criteria, which will be used in the prioritization and implementation of the PTCA Plan. The JTS will also explore ways to apply the criteria to governmental policymaking and rulemaking.

The PTCA CSC has drafted the following preamble about the importance of a Just Transition:

"We live in a community seeking transformation from a legacy of historical and systematic redlining of communities of color and failure of government agencies to protect our community's health. Moving beyond this reality in an era of climate chaos caused by an over-dependence on the fossil fuel industry is essential. To confront these challenges and ensure the survival of ourselves and our children and grandchildren, our community must create a bold vision for a just transition and bring it to life through our AB617 Community Emissions Reduction Plan.

At its core, a Just Transition is a deeply democratic process that shifts away from the fossil fuel industry to just, clean, renewable energy. It interweaves the needs of industry workers and frontline communities who have been most harmed by the polluters. It does this through vision planning and strategically building economic and political power to create a more equitable, sustainable, and just community.

Our plan to reduce emissions and exposure in our community is rooted in principles of Just Transition. Our strategies are designed to implement the following principles:

- 1. Support the workers of industries in transition away from the fossil fuel industry towards just clean renewable energy jobs*
- 2. Sustain investment in communities impacted by transition or by extractive industries to diversify local economies*
- 3. Improve enforcement of existing regulations*
- 4. Fund Just and clean renewable energy development through taxes or fines on fossil fuel companies*

5. *Embrace community-driven planning and decision-making*
6. *Prioritize the need for broad social healing and restoration*

As we pave our path forward, we commit to forging a collective decision-making process that provides pathways for regenerative economies through green jobs, protects the land and Bay as polluters decommission, and most importantly, addresses community health burdens.

Additionally, to achieve a Just Transition, we recognize the importance of an effective, long-term partnership between our community, the PTCA CSC, the City of Richmond, the City of San Pablo, Contra Costa County, Air District, and other regulatory agencies. Through AB617, we have laid the groundwork for this partnership. This partnership will empower our community to pave the way toward a Just Transition, environmental justice, and a thriving future."

Component	Description
Strategy #	Fuel Refining (FR) 1
Strategy name	Move Towards a Just Transition
Key Issue Addressed	KI 4: Just Transition KI 1: Fuel refining sector in Richmond is the Largest Source of Emissions in PTCA area KI 2: Lack of accountability with Air District Regulations KI 3: Persistent flaring
Objective (intended outcome of the strategy)	Lay the foundation for a Just Transition to a fossil fuel-free future, with community, workers, and governmental leaders at the helm.
Narrative on how Strategy meets Feasibility Criteria	This strategy is feasible in that it lays out some foundational steps towards advancing Just Transition in the PTCA area. It focuses on key elements of education and collaboration. The formation of a Just Transition Subcommittee (JTS) can provide a platform for advancing Just Transition and facilitate conversations and potential partnerships with both governmental and non-governmental organizations. Creation of an online shareable folder of Just Transition educational materials will help support education and aid communications with key stakeholders. Resources to support the JTS and a potential JT Project Consultant will be sought from CARB, Air District, and/or other funders as available. Incorporating Just Transition principles and criteria into implementation is also feasible, as an implementation plan will be created and updated regularly for the PTCA Plan.
Narrative on how Strategy meets Vision and Principles Criteria	This strategy will advance Just Transition: a transition away from fossil fuels and towards a just, clean, renewable-energy future. The Just Transition movement is meant to drive racial and social equity and advance ecological restoration. It focuses on democratizing and redistributing resources and power by centralizing community and workers' concerns and needs. This strategy, and the actions within it, will help ensure accountability for a Just Transition within the PTCA area. To do this, CSC members will create a vision plan for a Just Transition. This will start with a Just

Component	Description
	Transition Subcommittee that elevates Just Transition Principles throughout the PTCA Plan and policy making.
List of Actions (# and name)	<p>FR 1.1. Educate the CSC and Air District on how Just Transition would apply to the Zero Emission Future and a managed phase-down of fossil fuels in the PTCA area. The CSC will establish a Just Transition Subcommittee (JTS) as part of Path to Clean Air Plan Implementation by Q2 2024</p> <p>FR 1.2. Incorporate Just Transition Principles and Criteria in the prioritization and implementation of the PTCA Plan and explore incorporating these in governmental policymaking and rulemaking</p>

Strategy 2. Reduce Persistent Flaring and Improve Incident Response

This strategy is focused on eliminating persistent flaring (i.e., minimizing flaring occurrences) and reducing the impacts (both in terms of physical health and psychological health) on the PTCA community, as well as responding to incidents in a more effective manner. A clear priority that has been identified by the CSC members is reducing frequency of flare activity and reducing emissions from flares at the Chevron Richmond Refinery.

In recent years, there have been increases not only in flaring frequency, but also in flaring emissions at Chevron Richmond Refinery. As part of strategy development, an evaluation of historical flaring trends was conducted. Monthly flaring data reported per Regulation 12, Rule 11 – Flare Monitoring at Refineries was reviewed for the time period covering 2016 to 2022.

The analysis showed:

- There was a significant increase in flaring frequency and emissions was observed after October 2018, which was when the new hydrogen plant at the Chevron Richmond Refinery started operation.
- Though the hydrogen flare only started operation in October 2018, when looking at the 2016 – 2022 period, the hydrogen flare processed the highest volume of vent gas in comparison to the other flares. Thus, in 4 years’ time the hydrogen flare processed more gas than any other single flare processed across 6 years’ time.
 - Non-methane hydrocarbon (NMHC) emissions from the hydrogen flare were highest among the flares operated at the facility. The source of NMHC emissions were primarily due to the large amount of pilot and purge gas required to operate the hydrogen flare.
 - SO₂ emissions from the hydrogen flare were negligible during the 2016-2022 period. This is because vent gas routed to hydrogen flare is typically high purity hydrogen (with hydrogen purity in excess of 99.99 percent).
- The North Isomax Flare was responsible for the majority of SO₂ emissions in the flare category during the 2016 – 2022 period.

Overall, flaring activity at Chevron Richmond Refinery has significantly increased during the 2016 – 2022 period. Flaring activity has increased not only due to start-up of the hydrogen flare in 2018, but also due to increased flare activity across the entire Chevron Richmond Refinery since the start-up of the hydrogen plant.

Reducing persistent flaring and improving incident response around flaring and other incidents is paramount to the PTCA community.

Component	Description
Strategy #	Fuel Refining (FR) 2
Strategy name	Reduce Persistent Flaring and Improve Incident Response
Key Issue (KI) Addressed	KI 3: Persistent flaring KI 1: Fuel refining sector in Richmond is the Largest Source of Emissions in PTCA area KI 2: Lack of accountability with Air District Regulations KI 4: Just Transition
Objective (intended outcome of the strategy)	Reduce flaring events to the lowest levels possible (in terms of frequency and emissions), including during emergencies / upset, via more consistent and competent operations with an ultimate goal of zero routine or planned flaring. Improve community satisfaction with communications surrounding major incidents and flaring. Increase public awareness of and knowledge around flaring activities, with the goal of providing better information on health impacts and incident response activity.
Narrative on how Strategy meets Feasibility Criteria	<p>There is negative health impact associated with direct inhalation of pollutants from flaring events and other incidents, but also other pathways involving psychological stress and consequent bodily responses that can be damaging in the short and/or long term (cardiovascular, inflammatory, etc.). The actions presented in this strategy focus on measures that would provide timely notification and increase availability of information for community, as the community has shared that a lack of information during flaring events is both a safety concern and a source of emotional distress. There are examples of successful flaring notification at the other Air District such as Flare Event Notification System (FENS)⁴⁴ implemented by South Coast Air Quality Management (SCAQMD), which is a real time notification system that provides location and information related to the flaring of the event in real time as soon as the notification is received. With examples of similar strategies that have been successfully implemented in other refinery communities, the implementation of a similar strategy to the PCTA community is feasible.</p> <p>Other strategies in this section focus on rule amendment efforts that would lead to reduction in both frequency and emissions from flares. The flare rules for the Air District have not been amended since mid-2000. Based on information that has been compiled since the adoption of the flare rules, the Air District staff has already identified potential amendment items that would strengthen and increase effectiveness of the rule. In addition, there are already more stringent emission limits and monitoring requirements present in other flare regulations adopted by other air districts and the EPA that can be evaluated for inclusion in Air District rule amendments.</p>

⁴⁴ <https://xappprod.aqmd.gov/fens/public>; <https://www.aqmd.gov/docs/default-source/news-archive/2019/south-coast-aqmd-launches-fens.pdf>

Component	Description
<p>Narrative on how Strategy meets Vision and Principles Criteria</p>	<p>Frequent flaring activity has not only been a source of safety and health concerns but also a source of trauma and emotional stress for the PTCA community. The actions presented in this section aim to reduce the flaring activity via rule amendment, provide timely notification of flaring events to the community, and increase information availability related to flaring events for the public. Reduction in flaring activity via rule amendment is intended to lead to a decrease in emissions, specifically those emissions that pose negative health impacts to the PTCA community. Timely issuance of notification and increased availability for flaring events will allow the impacted community to take appropriate action to mitigate the negative health impacts from flaring events.</p> <p>The action items in this section meet the vision and principles criteria. These actions are expected to reduce flaring activity and the PTCA area’s exposure to air pollutants generated during a flaring event, which will lessen the negative health impact and emotional distress caused by flaring.</p>
<p>List of Actions (# and name)</p>	<p>FR 2.1. Air District and the CSC will work with the City of Richmond to strengthen the Industrial Safety Ordinance (ISO).</p> <p>FR 2.2. The Air District will coordinate with the CSC to improve and expand communications about all flaring events for the fuel refining sector in the PTCA area and also for major incidents at both fuel-refining and non-fuel refining sources. Communications mechanisms will be developed in collaboration with a CSC Communications Subcommittee and include (A) a new webpage and (B) standardized internal and external communication protocols.</p> <p>FR 2.3. Air District and CSC will collaborate with Contra Costa County to recommend improvements for their Community Warning System.</p> <p>FR 2.4. Air District will improve its incident response program to get more transparent and user-friendly information to a wider audience faster during and after major incidents.</p> <p>FR 2.5. CSC will make recommendations on the improved communications protocols to the Air District Board of Directors (BOD) Incident Response Ad Hoc</p> <p>FR 2.6. Air District will initiate a rule development effort, further evaluating potential updates to flaring rules (Rule 12-11 and Rule 12-12), by the end of 2024. Rule development efforts will aim to incorporate health impacts analyses, enhance rule enforceability, and establish new and/or more stringent limits. Health and Safety Code requirements will be satisfied as well.</p> <p>+ Cross references to all other relevant PTCA strategies and actions</p>

Strategy 3. Hold Chevron and Other Emitters Accountable for Reducing Pollution and Negative Public Health Impacts from their Operations

This strategy is meant to increase accountability for polluters through more effective compliance and enforcement activities (e.g., inspections and investigations); legal approaches and penalties; permitting; monitoring and measurements; communications, education and outreach; and equity and environmental justice. This also helps ensure accountability for the Air District, as the lead implementer or partner for many of the actions identified in this strategy -

and as a partner committed to increasing transparency with the CSC and community. Continuous improvement over time is key.

Component	Description
Strategy #	Fuel Refining (FR) 3
Strategy name	Hold Chevron and Other Emitters Accountable for Reducing Pollution and Negative Public Health Impacts from their Operations
Key Issue (KI) Addressed	KI 2: Lack of accountability with Air District Regulations KI 1: Fuel refining sector in Richmond is the Largest Source of Emissions in PTCA area KI 3: Persistent flaring
Objective (intended outcome of the strategy)	An enhanced and standardized inspection protocol for Chevron that is informed by the CSC. Use enhanced monitoring and monitoring data analysis to help improve our emissions modeling, rule development, compliance & enforcement, and public communication.
Narrative on how Strategy meets Feasibility Criteria	This strategy is feasible because it leverages work that falls within the wheelhouse of various sections of the Air District, with the overall goal of comprehensively increasing accountability for industry and ensuring the Air District meets community expectations in carrying out its duties. Actions cover compliance and enforcement, legal approaches, penalties, monitoring, measurements, permitting, environmental justice and equity. The type of work covered by the actions is feasible, although resources will be critical to being able to complete many of these actions as they build upon, or expand into greater depth or focus, existing types of responsibilities of Air District staff. While certain legal elements of enforcement necessarily must be confidential in order to protect ongoing investigations or negotiations, the basic intent of the legal portions of this strategy are generally feasible. Communities impacted by air pollution issues have a right to be informed of progress and results to ensure facilities are held accountable for violations - transparency is feasible to the extent it will not impede enforcement efforts. For these strategies to be successfully implemented, the Air District must periodically consult the CSC to gain a clear vision of the community expectations for these strategies. Some of these actions are also priorities for the Air District's Community Advisory Committee; it is expected there will be synergy between these different community-led planning processes (CSC and Air District CAC) and the Air District's Strategic Plan.
Narrative on how Strategy meets Vision and Principles Criteria	This strategy will meet the vision and principles criteria in that it increases the public's access to information on the compliance of facilities within the PTCA area. These actions provide a setting for the Air District to share annual results of inspections, complaint responses, and major air pollution incidents that occur. It also lays the groundwork for how the Air District can incorporate community feedback into legal enforcement approaches and for setting up a process to invest a portion of the funds from settlements back into the communities impacted by these violations. This strategy can redress harm to communities caused by air quality violations through actions that seek to deter future air quality violations and

Component	Description
	<p>to reinvest funds collected from penalties back into the impacted neighborhoods to improve air quality and public health. Further, actions that center around meaningful involvement of community leaders from the CSC and CAC (who live in communities overburdened by pollution in the development of these policies) while allowing the Air District the necessary discretion and flexibility to successfully resolve violations, serves to promote community voice and strengthen partnership between government and the community.</p> <p>These actions will ensure greater transparency and partnership with communities in the PTCA area by promoting the complaint system, creating better communication during responses to major incidents, and by reporting results to the community as progress is made during response implementation.</p> <p>Furthermore, compliance and enforcement activities are especially important in historically overburdened communities that often are located near sources of pollution from businesses and industry. Incorporating civil rights and equity-based actions is critical to meeting the vision and principles as well. These communities may be the closest to air quality problems, accidents, and major incidents, meaning their health, safety, and quality of life are under threat from proximity to air quality issues.</p>
<p>List of Actions (# and name)</p>	<p>FR 3.1. Air District will develop and implement a standardized Chevron inspection protocol in partnership with the CSC.</p> <p>FR 3.2 Increase the frequency of Air District inspections, audits, and investigations at Chevron and Chemtrade.</p> <p>FR 3.3. Seek to build a strong collaborative relationship with operators and Union Health and Safety representatives.</p> <p>FR 3.4. Transparent, Regular, and Inclusive Updates on Compliance and Enforcement Activity at Chevron.</p> <p>FR 3.5. Air District will expedite the Notice of Violations resolution process in the fuel refining sector.</p> <p>FR 3.6. Air District will coordinate on enforcement with federal, state (USEPA, CARB, and the Attorney General’s Office), and local enforcement partners (District Attorneys, City and County Counsel) on fuel refining violations, enforcement, and other legal issues, as appropriate.</p> <p>FR 3.7. Air District will provide quarterly and annual updates to CSC about penalties assessed against fuel refining sector facilities and all other sources in the PTCA area.</p> <p>FR 3.8. Air District will collaboratively develop, with the CSC, and pilot legal enforcement approaches for fuel refining facilities within one year of final approval of the PTCA Plan. Then this will be expanded to cover all PTCA sources.</p> <p>FR 3.9. First, Air District will partner with the CSC to develop, within 1 year of PTCA Plan adoption, a Community Benefits Policy (CBP) that invests up to 100% of penalty monies from the fuel refining sector back into the PTCA area. Then, Air District will partner with the CSC to expand the Fuel Refining Community Benefits Policy (CBP) to cover the full PTCA area.</p>

Component	Description
	<p>FR 3.10. Air District will develop a program by 2026 to apply a Title VI/Gov. Code section 11135 lens including, but not limited to, a process for applying civil rights/disparate impact analyses for Air District refinery-related permitting activities in the PTCA area.</p> <p>FR 3.11. Air District will expand the distance and circumstances covered by Air District notifications for fuel refining permit actions.</p> <p>FR 3.12. Follow the Air District's new EJ Chapter in its California Environmental Quality Act (CEQA) Guidance.</p> <p>FR 3.13. Improve refinery fence-line and community air monitoring programs.</p> <p>FR 3.14. Improve source emissions monitoring and reporting for sources at the Chevron Refinery and fuel refining-related facilities.</p> <p>FR 3.15. Refinery-related measurement data accessibility improvements.</p> <p>+ Cross references to all other relevant PTCA Plan strategies and actions</p>

Strategy 4. Reduce Exposure and Public Health Impacts from Toxic Air Contaminants Emitted by the Fuel Refining Sector

This strategy is focused on reducing exposure to toxic air contaminants experienced by the PTCA community as a result of localized sources of emissions from the fuel refining sector. It is especially critical to address large facilities with numerous sources of toxics, including Chevron and Chemtrade.

Component	Description
Strategy #	Fuel Refining (FR) 4
Strategy name	Reduce Exposure and Public Health Impacts from Toxic Air Contaminants (TACs) Emitted by the Fuel Refining sector
Key Issue (KI) Addressed	KI 1: Fuel refining sector in Richmond is the Largest Source of Emissions in PTCA area
Objective (intended outcome of the strategy)	Reduce exposure burden from Toxic Air Contaminants (TACs) to the lowest level feasible. Reduce Toxicity Weighted Emissions (TWE) from the fuel refining sector, with the goal of a 30-50% reduction before 2035.
Narrative on how Strategy meets Feasibility Criteria	This strategy is feasible because it relies on an adopted rule - Rule 11-18 - which is currently being implemented and is designed to achieve reductions in Toxic Air Contaminants (TACs) and the associated health risks from those pollutants. Additionally, to strengthen the rule, various amendment items are currently being considered. Furthermore, an analysis of best available controls for source categories that may not be addressed, to the extent desired, via Rule 11-18 has been conducted. For any sources that may pose health risks that are not adequately addressed under Rule 11-18, a source-specific rule development evaluation will be performed. However, it is not

Component	Description
	guaranteed that each single source is a suitable candidate for regulatory control.
Narrative on how Strategy meets Vision and Principles Criteria	<p>Rule 11-18 is a health risk-based rule requiring reduction in TAC emissions that pose increased health risks to nearby communities. By targeting the major stationary sources in the community, including the fuel refining sector which generates over half of the toxicity weighted emissions associated with chronic health effects and cancer risk, the pollution burden on the entire community will be reduced. It is particularly important to address impacts to communities located closest to the refinery, specifically the BIPOC population historically and disproportionately affected by health conditions such as asthma, low-birth weights, and diabetes.</p> <p>Further, by adding in an action to address any remaining burden post Rule 11-18 implementation, this strategy builds in a backstop plan to help ensure the community gets the reductions in exposure they deserve and demand.</p>
List of Actions (# and name)	<p>FR 4.1. Amend Rule 11-18 to improve stringency, efficiency, transparency, and public engagement</p> <p>FR 4.2. Prioritize implementation of Rule 11-18 for Chevron</p> <p>FR 4.3. Implement Rule 11-18 at Chemtrade</p> <p>FR 4.4. Implement Rule 11-18 at all other fuel-refining and fuel-refining related facilities subject to the rule and Provide Regular Updates on Rule 11-18 Implementation</p> <p>FR 4.5. Evaluate and Implement Targeted Single-Source Category Controls to further reduce public health impact from TACs</p> <p>+ Cross references to all other relevant PTCA Plan strategies and actions</p>

Strategy 5. Reduce Exposure from Particulate Matter and Other Criteria Air Pollutants Emitted by the Fuel Refining Sector

This strategy aims to reduce exposure to PM_{2.5} from fuel refining and fuel refining-related sources in the PTCA area, as the sector - with a majority coming from Chevron - contributes around one third of the PM_{2.5} exposure experienced from local sources. It includes implementing Rule 6-5, which will result in a large reduction in PM_{2.5}, as well as finalizing a methodology to calculate risk from PM_{2.5} and then evaluation how to incorporate health risk into rule development and/or a risk reduction program that would cover fuel refining sources, in addition to other sources of PM_{2.5}.

Component	Description
Strategy #	Fuel Refining (FR) 5
Strategy name	Reduce Exposure and Public Health Impacts from Particulate Matter and Other CAPs Emitted by the Fuel Refining sector

Component	Description
Key Issue (KI) Addressed	KI 1: Fuel refining sector in Richmond is the Largest Source of Emissions in PTCA area
Objective (intended outcome of the strategy)	Reduce PM _{2.5} emissions from the fuel refining sector by 30-50% by 2034
Narrative on how Strategy meets Feasibility Criteria	<p>There are numerous scientific studies that link PM_{2.5} exposure to a variety of health issues including premature death in people with heart or lung disease, nonfatal heart attacks, aggravated asthma, and increased respiratory symptoms. The actions presented in this section are expected to reduce PM_{2.5} emissions and exposure, and thus help reduce health risk: including via the implementation of Rule 6-5, adoption of PM methodology, and integration of health risk from PM into the existing Air District regulation. Implementation of Rule 6-5 will lead to significant emissions reductions, as the Fluidized Catalytic Cracking Unit (FCC unit or FCCU) is a major source of PM_{2.5} emissions in this PCTA community and the rule will require FCCUs to meet a stringent emission standard equivalent to a wet gas scrubber. This emission level has been achieved in practice at FCCUs operating at other refineries. Though there is ongoing litigation for this rule, the implementation timeline for Rule 6-5 is not expected to be impacted until a judgment for this case becomes available.</p> <p>The adoption and implementation of PM methodology into Air District rules will allow the Air District to limit PM_{2.5} exposures using health risk-based metrics through the existing permitting program, Rule 11-18, and/or new rules. The PM methodology is already in the development process and has been presented to the Advisory Council and public for comments. There are also other efforts by the state (e.g., CARB) and federal government to better understand health impacts from criteria air pollutants, including cumulative impacts (see Public Health Strategy 6).</p> <p>Other actions provided in this section aim to identify stronger controls that can help reduce the health impacts and regional and local air quality impacts associated with NO_x and SO₂ emissions. NO_x and SO₂ are precursors to secondary PM which may increase the PM exposures for the PCTA community.</p>
Narrative on how Strategy meets Vision and Principles Criteria	The fuel refining sector is responsible for 63% of local PM _{2.5} emissions according to the Air District Inventory. The actions presented in this section aim to reduce the negative health impacts associated with PM _{2.5} emissions for the community either by directly limiting PM _{2.5} emissions or by using health risk-based metrics to require the PM _{2.5} emissions reductions. The PM _{2.5} emission reductions from these strategies will lead to reductions in PM _{2.5} exposure, which in turn would mitigate the negative health impacts that the community is suffering from due to high level of exposures to air pollutants in the PCTA community.

Component	Description
	<p>The actions provided in this section will evaluate the negative impacts to health and local and regional air quality associated with NO_x and SO₂ emissions with the aim to proceed with rule development if the findings indicate that NO_x and SO₂ emissions in the region do have significant impacts.</p> <p>Other actions presented in this section are in alignment with vision and principles criteria for key issue statements since the potential outcome of the strategies include proceeding with rule development efforts, which would lead to NO_x and SO₂ emission reductions that would mitigate negative impacts to the PCTA community from both health and air quality perspectives.</p>
<p>List of Actions (# and name)</p>	<p>FR 5.1. Implement Rule 6-5</p> <p>FR 5.2. Finalize PM_{2.5} Local Risk Methodology for rule development and accountability</p> <p>FR 5.3. Develop and implement health-based rules for PM, upon finalizing a methodology to account for health risk from PM. Evaluate with respect to fuel refining sources, non-fuel refining sources, and other significant sources. Initiate by the end of 2025.</p> <p>FR 5.4. Include work to improve quantification of PM and VOC emissions from cooling towers (see Fuel Refining Strategy 3 Action 3.13)</p> <p>FR 5.5. Initiate rule development for NO_x emissions from combustion sources at petroleum refineries by the end of 2024</p> <p>FR 5.6. Initiate rule development to evaluate controls to reduce SO₂ emissions and Secondary PM⁴⁵ generated by Chevron and related industries in the PTCA area</p> <p>+ Cross references to all other relevant PTCA Plan strategies and actions</p>

Marine and Rail Introduction

Marine and Rail (M&R) is a community concern because marine and rail facilities and operations tend to have a variety of pollution sources present that result in concentrations of harmful emissions, such as diesel particulate matter (DPM), with cumulative impacts on residents. M&R sources account for 43% of the cancer risk attributable to local emissions sources in the PTCA community, as well as chronic health risk. In addition, M&R operations tend to utilize older, larger, dirtier equipment that can be challenging to upgrade and replace with cleaner technologies. The following key issues elaborate on the concerns surrounding the M&R sectors identified in partnership with the community.

⁴⁵ <https://www3.epa.gov/region1/airquality/pm-what-is.html>

Key Issues

Key Issue 1: Cancer Risk

Marine and rail is primarily a concern because it accounts for 43% of cancer risk (36.4 of 84.3 in a million) attributable to local emissions sources in the PTCA area, as well as chronic health risk. This means local residents impacted by marine and rail operations, who are disproportionately low-income, unhoused and/or people of color, face exposures to toxic air contaminants (TACs), high levels of Diesel PM, and other drivers of cancer risk and chronic health risk.

Key Issue 2: Older, Larger, Dirtier Equipment

Marine and rail operations are a concern because they function with older equipment that mainly run on large fossil fuel-powered engines. They also cross long distances through regions with varying regulatory authorities, making it more challenging to incorporate cleaner, zero-emission technology into the existing fleet of equipment.

Key Issue 3: Marine and Rail Hubs

Operations at hubs like ports, terminals, and intermodal rail yards are a concern because they have a wide variety of pollution sources present that result in concentrations of harmful emissions, like toxic diesel particulate matter, with cumulative impacts on residents. When these hubs are near or upwind of sensitive receptors or community gathering points, exposure impacts are an even greater concern. For example, the Port of Richmond is located near Miller Knox Regional Park, a popular recreational area where community members gather, exposing visitors to pollution.

Strategies

Strategy 1. Reduce Cancer and Chronic Health Risk from Rail Operations and Facilities

This strategy seeks to reduce cancer and chronic health risk from rail operations and facilities within the PTCA community.

Component	Description
Strategy #	Marine & Rail (M&R) 1
Strategy name	Reduce Cancer and Chronic Health Risk from Rail Operations and Facilities
Key Issue (KI) Addressed	KI 1: Cancer Risk KI 2: Older, Larger, Dirtier Equipment KI 3: Marine and Rail Hubs
Objective (intended outcome of the strategy)	Lower the cancer and chronic health risk attributable to rail operations via CARB's existing In-Use Locomotive Regulation, which is anticipated to reduce rail emissions in the PTCA area by more than 70% by 2033. The longer-term strategy is 100% zero emissions operations. This will be accomplished through the early deployment of Tier 4 and zero emission locomotives by Union Pacific, BNSF, Richmond Pacific, Amtrak, and Caltrans (Capitol Corridor and San Joaquin's passenger rail).
Narrative on how Strategy meets Feasibility Criteria	This strategy is feasible. CARB is the champion and has proposed an In-Use locomotive regulation that could achieve this outcome. This regulation will include a funding source, can be implemented in a reasonable timeframe, within current legal authorities, and we do not foresee a major political

Component	Description
	<p>barrier. EPA has responded to a petition to look into establishing requirements for new and preempted locomotives.</p> <p>There is a need for dedicated staff at the Air District, and CARB, to support the implementation of these actions and this strategy, in addition to time from the CSC and/or the public.</p>
Narrative on how Strategy meets Vision and Principles Criteria	<p>The In-Use Locomotive regulation’s focus on getting to zero-emissions while also prioritizing providing benefits to the state’s most impacted communities. This aligns with PTCA Vision and Principles. Implementation of the Rail strategy would directly benefit those living adjacent to rail lines and/or operations, such as those within the Iron Triangle neighborhood in the City of Richmond. This is important because these overburdened neighborhoods are located adjacent to polluting sources due to historic, racist redlining and zoning practices. Requirements for cleaner rail equipment (running along rail lines and in rail yards) would improve the health of those most acutely impacted (those living and working adjacent to rail operations), as well as for the greater community.</p> <p>By working with CARB directly, who has authority to regulate some rail sources, and with support from the Air District, who can incentivize cleaner Rail, this strategy is set up to maximize reductions in emissions and exposure. Working with EPA to address federally preempted rail equipment will complement the state-level approach.</p>
List of Actions (# and name)	<p>M&R 1.1: Regulate Emissions Reductions from Rail</p> <p>M&R 1.2: Enforce Emissions Reductions for CARB In-Use Locomotive Regulation</p> <p>M&R 1.3: Incentivize (“Find and Fund”) Emissions Reductions</p> <p>M&R 1.4: Conduct Further Study related to programs and/or regulations related to Marine and Rail</p> <p>M&R 1.5: Conduct Education and Outreach Efforts to Marine and Rail operators to align their business plans with PTCA Plan strategies</p>

Strategy 2. Reduce Cancer and Chronic Health Risk from Ocean Going Vessel Operations

This strategy seeks to reduce cancer and chronic health risk from Ocean Going Vessel operations within the PTCA community.

Component	Description
Strategy #	Marine & Rail (M&R) 2
Strategy name	Ocean Going Vessels (OGVs)
Key Issue (KI) Addressed	<p>KI 1: Cancer Risk</p> <p>KI 2: Older, Larger, Dirtier Equipment</p> <p>KI 3: Marine and Rail Hubs</p>
Objective (intended outcome of the strategy)	<p>Decrease emissions from OGVs, both at berth and in transit, specifically addressing emissions not expected to be reduced through current regulations.</p> <p>Address emissions from bulk vessels, which are not currently included in the At Berth regulation and must be addressed.</p>

Component	Description
Narrative on how Strategy meets Feasibility Criteria	<p>This strategy is feasible regarding At Berth emissions for which CARB is the champion and has already adopted regulations. CARB's Interim Evaluation Report verifies the feasibility of this regulation's implementation.</p> <p>Reducing in transit (i.e., emissions that occur while not at berth - either while maneuvering or in transit near shore) emissions would require a community and/or agency champion to put forth incentives and/or a new regulation. If created, this regulation may lend itself to an incentives-based mechanism. There may be political obstacles with authority, due to the multi-jurisdictional nature of OGV transit.</p> <p>There is a need for dedicated staff at the Air District, and CARB, to support the implementation of these actions and this strategy, in addition to time from the CSC and/or the public.</p>
Narrative on how Strategy meets Vision and Principles Criteria	<p>Our strategy is an attempt to reduce at berth emissions and to expand CARB's current regulations beyond at berth to include in-transit emissions, in an effort to reduce emissions and total impact from OGVs. For the community, it is important to address in transit emissions that impact public health - specifically emissions that occur near enough to shore that they result in exposure to community on land.</p> <p>CARB should keep in mind any potential unintended consequences of statewide implementation of any new regulations (e.g., trickle down economic consequences), while developing new regulations.</p>
List of Actions (# and name)	<p>M&R 2.1: Regulate Emissions Reductions for OGVs At Berth M&R 2.2: Enforce Emissions Reductions for OGVs M&R 2.3: Incentivize ("Find and Fund") Emissions Reductions M&R 2.4: Conduct Further Study M&R 2.5: Conduct Education and Outreach Efforts M&R 2.6: Regulate Emissions Reductions for OGVs In Transit</p>

Strategy 3. Reduce Cancer and Chronic Health Risk from Commercial Harbor Craft

This strategy seeks to reduce cancer and chronic health risk from commercial harbor craft within the PTCA community.

Component	Description
Strategy #	Marine & Rail (M&R) 3
Strategy name	Commercial Harbor Craft
Key Issue (KI) Addressed	<p>KI 1: Cancer Risk KI 3: Marine and Rail Hubs</p>
Objective (intended outcome of the strategy)	Reduce localized cancer and chronic health risk, from commercial harbor craft (CHC). Transition the CHC fleet to the cleanest technology possible, especially zero emission technology.
Narrative on how Strategy meets Feasibility Criteria	This strategy has a champion in that CARB has a recently updated regulation mandating the turnover of the CHC fleet statewide, with earliest compliance for oldest, highest-emitting engines. There are cost challenges with commercial fishing vessels that have resulted in less stringent requirements in

Component	Description
	<p>the adopted regulation for that category of vessels, and cost may continue to present challenges in the future if funding is not adequate. A technology evaluation will be completed every 2 years, providing ample opportunity to evaluate the landscape for the commercial harbor craft and consider adjusting implementation as needed, (e.g., adding stringency, adding funding, updating understanding of cleanest technologies and zero emission availability, or, in the worst-case scenario, acknowledging lack of availability of cleaner technology).</p> <p>There is a need for dedicated staff at the Air District, and CARB, to support the implementation of these actions and this strategy, in addition to time from the CSC and/or the public.</p>
<p>Narrative on how Strategy meets Vision and Principles Criteria</p>	<p>The goal of this strategy is to reduce the cancer and chronic health risk from commercial harbor craft, which will have a direct benefit for those disproportionately harmed by emissions and exposure to pollutants from CHC. Strategies like these will help to address certain impacts from historic, racist redlining practices by reducing the pollution sources that have existed in communities over generations.</p> <p>Some of the vessels in this category include public transit services, specifically ferries. CARB’s regulation is prioritizing zero emission technology for ferries, which would provide additional benefit in that impacts would not just be reduced for those exposed at shore near CHC operations, but also for individuals during their commute.</p> <p>There is potential for some smaller local business owners, e.g., fishing operations, to be impacted by the phase in of some more stringent requirements from CARB’s CHC regulation. Incentives funding should be available to help ease this burden.</p>
<p>List of Actions (# and name)</p>	<p>M&R 3.1: Regulate Emissions Reductions from CHC M&R 3.2: Enforce Emissions Reductions for CHC M&R 3.3: Incentivize (“Find and Fund”) Emissions Reductions M&R 3.4: Conduct Further Study M&R 3.5: Conduct Education and Outreach Efforts</p>

Strategy 4. Reduce Cancer and Chronic Health Risk from Cargo Handling Equipment

This strategy seeks to reduce emissions from Cargo Handling Equipment within the PTCA community. Cargo handling equipment is any motorized vehicle used to handle cargo or perform routine maintenance activities at ports and intermodal rail yards. The type of equipment includes yard trucks (hostlers), rubber-tired gantry cranes, container handlers, forklifts, etc. CARB’s current Cargo Handling Equipment (CHE) Regulation, adopted in 2005, establishes requirements for in-use and newly purchased diesel equipment that reduce diesel particulate matter (PM) and oxides of nitrogen (NO_x). CARB currently is assessing zero-emission technologies and additional solutions including efficiency improvement. CARB plans to develop amendments to the CHE Regulation (post-2025), so there is support and leadership at the statewide implementer level for reducing CHE emissions.

Goods movement at ports and intermodal rail yards is expected to continue and may increase to meet demand for just-in-time goods. With new technologies to lower CHE emissions (low/zero emissions equipment), there are opportunities to reduce the potential impact from ports and rail yards in advance of amended statewide regulations. There is a need for dedicated staff at the Air District, and CARB, to support the implementation of actions in this strategy, in addition to time from the CSC and/or the public.

Component	Description
Strategy #	Marine & Rail (M&R) 4
Strategy name	Cargo Handling Equipment
Key Issue (KI) Addressed	KI 3: Marine and Rail Hubs
Objective (intended outcome of the strategy)	Reduce emissions from cargo handling equipment (CHE). Reduce CHE contribution to cumulative facility impacts from marine and rail hubs. Prioritize accelerated development and deployment of zero emission cargo handling equipment.
Narrative on how Strategy meets Feasibility Criteria	CARB currently has plans to develop amendments to their Cargo Handling Equipment regulation (by 2025), so there is support and leadership at the statewide implementer level for reduction of emissions from cargo handling equipment. There is a need for dedicated staff at the Air District, and CARB, to support the implementation of these actions and this strategy, in addition to time from the CSC and/or the public.
Narrative on how Strategy meets Vision and Principles Criteria	CARB staff would also consider opportunities to prioritize the earliest implementation in or adjacent to the communities most impacted by air pollution.
List of Actions (# and name)	M&R 4.1: Regulate Emissions Reductions from CHE M&R 4.2: Enforce Emissions Reductions for CHE M&R 4.3: Incentivize (“Find and Fund”) Emissions Reductions M&R 4.4: Conduct Further Study M&R 4.5: Conduct Education and Outreach Efforts

Strategy 5. Reduce Cancer and Chronic Health Risk from Cumulative Impact Facilities and Operations

This strategy seeks to reduce cancer and chronic health risk from Cumulative Impact Facilities and Operations within the PTCA community. M&R sources in the PTCA are co-located along with other associated facilities and operations. These co-located facilities and operations function as goods movement hubs and can have cumulative exposure impacts on the PTCA community.

Component	Description
Strategy #	Marine & Rail (M&R) 5
Strategy name	Cumulative Impact Facilities and Operations
Key Issue (KI) Addressed	KI 1: Cancer Risk KI 2: Older, Larger, Dirtier Equipment KI 3: Marine and Rail Hubs

Component	Description
Objective (intended outcome of the strategy)	<p>To address and reduce the cumulative impacts from Marine and Rail and associated facilities and operations which often are co-located and function as a goods movement hub.</p> <p>Reductions at M&R goods movement hubs that have the greatest exposure impacts on the PTCA community.</p>
Narrative on how Strategy meets Feasibility Criteria	<p>There are existing CARB regulations, either proposed or passed, that seek to reduce emissions from individual sources at these goods’ movement hubs. There is support and funding for some emissions reductions for a few of these sources. CARB could be a great champion for this work, as the regulator. However, there is not a great approach for addressing the total cumulative impacts from the variety of sources associated with a given facility or operation. Traditional regulatory focus tends to be at the source or equipment-type level, so it is a challenge to identify mechanisms to address cumulative impacts from given hubs of activity.</p> <p>There is a need for dedicated staff at the Air District, and CARB, to support the implementation of these actions and this strategy, in addition to time from the CSC and/or the public.</p>
Narrative on how Strategy meets Vision and Principles Criteria	<p>By addressing the cumulative impacts where M&R facilities and operations overlap, we will be reducing impacts for the most disproportionately harmed communities who live adjacent to these M&R goods movement hubs, in addition to those frontline communities living near individual M&R facilities or operations.</p> <p>Hubs of industry were historically located in redlined communities, so this approach directly addresses that legacy of pollution of our most at-risk communities.</p>
List of Actions (# and name)	<p>M&R 5.1: Regulate Emissions Reductions from Cumulative Impact Facilities and Operations</p> <p>M&R 5.2: Identify opportunities to reduce emissions from on-site mobile and stationary equipment at railyards and ports</p> <p>M&R 5.3: Incentivize (“Find and Fund”) Emissions Reductions</p> <p>M&R 5.4: Conduct Further Study</p> <p>M&R 5.5: Conduct Education and Outreach Efforts</p> <p>M&R 5.6: Identify opportunities to reduce emissions from on-site mobile and stationary equipment at railyards and ports</p>

Public Health and Reducing Exposure

Introduction

Public health and reducing exposure is a crucial issue because the PTCA community faces disproportionate levels of air pollution as well as pre-existing health vulnerabilities resulting from lower socioeconomic status, poor living conditions, limited amenities, and inadequate social and health services. Plan strategies can help reduce pollution exposure, bolster comprehensive public health and social services, and promote human-centered planning, policies, and programming to reduce social determinants of health and the public health burden from air pollution. Furthermore, improving data systems, collaboration, and research efforts are essential

for tracking and addressing pollution and health outcomes, as well as enhancing public education and setting goals for improvement in public health policies and programs.

Many of the following health actions do not yet have an identified funding source. However, one funding source for health-promoting initiatives may be a Community Benefits Policy (CBP) Pilot, which would invest a portion of penalty funds associated with sources in the PTCA into the community, as described in further detail in FR Action 3.9.

Key Issues

Key Issue 1: Reducing Vulnerabilities to Air Pollution and Improving Social Determinants of Health
Poor health outcomes are associated with exposure to air pollution. The PTCA area has disproportionate levels of air pollution. In addition to breathing poor-quality air, our community has pre-existing health vulnerabilities. These vulnerabilities are based on lower socioeconomic status, poor living conditions, unhoused status, limited neighborhood amenities, scarcity of social and health services, and age and health condition. The most significant impact is on young children, pregnant and/or breastfeeding women, and the elderly. These vulnerabilities increase the risk of developing air pollution-related diseases and worsen health outcomes. Climate change is also a growing concern as it exacerbates these vulnerabilities. More comprehensive health and social services are needed to decrease these vulnerabilities and subsequently lower our community's burden of adverse health risks and outcomes. More human-centered planning is needed to improve living conditions, neighborhood facilities and health clinics.

Key Issue 2: Reducing Exposure to Air Pollution

High air pollution exposure for community members worsens health outcomes for various illnesses, including cancer, chronic respiratory diseases and chronic heart problems. In addition to high pollution levels, climate change increases the frequency and severity of wildfires, further increasing our exposure to harmful air. Additionally, the combination of industrial pollution and frequent wildfires needs further assessment. Air pollution exposure reduction is integral to improving public health and health equity in our PTCA communities.

Key Issue 3: Improving Data and Public Health Goals & Reporting

Many health policies and programs can be improved if a comprehensive system tracks and trends pollution and health outcomes. We need significant investments in epidemiological research, as well as improved health risk factors, health impact data, and methods and approaches for Health Risk Assessments (HRAs). Finally, we need additional education about public health, air pollution health risks and impacts, and to develop goals for improvement.

Strategies

Strategy 1. Increase Health Resilience and Improve Social Determinants of Health

This strategy seeks to reduce the harmful impact of social determinants of health on historically disadvantaged communities in the PTCA area. This would be accomplished through expanded healthcare for low-income PTCA residents - especially Black residents, advocacy and support for a guaranteed income program, and a study on reparations. In the PTCA community, studies show Black residents have the worst health outcomes for most air pollution-related diseases. (see the Community Description Chapter).

Component	Description
Strategy #	Health (H) 1
Strategy name	Increase Health Resilience and Improve Social Determinants of Health
Key Issue (KI) Addressed	KI 1: Reducing Vulnerabilities to Air Pollution and Improving Social Determinants of Health
Objective (intended outcome of the strategy)	Find opportunities for reparations for Black residents and expand health care access for the CERP Community's Black residents. Increase financial security for CERP Community residents and build relationships with West Contra Costa Unified School District (WCCUSD) to help bolster their asthma programming.
Narrative on How Strategy Meets Feasibility Criteria	Contra Costa County Health Services will be asked to implement action H 1.3, which would build on existing programs and current efforts. H 1.1 and H 1.3 both have political and technical support and are within existing legal frameworks. A timeline has yet to be determined. H 1.1 and H 1.2 ask that local jurisdictions (the cities of Richmond, San Pablo, and Contra Costa County) support State reparations efforts related to Black residents in the PTCA area. This action will need political support and input from community members and community-based organizations to write its scope, goals, and findings. H 1.4 will be led by the CSC, and its feasibility depends on the willingness and interest of the West Contra Costa Unified School District (WCCUSD).
Narrative on How Strategy Meets Vision and Principles Criteria	Through expanded opportunities for health care, financial security, and economic justice, this strategy tries to reflect the needs of the people who have been disproportionately harmed by environmental injustice, especially Black residents who have some of the worst health outcomes in the PTCA community.
List of Actions (# and name)	<p>H 1.1: Promote and advocate for a guaranteed income pilot for low-income CERP residents.</p> <p>H 1.2: Support State reparations efforts as they relate to Black residents in the PTCA area and in Contra Costa County.</p> <p>H 1.3: Ask CCHS to expand CalAIM programming for MediCal-eligible in the PTCA area and in Contra Costa County.</p> <p>H 1.4: Build relationships with the West Contra Costa Unified School District (WCCUSD) to help bolster their asthma management programming.</p>
Strategy Metric(s)	<p>Was the action implemented or completed? (yes/no?)</p> <p>Was funding increased or obtained, and if relevant, is the new funding source permanent?</p> <p>A measure of impact: How many more people/places/units were served/implemented/installed?</p>

Strategy 2. Reduce Air Pollution at Home

This strategy seeks to reduce exposure to air pollution for CERP residents at home, including residents who are homeowners, renters, and experiencing homelessness.

Component	Description
Strategy #	Health (H) 2
Strategy name	Reduce Air Pollution at Home
Key Issue (KI) Addressed	KI 2: Reducing Exposure to Air Pollution
Objective (intended outcome of the strategy)	Reduce exposure to air pollution where people live.
Narrative on how Strategy meets Feasibility Criteria	<p>The strategy supports existing programs and provides research services to identify program gaps, promotes and creates incentive programs, and updates regulations. These actions will work to better protect PTCA residents from indoor pollution at home and better protect unhoused residents from outdoor pollution. Many of these programs are currently funded and can be continued with current authorities.</p> <p>Air District, the cities of Richmond and San Pablo, Contra Costa County, and the CSC:</p> <ul style="list-style-type: none"> - These organizations must dedicate time to implement this strategy and these actions. These actions are technically and politically feasible, as they are already underway. <p>Air District:</p> <ul style="list-style-type: none"> - Air District must coordinate and support partners with research summaries and recommendations. This could require significant additional resourcing from Air District beyond its current capacity. <p>This Strategy requires partnerships between various agencies, including Air District, the cities of Richmond and San Pablo, the County, the CSC, and PTCA area members. Some of the existing programs are run by state agencies and existing public-private partnerships and will require coordination to move forward together.</p>
Narrative on how Strategy Meets Vision and Principles Criteria	<p>The Strategy meets the PTCA Vision and Principles Criteria by working to decrease indoor air pollution exposure and reduce the risk of individuals developing an air pollution-related disease. For those individuals that suffer from asthma and other lung diseases, reducing indoor exposure can decrease the chance of triggering a severe episode. Thus, the Strategy can create positive health outcomes in the long term and directly benefit CERP residents.</p>

Component	Description
	<p>The strategy also addresses disparities in the built environment, as older rental housing often lacks proper retrofitting to keep air pollution out and lacks indoor air filtration. The strategy also asks jurisdictions to change rental standards to require air filtration, cooling, and heating for all properties. Jurisdictions are encouraged to engage landlords in developing these policy changes in the planning stage and to provide landlords with financial support ahead of mandates as part of a strategy to prevent financial burdens for landlords and pricing renters out of their current rental units.</p> <p>The Strategy reflects the need of PTCA residents who have been disproportionately harmed by environmental injustice by increasing access to clean air at home. It aims to make participation in available retrofit programs more accessible to low-income residents of the PTCA area.</p> <p>There is a risk that retrofit programs that invest in rental owner-occupied housing will lead to gentrification and price low-income families out of the community. This would be an unintended consequence of the Strategy but must be weighed against the potential health benefits for the existing PTCA residents. The implementers of this action are encouraged to safeguard against this and think of protective, proactive measures to protect against gentrification.</p>
<p>List of Actions (# and name)</p>	<p>H 2.1: Support better access to home retrofits in the PTCA area H 2.2: Support transition to electric appliances for PTCA residents H 2.3: Assess if rental standards can require indoor air filtration in the PTCA community H 2.4: Assess and address gaps in the programming that protects the unhoused from air pollution in the PTCA area H 2.5: Reduce exposure to wood burning H 2.6: Create incentives for electric lawn and gardening equipment</p>
<p>Strategy Metric(s)</p>	<p>Was the action implemented or completed? (yes/no?) Was funding increased or obtained, and if relevant, is the new funding source permanent? A measure of impact: How many more people/places/units were served/implemented/installed?</p>

Strategy 3. Promote Healthy Food Access

There is empirical evidence to suggest that across the United States, racial segregation, discriminatory planning, and exclusionary zoning create unequal neighborhoods in which low-income and Black, Indigenous, People of Color (BIPOC) have limited “health-promoting resources” (e.g., grocery stores, green spaces, etc.) and a disproportionate number of “health-restricting resources” (e.g., fast food, liquor stores, and incompatible land uses). Social determinants of health (SDOH), such as food insecurity, are among the most impactful driving forces behind health disparities. Factors such as limited access to affordable healthy food

choices (e.g., grocery stores, farmers' markets with EBT options, healthy food at corner stores, etc.), poverty, low wages, and transportation barriers are SDOH and make people more susceptible to developing short and long-term adverse health outcomes. One-third of our PTCA area is comprised of low-income households that reside more than half a mile from the nearest grocery store. In addition, the COVID-19 pandemic and climate change have worsened food insecurity.

Our PTCA area demands more comprehensive policies promoting food access and increased availability of healthier food choices in our community. Community engagement with a human-centered focus on the policy development process is critical to ensure the desired outcomes. Our local public health agency, Contra Costa County Health Services (CCHS), has a pivotal role in leading the implementation of such policies.

This strategy asks for the writing of policies to increase refrigeration capacity for healthy food items at corner stores, study CalFRESH/EBT to increase enrollment, healthy food availability in retail environments, and less unhealthy food at check-outs.

This strategy asks that CCHS increase programming to improve access to healthy food in retail settings and to conduct a study on increasing CalFresh enrollment within the CERP Community. It asks the City of Richmond, the City of San Pablo, and Contra Costa County (local jurisdictions) to seek funding to increase the number of food retail businesses. CCHS and local jurisdictions are asked to coordinate and develop a Healthy Food Retail Model Ordinance for local jurisdictions. Lastly, West Contra Costa Unified School District (WCCUSD) is asked to revise and implement a Wellness Policy for West County Unified that promotes healthy food.

Component	Description
Strategy # 3	Health (H) 3
Strategy name	Promote Healthy Food Access
Key Issue (KI) Addressed	KI 1: Reducing Vulnerabilities to Air Pollution and Improving Social Determinants of Health
Objective (intended outcome of the strategy)	Local jurisdictions create processes and programs to promote healthy food access, write model ordinances or permitting guidelines that increase the siting of healthy retailers, and encourage healthy food retail programs and investment.
Narrative on How Strategy Meets Feasibility Criteria	This strategy asks that funding is found for actions #3.1, #3.2, and #3.3. Without secured funding, the feasibility of these actions diminishes as they will require substantial resources. However, these actions, particularly #3.1, #3.2, and #3.3, which ask for increased food options and a study to inform increasing CalFRESH enrollment, will provide immediate benefits to the CERP communities. Action #3.4 asks local jurisdictions and West County Unified School District to adopt policies or initiatives. Feedback from these entities is needed to understand the feasibility of these actions.

Component	Description
Narrative on How Strategy Meets Vision and Principles Criteria	This strategy applies the best current knowledge and thinking to address food access disparities resulting from socioeconomic and racial inequities. However, it should be noted that addressing food access and food deserts is complex. Increasing food access via food retail does not address food insecurity's root causes and structural drivers, like poverty, low wages, unaffordable food pricing, segregated land uses, and inadequate and inequitable transportation options. Health Strategy #1 has actions that speak to poverty and low wages, and the Mobile Strategies address transportation issues.
List of Actions (# and name)	H 3.1: Expand CCHS programming to increase healthy food in retail settings in West Contra Costa County. H 3.2: Ask EHSD to Study the current state of CalFresh - California state's Supplemental Nutrition Assistance Program (SNAP) - enrollment within the CERP Community and identify solutions to current barriers to enrollment. H 3.3: Find funding to increase the number of food retail businesses in the PTCA community. H 3.4: Develop a Healthy Food Retail Model Ordinance for potential adoption by local jurisdictions in the PTCA area.
Strategy Metric(s)	Was the "action" implemented or completed? (yes/no?) Was funding increased or obtained, and if relevant, is the new funding source permanent? A measure of impact: How many more people/places/units were served/implemented/installed?

Strategy 4. Promote Resilience Centers

One of the PTCA community's most important assets is resiliency. The PTCA community continues to be resilient despite the environmental and social injustice it faces. Easily accessible resilience centers (i.e., shelter and resources during climate and other emergencies) are crucial for building resilience capacity and for protecting sensitive populations. These centers can provide a safe place for temporary shelter and relief during days of extreme heat or operate as centers for distributing necessities such as food and multilingual information during and after disasters such as wildfires, flaring events from Chevron, or prolonged electrical outages. Developing resilience centers is a public health priority for the PTCA CSC. Resilience centers and the opportunities they offer can mitigate the vulnerabilities to air pollution experienced by the most sensitive populations, especially children and unhoused persons. Resilience centers should be where people congregate and be easily accessible to sensitive populations. Examples would be all community centers, libraries, and shelters for the unhoused. As proposed permanent facilities, resilience centers would operate year-round and provide infrastructure for clean air, cooling, and/or emergency/disaster relief centers. Available state funding could also support expanding air filtration technology to all schools and homeless shelters in the PTCA area.

Component	Description
Strategy #	Health (H) 4
Strategy name	Promote Resilience Centers
Key Issue (KI) Addressed	KI 2: Reducing Exposure to Air Pollution
Objective (intended outcome of the strategy)	Ensure that all residents in the PTCA area have access to a Resilience Center that provides indoor air filtration, has programming to meet community members' needs, and is sustainably funded.
Narrative on how Strategy meets Feasibility Criteria	The success of these actions will depend on local governments and Air District staff's capacity to work on such initiatives, as well as the capacity of community partners.
Narrative on how Strategy Meets Vision and Principles Criteria	<p>The first action in the strategy promotes resilience centers because they have a crucial role in supporting the PTCA Vision and Principles in numerous ways. They can help mitigate air pollution exposure by providing safe indoor spaces equipped with air filtration systems. Additionally, Resilience Centers can address the environmental, health, and socio-economic disparities the PTCA area faces. Through access to clean and cool air, vital social resources, health programs, community engagement, and education, these centers promote equity by addressing some of the underlying health disparities that disproportionately affect the PTCA area.</p> <p>Resilience centers have many benefits, such as providing access to resources by serving as community hubs where residents can get information on healthcare, job opportunities, educational resources, and social services. Resilience Centers can also offer health and wellness programs tailored to specific community needs, such as preventive care, nutrition, mental health support, and exercise facilities. Resilience centers can serve as platforms for community organizing, civic engagement, and empowerment by providing spaces for community meetings, discussions, and workshops, enabling residents to voice their concerns, collaborate on solutions, and advocate for their community. Lastly, resilience centers can offer educational programs focused on environmental justice, climate change, and sustainable practices.</p> <p>The second action focuses on getting air filtration into all facilities where the most vulnerable subpopulations congregate, e.g., all schools, libraries, senior and youth centers, and shelters for the unhoused. There is also the potential to develop a residential air filter distribution using CARB's Community Air Protection Incentives program funding. Providing free air filtration devices to community residents increases accessibility and addresses financial barriers.</p>

Component	Description
	This strategy strives to provide all people in the CERP Community access to air filtration where they live, work, play, and gather.
List of Actions (# and name)	H 4.1: Advocate for funding for Resilience Centers H 4.2: Ensure resources for high-efficiency air filtration unit distribution and installation programs and support for partnerships to benefit vulnerable populations and places
Strategy Metric(s)	Was the "action" implemented or completed? (yes/no?) Was funding increased or obtained, and is the new funding source permanent? (yes/no?) A measure of impact: How many more people/places/units were served/implemented/installed?

Strategy 5. Pollution & Public Health Education, Outreach, Accountability, and Health Data Tracking

This strategy aims to give community members accessible information so they can understand local pollution concerns, pollution reduction measures, and health improvement goals, as well as the air pollution reduction initiatives that are currently planned or in development. The actions entail the development of a user-friendly dashboard, health workers disseminating air pollution information, and tracking and using health metrics related to air pollution exposures.

Component	Description
Strategy #	Health (H) 5
Strategy name	Education, Outreach, Accountability, & Health Data Tracking
Key Issue (KI) Addressed	KI 3: Improving Data and Public Health Goals & Reporting
Objective (intended outcome of the strategy)	Increase community members' access to relevant and accessible information so they can understand local air pollution problems, pollution reduction opportunities, health improvement goals, and the air pollution improvement initiatives currently planned or in development.

Component	Description
<p>Narrative on how Strategy Meets Feasibility Criteria</p>	<p>Contra Costa Health Services plans to create a Public Health Dashboard. It is suggested that Air District provides existing/available and relevant information annually for this dashboard. These can be simplified versions of information and findings that are currently available in the PTCA Plan and/or information and findings from the annual PTCA Plan progress report with achievements and challenges. Informational updates can be based on AB 617 strategy implementation, as would program goals, initiatives, community events, etc. Feasibility will need to consider the additional staff time and costs to CCHS of setting up this website.</p>
<p>Narrative on How Strategy Meets Vision and Principles Criteria</p>	<p>This strategy helps increase public education and knowledge about local air pollution issues. Increasing the information available to residents will increase community participation and empowerment. By achieving this strategy's actions, we can increase community engagement in air pollution initiatives and facilitate inclusive data-driven decision-making processes to address air pollution and its associated health impacts in AB 617 Communities.</p>
<p>List of Actions (# and name)</p>	<p>H 5.1: Work with County Health Services to create a dashboard for health data and air pollution education materials. H 5.2: Work with health workers to deliver information on air pollution, health impacts, and mitigation opportunities. H 5.3: Implement the findings of the CARB-funded study to improve health metrics tracking in AB 617 Communities.</p>
<p>Strategy Metric(s)</p>	<p>Was the "action" implemented or completed? (yes/no?) Was funding increased or obtained, and if relevant, is the new funding source permanent? A measure of impact: How many more people/places/units were served/implemented/installed?</p>

Strategy 6. More Complete Health Risk Data and HRAs, Including Pollutant Interactions

We need a rigorous review of how we measure the health risks associated with the cumulative impacts of air pollution. We define cumulative impacts here as the combined and incremental effects of exposure to multiple pollutants.* Most chronic health research has focused on the impact of single pollutants. One area of particular concern is the possibility that certain pollutants, when combined, are worse for public health than the sum of the impacts of individual pollutants. In other words, combinations of pollutants may cause health risk factors greater than we currently understand. We define health risk factors here as pollutant exposures that increase the likelihood of a person developing a disease or health condition.

The emerging picture painted by the most recent research is that fine particulate matter (PM_{2.5}) is an even more serious problem than was previously known. Making it imperative that more research be done both on PM_{2.5} alone and on the impact of PM_{2.5} in combination with other

toxic pollutants commonly found in many industrial and agricultural communities. PM_{2.5} is a complex mixture of many compounds, including heavy metals and polycyclic organic hydrocarbons. More research may be needed on the health impacts of combinations of pollutants, including PM_{2.5}, NO_x, SO_x, Nickel, Manganese, Benzene, Sulfuric Acid, DPM, Formaldehyde, Acrolein, Arsenic, etc. Research should focus on pollution's correlation to a wide range of chronic health problems, including but not limited to asthma, diabetes, insulin effectiveness, obesity, cardiovascular problems, low birth weights, cognitive development, mental health, Alzheimer's, Parkinson's, and behavioral problems in children. Regarding easier-to-use tools for project HRAs that focus on the top pollutants, CARB is asked to design a simple spreadsheet screening tool that would quickly and roughly calculate the impact of a project on the top pollutants that impact public health. This will clarify if a project will have significant pollution impacts before the full EIR comes out, which often takes two or more years. It will also allow planning staff and decision-makers to proactively identify appropriate mitigation measures and project conditions.

** This strategy does not consider other pollution or contaminant exposure pathways like water contact and skin absorption. This is important when thinking about the Chronic Hazard Index. A contribution of +0.1 from air pollution is certainly "significant" (i.e., pushes above the threshold deemed "safe") when the "body burden" / contributions from other pathways are already above 0.9.*

Component	Description
Strategy	Health (H) 6
Strategy name	More complete health risk data and HRAs, including pollutant interactions
Key Issue (KI) Addressed	KI 3: Improving Data and Public Health Goals & Reporting
Objective (intended outcome of the strategy)	The strategy is focused on enhancing our understanding of the health risks from Criteria Air Pollutants (CAPs), Toxic Air Contaminants (TACs), and air pollutant interactions. We also aim to provide tools that will allow planners and project stakeholders to work together more easily with a simpler but more focused picture of the health-damaging pollution associated with a project.
Narrative on how Strategy meets Feasibility Criteria	The strategy is focused on enhancing our understanding of air pollutant interactions, the health risks from CAPs and TACs, and providing tools that will allow all planners and project stakeholders to work together with a simpler but accurate picture of health-damaging pollution. The timelines to complete and apply this research are not clearly known; therefore, the timeline for implementation and impact are best guesses and completely uncertain. Further investigation and background assessments are needed to find relevant research already complete, what research is currently being done, what the research limitations are, and how the research is/can be used to drive policy toward a helpful outcome(s).
Narrative on How Strategy Meets Vision and Principles Criteria	These actions seek to address the PTCA area's needs by improving our understanding of pollution-driven health risks to inform project decisions and emission reduction priorities.

Component	Description
	The challenge for this strategy will be to include and engage community stakeholders meaningfully, especially if residents need to be engaged to generate political support for more research funding. These topics are also complex for the layperson, and the work will need to be done primarily by professionals. Progress on the strategy’s metrics must be communicated understandably to the community constituents.
List of Actions (# and name)	<p>H 6.1: Advocate for expanded basic research on the health impacts of PM_{2.5} exposure and add basic research on NO_x, SO_x, and the most damaging TACs</p> <p>H 6.2: Develop a methodology for integrating health risks from CAPs and TACs</p> <p>H 6.3: Improve HRA completeness, quality, and ease of use in permitting decisions</p>
Strategy Metric (s)	<p>Was the “action” implemented or completed? (yes/no?)</p> <p>Was funding increased or obtained, and if relevant, is the new funding source permanent?</p> <p>A measure of impact: How many more people/places/units were served/implemented/installed?</p> <p>Were all the actions adequately funded?</p>

Vehicles and Trucks, Streets and Freeways, Logistics and Warehouses (“Mobile”)

Introduction

Limiting exposure from Vehicles and Trucks, Streets and Freeways, Logistics and Warehouses (hereafter referenced as Mobile) is of critical community concern because mobile sources such as truck and non-truck emissions produce a significant amount of air quality pollution in the PTCA community. Much of the PTCA area is built on car-oriented streets and more work can be done to promote safety through traffic calming and encouraging residents to use alternative forms of transportation, such as micro-mobility hubs, public transit, and cycling. As warehouses and logistics centers continue to operate in the PTCA area, traffic is prone to overflow into residential areas, exposing residents to fossil-fueled powered vehicle exhaust. Development and implementation of a truck management plan (TMP) can help reduce truck emissions and calm traffic.

Key Issues

Key Issue 1: Goods Movement

High exposure to pollution from freight trucks is a concern because goods movement is a major contributor to local emissions impacting the PTCA area. Modeled emissions estimate that truck use through and within the community contributes 37% of total average residential cancer risk and 41% of toxic DPM exposure attributable to local sources. This is a problem, not only because freeways and truck routes run through disproportionately burdened communities, but also because truck magnet sources, such as logistics centers and warehouses, are disproportionately placed in these communities.

Key Issue 2: Truck and Non-Truck Vehicle Emissions

Emissions from driving fossil-fuel powered vehicles are a concern because fuel combustion produces tailpipe pollution that negatively impacts both air quality and health. Brake and tire wear further contribute to adverse impacts. Trucks that are powered by diesel engines emit harmful pollution, including PM_{2.5} and toxic DPM. Modeling estimates show that within the PTCA area trucks are responsible for 6% of the PM_{2.5} exposure and 41% of the DPM exposure attributable to local sources. In addition, modeling estimates show that within the PTCA area non-truck vehicles contribute 7% of the PM_{2.5} exposure attributable to local sources. This exposure puts air quality and the health and safety of residents, workers, and others at risk in the PTCA area.

Key Issue 3: Streets and Freeways

Vehicle traffic on freeways and car-oriented streets are a concern because driving a) increases PM exposure from re-suspended road dust, b) emits tailpipe pollution, and c) increases collision risks. In the PTCA area, modeling estimates show that road dust accounts for 30% of residential PM_{2.5} exposure attributable to local sources. This exposure puts air quality and the health and safety of residents, workers, and others at risk in the PTCA area.

Strategies

Strategy 1. Truck-Attracting Businesses

This strategy will work to establish consistent local policies and ordinances for new truck-attracting businesses to require electrification in advance of state requirements.

Component	Description
Strategy #	Mobile 1
Strategy name	Truck-Attracting Businesses
Key Issue (KI) Addressed	KI 1: Goods Movement
Objective (intended outcome of the strategy)	To work with local jurisdictions to establish consistent policies and ordinances in advance of state regulatory requirements for new truck-attracting businesses to install electric infrastructure to accommodate the increased use of ZEVs. Infrastructure can include electrical conduits at docks and delivery/heavy-duty truck parking spaces. Another intended outcome would be to require truck-attracting businesses to install and store sufficient solar panels to offset the electric energy needed to support new ZEV fleets.
Narrative on how Strategy meets Feasibility Criteria	Local jurisdictions have the authority to adopt policies and ordinances governing development within their boundaries. Implementation of this strategy is primarily legislative; therefore, funding is needed to advocate with respect to the benefits of adopting EV electrical infrastructure requirements, much like what is found in the Contra Costa Electric Vehicle (EV) Readiness Blueprint . The physical construction of EV electrical infrastructure will be borne by developers. As more EV fleet requirements are passed and implemented by local, state, and federal governments, businesses will need infrastructure to support the rising use of EV vehicles.

Component	Description
	<p>Further, PG&E has prepared the 2022 Integrated Resources Plan (IRP) that outlines how the utility will shape its future energy portfolio to meet California’s clean energy goals in a reliable and cost-effective manner.⁴⁶ While the electricity use associated with electric vehicles is expected to increase, PG&E predicts that its overall sales in electricity would increase only slightly (up to eight percent). The expected increases in energy efficiency and solar photovoltaic projects are expected to offset much of the growth in electric vehicles, as well as economic and population driven growth.</p> <p>The potential increase in electric vehicles in the PTCA area is within the range that PG&E forecasts in the IRP for 2030 within its service area. Overall emissions associated with providing electricity from power plants are expected to decline or remain relatively consistent. Also, the state Renewables Portfolio Standard (RPS) requires that 50% of electricity retail sales be served by renewable resources by 2026, 60% by 2030, and 100% by 2045. Therefore, strategy implementation is not expected to result in an increase in air emissions associated with electricity over those already accounted for in the IRP.</p>
<p>Narrative on how Strategy meets Vision and Principles Criteria</p>	<p>Supporting local jurisdictions’ adoption of ZEV electrical infrastructure requirements will support the transition to ZEVs, which will reduce related traffic emissions within the PTCA area. For example, the Richmond Parkway (Parkway) is a regionally-significant major transportation corridor, serving both local and national goods movement and commuters and functioning as part of the San Francisco Bay Trail. The Parkway travels through much of the PTCA area connecting I-80 and I-580, both of which are designated by the FHWA as Primary Highway Freight System routes. Many freight facilities are located on or near the Parkway, including a seaport, rail lines, and rail yards.</p> <p>Traffic congestion, including traffic backups on westbound I-580 in the A.M. have also impacted the Parkway. Planned residential and industrial developments along the corridor may worsen traffic conditions. The local community suffers impacts from the Parkway without much corresponding benefit. During the development of the recently completed MTC-funded Richmond-Area Community-based Transportation Plan (CBTP), residents in the designated disadvantaged neighborhoods adjoining the Parkway cited cut-through traffic (both of trucks and other vehicles) as a major concern. Adoption of ZEV electrification infrastructure will support the transition to cleaner fleets which will reduce vehicle-related emissions on the Parkway and other travel corridors within the PTCA area.</p> <p>CARB has adopted regulations for on-road vehicles that will further reduce emissions; infrastructure will be needed to support the growth of new ZEVs over the coming years. California’s Advanced Clean Cars II Regulations require all new passenger vehicles sold in California to be</p>

⁴⁶ PG&E Integrated Resources Plan (IRP) - 2022. https://www.pge.com/en_US/for-our-business-partners/energy-supply/integrated-resource-plan/integrated-resource-plan.page

Component	Description
	<p>ZEVs by 2035. ZEVs include battery electric vehicles, plug-in hybrid vehicles (PHEV), and hydrogen fuel cell vehicles.</p> <p>The Advanced Clean Fleet Regulations also require zero-emission truck fleets in California by 2045. Milestones are staggered, based on truck types. For drayage fleets, starting in 2024, only zero-emission trucks may be added to service; and by 2035, all drayage trucks must be zero-emission trucks. Other trucks, such as last-mile delivery vehicles, have more aggressive implementation schedules. The affected vehicles account for 14% of PTCA area emissions with respect to the DPM emissions in the 2019 PTCA Plan inventory.</p>
<p>List of Actions (# and Name)</p>	<p>Mobile 1.1: Model and Map Freight Activity. Model and map daily freight trip activity for commercial and industrialized businesses in the PTCA area.</p> <p>Mobile 1.2: Model Policy/Ordinance for Low to Zero Emission Operations. Develop and disseminate a model policy/ordinance for reviewing and approving truck-attracting businesses, incorporating current best practices to achieve low to zero emission operations.</p> <p>Mobile 1.3: Truck-Attracting Businesses. In coordination with CARB, local, and regional agencies, review policies and assess opportunities to require and/or encourage truck-attracting businesses to incorporate zero emission operations. This would include electrifying loading docks, trucks, and TRUs and incorporating EV capable/ready infrastructure for all vehicle classes visiting the facility.</p> <p>Mobile 1.4: Magnet Source Rule. Air District will study feasibility and approach for a Bay Area Indirect Source (Magnet Source) Rule</p>

Strategy 2. Prioritize Air Quality Benefits of Traffic Calming and Other Safety Improvements on Local Streets and Freeways

This strategy will explore using existing public health, air quality, and safety data to identify priority traffic and safety improvements with air pollution co-benefits.

Component	Description
<p>Strategy #</p>	<p>Mobile 2</p>
<p>Strategy name</p>	<p>Prioritize Air Quality Benefits of Traffic Calming and Other Safety Improvements on Local Streets and Freeways</p>
<p>Key Issue (KI) Addressed</p>	<p>KI 1: Goods Movement KI 3: Streets and Freeways</p>
<p>Objective (intended outcome of the strategy)</p>	<p>Use existing public health, air quality, and safety data to identify and prioritize transportation infrastructure improvements that will provide safety benefits and reduce emissions and exposure. Once the priorities are identified, the strategy seeks to find funding and implement the needed infrastructure improvements using the best construction management practices and the cleanest technology and equipment available.</p>

Component	Description
Narrative on how Strategy meets Feasibility Criteria	The strategy is a tool that will take existing and available data to inform recommendations for safety improvements and air quality projects. Though traffic calming alone does not address the issue of over-sized trucks sharing roadways with bikes and pedestrians, some preventative measures can be used to dissuade trucks from endangering cyclists and pedestrians, such as public education campaigns. The strategy draws on existing funding sources to implement safety improvements that reduce emissions and exposure. As the strategy seeks to bring existing sources of funding into communities, in general, we anticipate support for the strategy. The strategy will require a multi-agency approach to collecting and analyzing the data and then developing criteria. Funding applications also benefit from a multi-agency approach. We recommend that stakeholders be engaged and consulted in each of the strategy's actions.
Narrative on how Strategy meets Vision and Principles Criteria	The strategy relies on available data and ground-truthing from community stakeholders to reduce emissions and exposure in communities.
List of Actions (# and Name)	Mobile 2.1: Criteria for Safety and Air Quality Projects. Develop and propose criteria for safety improvements and air quality projects. Mobile 2.2: Identify Areas at Intersection of Safety and Air Quality. Use data to identify areas with high air pollution exposure, unmaintained transportation infrastructure, and areas in need of increased road safety to prioritize traffic calming projects. This could include bike lanes and road diets. Mobile 2.3: Funding. Seek public funding sources (e.g., state and federal grants) for road infrastructure improvements. Mobile 2.4: Best Management Practices for Construction. Encourage transportation construction projects employ best management practices that reduce emissions, such as use of low to zero emission equipment and dust control measures.

Strategy 3. Multi-Jurisdictional Truck Management Plan

This strategy will assess feasibility and need for a Multi-Jurisdictional Truck Management Plan (TMP), and create a robust, community-informed TMP.

Component	Description
Strategy #	Mobile 3
Strategy name	Multi-Jurisdictional Truck Management Plan (TMP)
Key Issue (KI) Addressed	KI 1: Goods Movement KI 2: Truck and Non-Truck Vehicles KI 3: Streets and Freeways
Objective (intended outcome of the strategy)	Reduce truck-related emissions exposure and congestion from neighborhood streets through the creation of a TMP that reduces traffic

Component	Description
	<p>flow, as well as exposure to humans, through the strategic timing and regulation of regional truck traffic.</p>
<p>Narrative on how Strategy meets Feasibility Criteria</p>	<p>A multi-jurisdictional truck management plan (TMP) will require substantial resources and buy-in from several jurisdictions in the PTCA area. As of 2023, the cities of Richmond and San Pablo do not have TMPs of their own. Already over-stretched, there will be funding and capacity issues to support development of a TMP. Discussions have pointed to WCCTAC as a possible TMP convener, with the caveat that feasibility studies and truck traffic analyses should precede any efforts to form a working group.</p> <p>Contra Costa County has land-use authority, so could play a pivotal role in supporting these efforts. We estimate a 2-year planning phase and 5-year implementation plan. See the West Oakland Truck Management Plan as an example of a TMP.</p>
<p>Narrative on how Strategy meets Vision and Principles Criteria</p>	<p>A multi-jurisdictional TMP to reduce neighborhood exposures to truck emissions and to limit residential truck traffic adheres to the Plan vision. Air District maps document the highest concentrations of mobile and stationary sources impacts, overlaid with socioeconomic data, in the PTCA area. Air District staff understand that to achieve equitable outcomes from this strategy jurisdictions require substantial resources for early studies and buy-in. Overall, if fewer trucks are going through neighborhoods, truck emissions will be reduced.</p> <p>An existing-conditions report documenting baseline truck counts and parking demand followed by future traffic and parking projections based on planned and approved magnet facilities. The TMP needs to include an analysis of equitable outcomes, much like the 2021 LA County Goods Movement Strategic plan and the Portland 2040 Freight Plan.</p>
<p><u>List of Actions (# and name)</u></p>	<p>Mobile 3.1: Initial Truck Management Plan Assessment. Prepare an initial feasibility assessment and needs analysis for the TMP. This will include input from communities impacted by truck parking, truck movement and safety, truck signs and communication, current truck routes and truck route enforcement.</p> <p>Mobile 3.2: Create a TMP. After completion of the initial assessment, create a robust, community-informed TMP, alongside WCCTAC, that considers establishing new truck-prohibited streets and new truck routes across jurisdictions; assesses an off-hours deliveries program to reduce overall truck congestion; designates urban freight parking and time zones, and establishes clean last-mile delivery options; enhances citywide truck signage for wayfinding; and educates business owners and residents about the air quality and health benefits of routing and parking laws.</p>

Strategy 4. Equitable Street Sweeping

This strategy will study, implement and evaluate an Enhanced Street Sweeping Program to decrease community members' exposure to the road dust.

Component	Description
Strategy #	Mobile 4
Strategy name	Equitable Street Sweeping
Key Issue (KI) Addressed	KI 1: Goods Movement KI 2: Truck and Non-Truck Vehicles KI 3: Streets and Freeways
Objective (intended outcome of the strategy)	The strategy seeks to provide PTCA communities with the amount of street sweeping needed to decrease community members' exposure to road dust caused by traffic and goods movement. As stated in KI 1, 2, and 3, freeways, street truck routes, and truck magnet sources are features of disproportionately burdened communities (KI #1); brake and tire wear contribute to adverse health impacts (KI #2); and road dust accounts for 30% of residential PM2.5 exposure attributable to local sources (KI #3). For these reasons, Mobile Strategy 4 seeks to ensure that disproportionately burdened communities within the PTCA area receive a fair share of street sweeping services, commensurate with the amount of goods movement, traffic, and dust pollution these communities face. The Plan technical assessment provides further information about estimated emissions and exposure reduction that can be achieved through Mobile Strategy 4. For context, note that the WOCAP includes a strategy that calls on the City of Oakland to implement an equitable street sweeping program in West Oakland. The WOCAP technical assessment estimates a 10% reduction in road dust can be achieved through enhanced street sweeping.
Narrative on how Strategy meets Feasibility Criteria	We believe that Mobile Strategy 4 is potentially feasible. Mobile Strategy 4 does not require new technology and does not require capital investment. However, implementation will require political and community support and funding commitments. While a similar strategy is included in the WOCAP, this Plan covers multiple local jurisdictions (the cities of San Pablo, Richmond, and Contra Costa County) and therefore additional coordination. There is also the potential for negative impacts on communities, such as if more frequent street sweeping results in additional parking ticket fines for community members due to increased conflicts between street parking and the street sweeping schedule. A community engagement outreach program will be needed to ensure that an equitable street sweeping program is desired by community members and possible adverse outcomes are mitigated.
Narrative on how Strategy meets Vision and Principles Criteria	Analysis and engagement are needed to ensure the strategy aligns with the priorities of the Plan communities, and the ability of local jurisdictions to fund and implement new programs to increase street sweeping in impacted communities.

Component	Description
	PM _{2.5} and road dust has been identified as some of the largest forms of mobile pollution in the PTCA area and addressing these pollutants is consistent with the Plan's Vision and Principles. The study described in Action 4.1 will identify the neighborhoods that are most in need of more frequent street sweeping services.
List of Actions (# and Name)	<p>Mobile 4.1: Street Sweeping Study. Work with local jurisdictions and Air District staff on a study to identify which PTCA areas would benefit most from street sweeping initiatives, while ensuring equitable outcomes for communities that have historically suffered from divestment.</p> <p>Mobile 4.2: Implement Enhanced Street Sweeping Program. With support from the CSC and Air District, local governments implement enhanced street sweeping programs in Plan neighborhoods that will benefit most.</p> <p>Mobile 4.3: Street Sweeping Program Feedback. After implementing equitable street sweeping, convene a working group to evaluate successes, challenges, and opportunities.</p>

Strategy 5. Supporting Transition to Clean Fleets

The strategy will support residents, businesses, and governments in a transition to ZEV clean fleets.

Component	Description
Strategy #	Mobile 5
Strategy name	Support Transitions to Clean Fleets
Key Issue (KI) Addressed	<p>KI 1: Goods Movement</p> <p>KI 2: Truck and Non-Truck Vehicle Emissions</p> <p>KI 3: Streets and Freeways</p>
Objective (intended outcome of the strategy)	The strategy seeks to support residents, businesses, and governments in a transition to ZEV clean fleets through better coordination with CARB on enforcement, outreach, education, and incentive distribution. The strategy outcome is that residents, businesses, and governments are better served by CARB initiatives, acquire cleaner fleets especially for goods movement, and deploy ZEV light- and heavy-duty vehicles in advance of state requirements.
Narrative on how Strategy meets Feasibility Criteria	The strategy draws on existing enforcement and funding sources to bring ZEVs to the PTCA area. We anticipate support for the strategy. The strategy will require a multi-agency approach to developing successful coordination between agencies conducting enforcement, and outreach and education about available incentives. We recommend that stakeholders be engaged and consulted in each of the strategy's actions.
Narrative on how Strategy meets Vision and Principles Criteria	The strategy relies on available programs to benefit stakeholders in the community by making incentive dollars and ZEVs more available to community members, businesses, and local governments. The strategy seeks to remove barriers to receiving a less-than-equitable share of enforcement resources and incentive funding.

Component	Description
List of Actions (# and name)	<p>Mobile 5.1: Clean Fleet Enforcement. Investigate how municipal governments can coordinate with CARB on clean fleet enforcement.</p> <p>Mobile 5.2: Heavy-Duty Vehicle Support. Support heavy-duty vehicle transition to cleaner fleets through incentives, education, and outreach. Includes school buses.</p> <p>Mobile 5.3: Light-Duty Vehicle Support. Support light-duty vehicle transition to cleaner fleets through incentives, education, and outreach.</p>

Strategy 6. Public Transit, Bike, and Pedestrian Infrastructure

This strategy will improve access to safe, affordable, and reliable alternatives to driving, including bus, rail, microtransit, and active transportation options.

Component	Description
Strategy #	Mobile 6
Strategy name	Public Transit and Active Transportation
Key Issue (KI) Addressed	KI 2: Truck and Non-Truck Vehicle Emissions
Objective (intended outcome of the strategy)	Beginning in 2030, all community members who live or work in the Plan area have access to safe, affordable, and reliable alternatives to driving that allow community members to reach all their main destinations. These modes of travel include bus, rail, microtransit, and active transportation options that serve people of all abilities.
Narrative on how Strategy meets Feasibility Criteria	As California continues to codify its efforts to meet transportation climate goals, it is expected that more funding will become available. Through the implementation of the Climate Action Plan for Transportation Investment (CAPTI), it is possible that more funding will shift from road and highway infrastructure toward alternatives to driving. Identifying the correct authority or agency within the PTCA area may prove to be a challenge, so it is imperative to work with individual decision makers who can champion this strategy. Fortunately, staff and elected officials at the city, county, regional, and state levels have similar ambitions and have taken steps to bolster active and public transportation funding. Additionally, it is encouraging to see state funding flow directly into the Plan through the recent Transformative Climate Communities ⁴⁷ grant awarded to the City of Richmond, which will provide community organizations with resources to build upon their work toward this goal.
Narrative on how Strategy meets Vision and Principles Criteria	Transportation is the largest source of GHGs and harmful pollutants that lead to poor health outcomes, with personal vehicle travel making up a significant part of these emissions. Due to decades of disinvestment in public and active transportation throughout the PTCA area, many residents do not have viable alternatives to owning and driving a

⁴⁷ Transformative Climate Communities Grant: <https://www.grants.ca.gov/grants/transformative-climate-communities-planning-grant/>

Component	Description
	<p>personal car. Expanding access to shared modes of travel decreases emissions from vehicles and improves public health.</p> <p>Many decisions about transportation infrastructure were motivated by racial biases and discrimination, such as the construction of highways and roads that disenfranchised neighborhoods and impacted communities at the household and community levels. This strategy aims to undo many of those racially motivated systemic changes and benefit the people who have been historically burdened. Many of these actions will succeed through having robust community input, where their transportation and mobility needs will be placed at the center.</p>
<p>List of Actions (# and Name)</p>	<p>Mobile 6.1: Zero Emission Bus Fleets by 2040. Complete transition to all-electric hybrid and/or hydrogen bus fleet on all routes within the PTCA area by 2040.</p> <p>Mobile 6.2: Bike and Scooter Share Stations. Advocate for affordable bike and scooter-share stations in the most impacted communities within the PTCA area.</p> <p>Mobile 6.3: Expanding Micro-Transit. Expand micro-transit and advocate for a permanent program building on the existing Richmond Moves initiative.</p> <p>Mobile 6.4: Funding Transit Operations. Advocate for additional public funding towards transit operations.</p>

Cross-Cutting Issues

Compliance & Enforcement

Introduction

Compliance and Enforcement is a cross-cutting issue because across all source types in the PTCA area - both fuel refining and non-fuel refining - the community has concerns about businesses and industries with compliance issues. This is especially critical with respect to compliance issues that can affect the health, safety, and quality of life for those who live, work, and play in the PTCA area. Concerns and violations need to be addressed through the Air District's complaint system and through inspections and investigations that are responsive to the lived experience of the community and their concerns.

Compliance & Enforcement Strategy

Component	Description
<p>Strategy #</p>	<p>Compliance & Enforcement (C&E) 1</p>
<p>Strategy name</p>	<p>Compliance and Enforcement</p>
<p>Key Issue (KI) Addressed</p>	<p>FR KI 1: Fuel refining sector in Richmond is the Largest Source of Emissions in PTCA Area</p> <p>FR KI 2: Lack of accountability with Air District Regulations</p> <p>C&I KI 3: Cumulative Impacts from Local Facilities: Diverse Sources</p>

Component	Description
	C&I KI 4: Cumulative Impacts from Local Facilities: Large Industrial Facilities
Objective (intended outcome of the strategy)	<p>Prioritize fielding complaints and conducting inspections and investigations to address facilities of community concern, such as those with issues that impact health, safety, and quality of life.</p> <p>Develop tailored strategies to address facilities that are an ongoing concern for the community.</p> <p>Meet with the community regularly through implementation to track new facilities of concern that emerge to protect the health, safety, and quality of life of people who live in close proximity to polluting sources.</p>
Narrative on how Strategy meets Feasibility Criteria	<p>This strategy is feasible in that it intends to build on existing practices to ensure alignment between Compliance & Enforcement staff and the community's concerns, as well as to develop communication and transparency as the Air District proactively works to resolve ongoing issues.</p> <p>Outreach efforts to promote the complaint system are feasible. Some elements to keep in mind however are resources and successful education efforts around how best to use the system. Incomplete complaints that don't list specifics, addresses, or provide contact information can make it difficult to respond in a timely manner. Therefore, it is also critical to make sure complainants have access to effective resources so they can file complete, detailed complaints. It will also be important to set appropriate expectations around how the complaint process works as a tool. This is due to Air District staff not being first responders. Furthermore, it is important to set expectations around the depth of information that can be shared after each incident since they evolve in real time, and it is important to gather all information necessary before releasing findings and determining appropriate action.</p> <p>With respect to facilities of community concern, this is feasible because the Air District Compliance and Enforcement team already prioritizes certain facilities or facility types when there are ongoing issues of non-compliance, or when there is a greater risk to the public from non-compliance.</p> <p>As mentioned before, the biggest impediment to successful implementation of this strategy will be limited staff capacity. There are six full-time C&E field staff in the PTCA area, and three are solely dedicated to the Chevron refinery. Increased attention to facilities of concern to the community could reduce the availability of staff to respond to complaints and conduct required inspections for the permitted facilities in West Contra Costa County. It is important to note that at times assignments may need to be changed and adjusted due to C&E staffing needs. Aligning with the Resource PTCA Plan Implementation Strategy is thus an important component of feasibility for this strategy.</p>
Narrative on how Strategy meets	The complaint system and targeted compliance and enforcement activities are especially important in historically overburdened

Component	Description
Vision and Principles Criteria	<p>communities that often are located near sources of pollution from businesses and industry. These communities may be the closest to air quality problems, accidents, and/or major incidents, meaning their health, safety, and quality of life can be under threat from proximity to air quality issues.</p> <p>This strategy will help with greater transparency and partnership with communities in the PTCA area by promoting the complaint system, prioritizing addressing facilities and operations identified by community as concerns, and by reporting results to the community as progress is made during response implementation. It meets Vision and Principles criteria in that it relies on the important voice of the community and the CSC. Actions that center around meaningful involvement of community leaders from the CSC and community members in the PTCA highlight the valuable lived experience of those who live in neighborhoods overburdened by pollution.</p>
List of Actions (# and name)	<p>C&E 1.1: Develop an outreach campaign to promote the Air District Air Quality Complaint Program and pilot an enforcement tip hotline for industry workers.</p> <p>C&E 1.2: Conduct targeted investigations of facilities of community concern (i.e., facilities identified and prioritized using community concern and AB617 data).</p> <p>C&E 1.3: Update CSC regularly with respect to compliance status of facilities identified as a result of community concerns or those with issues that impact health, safety, and quality of life.</p>

Land Use

Introduction

This strategy seeks changes in land use as protective measures to separate communities from pollution sources and locations of exposure. Land use strategies that protect people from air pollution are crucial to reducing health impacts and are especially important for sensitive receptors and residential populations. Zoning regulations can establish buffers to protect people from freeway pollution, require best practices for building and design, such as indoor filtration, and prevent the siting of *new* polluting businesses near sensitive uses. Additionally, land use tools such as amortization can phase out the most egregious *existing* polluting businesses near sensitive uses. By considering air quality impacts in land use decisions and employing techniques to redress environmental injustices and prevent further harm, as described in the actions below, policymakers can help reduce exposure to air pollution and improve public health.

Land Use Strategy

Component	Description
Strategy #	Land Use 1
Strategy name	Land Use
Key Issue (KI) Addressed	C&I KI 1: Fine Particulate Matter C&I KI 2: Fugitive Dust

Component	Description
	<p>C&I KI 3: Diverse Sources C&I KI 4: Large Industrial Facilities C&I KI 5: Commercial and Smaller Industrial Facilities M&R KI 3: Marine and Rail Hubs H KI 2: Reducing Community Exposure to Air Pollution Mobile KI 1: Goods Movement Mobile KI 3: Streets and Freeways</p>
Objective (intended outcome of the strategy)	<p>The goal of this strategy is to focus on land use regulations, conditions of approval, and protective zones to reduce the cumulative impact and concentration of polluting sources within the PTCA area. Recommended strategies will separate, buffer, and otherwise protect sensitive receptors and residential areas from existing and potential future pollution sources and exposure, with an intended outcome of improving community health for all, including disproportionately impacted communities.</p>
Narrative on how Strategy meets Feasibility Criteria	<p>This strategy will benefit from strong champions both within and outside of local governments because it may experience opposition from industry representatives and be difficult politically to implement. Though some aspects of this strategy would likely be implemented over a longer timeframe, others can be implemented as part of local municipal ordinance updates in a shorter timeframe. Overall, the regulatory updates could help to reverse discriminatory zoning and housing policy impacts that are still present today and create lasting health improvements for the most pollution-burdened communities.</p>
Narrative on how Strategy meets Vision and Principles Criteria	<p>Land use regulations such as zoning and other policies that limit pollution exposure can be effective instruments for promoting racial and social equity because they shape the built environment. Land use regulations can also ease the PTCA community's disproportionate environmental burden, preventing the concentration of polluting industries near these communities and increasing restrictions on these industries. This strategy aligns with the CSC's Vision and Principles in that, when implemented, it will help reverse the air pollution impacts from historic and systemic discriminatory land use decisions, which resulted in the co-location of BIPOC and low-income communities near polluting industries.</p>
List of Actions (# and name)	<p>LU 1.1: Support Envision CCC 2040, and Other General Plan and Zoning Updates LU 1.2: Community-Informed Amortization LU 1.3: Buffer Zones and/or Overlay Zones LU 1.4: Site Development Standards and Conditions of Approval LU 1.5: Zoning Regulations and Business Permitting</p>
Strategy Metric(s)	<p>Were the policies, plans, ordinances, or research mentioned in the actions below implemented? Which ones and by which jurisdictions? To what effect? Describe the impact (did it help community members)?</p>

Resource PTCA Plan Implementation

Introduction

Properly resourcing the PTCA Plan is a cross-cutting strategy due to multiple factors. Many of the strategies that will reduce pollution and protect public health are constrained by a limitation in existing Air District staff resources. Current resource limitations and staffing needs must be addressed to guarantee the PTCA Plan ambitions can be fully achieved.

Resource PTCA Plan Implementation Strategy

Component	Description
Strategy #	R1
Strategy name	Properly resource the PTCA Plan to ensure community-identified priority strategies and actions are fully implemented.
Key Issue (KI) Addressed	-
Objective (intended outcome of the strategy)	<p>This strategy is focused on ensuring the Air District is effectively resourced to deliver on commitments identified in the PTCA Plan strategies and actions, as prioritized by the CSC and the PTCA community. The CSC strongly recommends the Air District prioritize staff resources to focus on PTCA Plan strategy implementation and other high priority efforts within the PTCA that may emerge during implementation. Current resource limitations and staffing needs must be addressed to guarantee the PTCA Plan ambitions can be fully achieved. Additionally, throughout implementation, resources will need to be re-evaluated to ensure appropriate staff and funding levels are dedicated to PTCA Plan implementation as well as address other emerging needs. Resources will need to be flexible to be responsive to new information, updated community perspectives, and emerging opportunities. This strategy also considers the role of the CSC in helping inform the Air District annual budget processes, as well as any mid-year budget adjustments, with respect to the resources needed to ensure PTCA Plan commitments are met. It also considers CSC participation in the development and implementation of the Air District's Strategic Plan, which is an opportunity to share the CSC and PTCA community priorities and views with the Air District Board of Directors.</p> <p>For additional information about implementation including a discussion of early priorities and processes to develop the annual implementation plan and report on progress, successes, and challenges, see PTCA Plan Chapter 9, Implementation and Reporting.</p>
Narrative on how Strategy meets Feasibility Criteria	This strategy is feasible, but success relies on political support from Air District leadership and the Board, as well as having CSC champions engage on a regular and ongoing basis in implementation, budget, and strategic planning efforts.
Narrative on how Strategy meets Vision and Principles Criteria	This strategy focuses on ensuring the Air District is effectively resourced to deliver on commitments identified in the PTCA Plan strategies and actions, as prioritized by the CSC and the PTCA community. As such, the intent of this strategy is for resource allocations to reflect the needs of the people who have been disproportionately harmed by environmental injustice and to

Component	Description
	center the priorities of stakeholders burdened by air pollution who would most benefit from action.
List of Actions (# and name)	R 1.1 Allocate Dedicated Staff Resources to CSC Early Priorities R 1.2: Co-develop and implement an annual Implementation Plan R 1.3: Engage with the Air District on Annual Budget Planning R 1.4: Engage with Air District on Strategic Planning

Urban Greening

Introduction

Implementation of the Urban Greening cross-cutting strategy will provide a myriad of ecosystem services in the PTCA area, including increasing green spaces throughout the PTCA area, providing vegetative buffers from polluting sources, mitigating urban heat island effects, and providing walkable trails throughout the community. Urban green space also offers health benefits by improving allergic respiratory conditions, cardiovascular conditions, and psychological well-being.⁴⁸ Though planting trees and vegetation alone are not enough to reduce emissions of all pollutants in the PTCA area, urban greening can provide buffers between pollution sources and people in the community. At a neighborhood level, work is already coinciding with this strategy, such as the Richmond Rising Grant recently awarded to the City of Richmond. The City of San Pablo, too, has projects such as Rumrill Boulevard Complete Streets Project and Sutter Ave Green Street Project that help improve multimodal safety and stormwater facilities, respectively. Combined with opportunities to educate and engage the community through the addition of green infrastructure, Urban Greening seeks to shift the heavy emphasis on grey infrastructure to green.

Urban Greening Strategy

Component	Description
Strategy #	Urban Greening (UG) 1
Strategy name	Urban Greening
Key Issue (KI) Addressed	Mobile KI 2: Goods Movement Mobile KI 3: Streets and Freeways
Objective (intended outcome of the strategy)	Increase tree planting within the Plan area in low-income census groups and around sensitive receptors.
Narrative on how Strategy meets Feasibility Criteria	This strategy meets the feasibility criteria because of renewed funding commitments to the City of Richmond. For a long time, limited long-term funding and local government staff capacity have been issues for implementing jurisdictions. The City of Richmond, for example, has no dedicated urban forestry staff and will often contract work out to Groundwork Richmond, a local community organization, to complete maintenance.

⁴⁸ Nguyen PY, Astell-Burt T, Rahimi-Ardabili H, Feng X. Green Space Quality and Health: A Systematic Review. *Int J Environ Res Public Health*. 2021 Oct 20;18(21):11028. doi: 10.3390/ijerph182111028. PMID: 34769549; PMCID: PMC8582763. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8582763/>

Component	Description
	<p>In 2023 the City of Richmond, along with a coalition of partners, received a Transformative Climate Communities (TCC) Grant from the California Strategic Growth Council, worth \$35 million, to implement several neighborhood-level urban greening projects in the Santa Fe, Coronado, and Iron Triangle neighborhoods over the next 5 years. The TCC Grant will align with the guidance outlined in the City of Richmond Urban Greening Master Plan (2017). Unfortunately, the TCC grant does not extend to the City of San Pablo and will only last for 5 years. Success of this initial investment fund may unlock other sources of state and federal funding such as CARB's Community Air Protection Incentives.</p> <p>Further, the City of Richmond has prepared a mapping file of street tree canopy throughout the city. Since the City of San Pablo does not have the capacity to do the same, it will have to prioritize a street tree canopy mapping process in order to understand where to focus plantings in the City of San Pablo (though San Pablo, in general, has a larger tree canopy than Richmond).</p> <p>Though political support is not entirely present, the hope is that this strategy continues to educate local government leaders and advocate for increased, permanent funding to implement green infrastructure throughout the PTCA area.</p>
<p>Narrative on how Strategy meets Vision and Principles Criteria</p>	<p>According to the AB 617 Richmond San Pablo Social Pinpoint data, urban heat island effects are a serious concern in the PTCA area. In addition, low-income communities of color are most susceptible to the impacts of climate change. We know that planting trees will not solve the PTCA area's emissions problems, but by prioritizing street tree plantings and vegetation in neighborhoods with limited tree canopies and high concentrations of PM_{2.5}, this strategy will help to decrease exposure to air pollution for future generations.</p> <p>Further, by incorporating workforce training already included in Groundwork Richmond's programming, a partner of the City of Richmond's urban forestry plan, this strategy equips people from the most burdened communities to learn marketable skills in a green economy, well in alignment with the City of Richmond's Green-Blue New Deal.</p> <p>In Richmond, lower income census tracts have fewer trees. A 2021 meta-analysis concluded that lower-income "[...]people show more beneficial effects than affluent people, particularly when concerning public green spaces/parks[...]"⁴⁹ Urban greenery is a tool to further health and social equity.</p> <p>In addition, as recipients of the \$35 million Transformative Climate Communities (TCC) Richmond Rising Grant, the City of Richmond is poised in the next 5 years to accomplish, with the help of the State, several urban greening projects, including tree plantings, trails, urban agriculture, fruit tree giveaways, and veggie RX pilot programs.</p>

⁴⁹ Rigolon A, Browning MHEM, McAnirlin O, Yoon HV. Green Space and Health Equity: A Systematic Review on the Potential of Green Space to Reduce Health Disparities. Int J Environ Res Public Health. 2021 Mar 4;18(5):2563. doi: 10.3390/ijerph18052563. PMID: 33806546; PMCID: PMC7967323. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7967323/>

Component	Description
	Urban greening provides many benefits for the community, including: improved air quality, access to green space through physical activity, mental health improvement, not to mention environmental benefits for the environment. In addition, workforce development opportunities can be created through urban greening strategies that can further train a green workforce and spur economic development for a labor force that is knowledgeable about environmental issues.
List of Actions (# and name)	UG 1.1: Plant Street Trees and Vegetation in Priority Neighborhoods UG 1.2: Education and Funding Opportunities UG 1.3: Require New Development to Include Vegetative Buffers UG 1.4: Green Workforce Development

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Chapter 8: CARB Statewide Strategies

Overview of California Air Resources Board's Statewide Actions

Community-scale air pollution exposure is caused by many factors, including the cumulative impacts of multiple pollution sources. Effective solutions require multiple strategies at both the statewide and local levels to deliver new emissions reductions directly within these communities. The California Air Resources Board (CARB) has adopted a number of comprehensive air quality and climate plans over the last several years that lay out new emissions reduction strategies. These plans include the recent State Strategy for the State Implementation Plan,⁵⁰ California's 2022 Climate Change Scoping Plan,⁵¹ the California Sustainable Freight Action Plan,⁵² the Short-Lived Climate Pollutants Reduction Strategy,⁵³ and the 2020 Mobile Source Strategy,⁵⁴ along with a suite of incentive programs. CARB is continuing to develop air quality and climate plans that will further reduce emissions. The Community Air Protection Blueprint⁵⁵ further identified additional actions to reduce the air pollution burden in heavily impacted communities throughout the State. Together, these plans provide a foundation for the new actions identified as part of this community emissions reduction program.

This chapter illustrates CARB's role in the community emissions reduction program by broadly describing the regulatory and incentive-based statewide actions CARB has taken to reduce emissions statewide. It also highlights specific actions that address areas of concern identified by the PTCA community. CARB's potential enforcement strategies are described in Chapter 6 of the PTCA Plan.

Incentive Programs

CARB operates incentive programs that reduce the costs of developing, purchasing, or operating cleaner technologies. The programs help ensure cleaner cars, trucks, equipment, and facilities are operating in our neighborhoods by driving the development of new, cleaner technologies and by accelerating their sale and adoption. Specifically, they accelerate the introduction of advanced technology vehicles and equipment, accelerate the turnover of older and higher-emitting vehicles and equipment, and increase access to clean vehicles and transportation in disadvantaged communities and lower-income households.

While CARB is responsible for program oversight, some programs are implemented in partnership with local air districts. Examples of CARB incentive programs include:

⁵⁰ California Air Resources Board, 2022 State Strategy for the State Implementation Plan, September 12, 2022, available at: <https://ww2.arb.ca.gov/resources/documents/2022-state-strategy-state-implementation-plan-2022-state-sip-strategy>

⁵¹ California Air Resources Board, California's 2022 Climate Change Scoping Plan, September 2022, available at: <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents>

⁵² California Department of Transportation, California Sustainable Freight Action Plan, July 2016, available at: <https://dot.ca.gov/programs/transportation-planning/freight-planning/california-sustainable-freight-action-plan>

⁵³ California Air Resources Board, Short-Lived Climate Pollutant Reduction Strategy, March 2017, available at: <https://ww2.arb.ca.gov/resources/documents/slcp-strategy-final>

⁵⁴ California Air Resources Board, 2020 Mobile Source Strategy, October 2021, available at: <https://ww2.arb.ca.gov/resources/documents/2020-mobile-source-strategy>

⁵⁵ California Air Resources Board, Final Community Air Protection Blueprint for Selecting Communities, Preparing Community Emissions Reduction Programs, Identifying Statewide Strategies, and Conducting Community Air Monitoring, October, 2018, available at: <https://ww2.arb.ca.gov/capp-blueprint>

- Carl Moyer Memorial Air Quality Standards Attainment Program⁵⁶
 - The Community Air Protection Incentives⁵⁷ are implemented by the air district through this program,
- Proposition 1B: Goods Movement Emission Reduction Program,⁵⁸
- Funding Agricultural Replacement Measures for Emission Reductions Program,⁵⁹ and
- Low Carbon Transportation Investments and Air Quality Improvement Program (which includes the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project).⁶⁰

Community Air Protection Incentives

Since 2017, the California Legislature has appropriated money annually from the Greenhouse Gas Reduction Fund (GGRF) for incentives to support AB 617. In advance of initial community selection in 2018, the Legislature directed that CAP incentives appropriated in Fiscal Year (FY) 2017-18 be focused on disadvantaged and low-income communities through the Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program) and the Proposition 1B Goods Movement Emission Reduction Program (Proposition 1B Program) to provide immediate air quality benefits in heavily impacted communities.

Between FYs 2017-18 and 2022-23, the Legislature appropriated \$1,162 million in CAP incentives (Table 1 in Appendix A).⁶¹ The Legislature initially appropriated incentives to generate immediate air quality benefits in communities most likely to participate in AB 617 – primarily disadvantaged communities – as the Program began to develop. Additionally, the Board set specific priority population investment targets for the funds: 70 percent in and benefiting disadvantaged communities and 80 percent in and benefiting disadvantaged or low-income communities. Through May of 2023, air districts have expended over \$465 million dollars with \$184 million in AB617 communities. The majority of the remaining \$281 million in CAP incentives expended (94%) have been in other disadvantaged and low-income communities across the State.⁶²

To expand on initial funding options in the CAP Guidelines, CARB developed a process for the air districts to fund new projects responsive to community priorities and to expand stationary source incentives. CARB staff worked with the air districts and California Air Pollution Control Officers Association (CAPCOA) through late 2019 and early 2020 to ensure the process maximized flexibility to support projects requested by community members while simultaneously meeting the need to assess emissions reductions and other benefits. Agency staff shared draft language

⁵⁶ For more information on the Carl Moyer Memorial Air Quality Standards Attainment Program, visit: <https://ww2.arb.ca.gov/our-work/programs/carl-moyer-memorial-air-quality-standards-attainment-program>.

⁵⁷ For more information on the Community Air Protection Incentives, visit: <https://ww3.arb.ca.gov/msprog/cap/capfunds.htm>

⁵⁸ For more information on the Proposition 1B: Goods Movement Emission Reduction Program, visit: <https://ww2.arb.ca.gov/our-work/programs/proposition-1b-goods-movement-emission-reduction-program>.

⁵⁹ For more information on the Funding Agricultural Replacement Measures for Emission Reductions Program, visit: <https://ww2.arb.ca.gov/our-work/programs/farmer-program>.

⁶⁰ For more information on the Low Carbon Transportation Investments and Air Quality Improvement Program, visit: <https://ww2.arb.ca.gov/our-work/programs/low-carbon-transportation-investments-and-air-quality-improvement-program>.

⁶¹ California Air Resources Board, AB 617 Budget Frequently Asked Questions – Summary of AB 617 Funding, available at: https://ww2.arb.ca.gov/sites/default/files/2023-05/AB617%20Funding%20Questions_update%20Final_5.23.23.pdf

⁶² Disadvantaged and low-income communities as defined by Assembly Bill 1550 (Gomez, Chapter 369, Statutes of 2016), read more here: <https://calepa.ca.gov/envjustice/ghginvest/>

with the public in May 2020 and incorporated their guidance as well as feedback from the air districts into the final version in October 2020.

The revised guidelines allow air districts to expeditiously develop and fund projects to reduce emissions from stationary sources and to address those concerns identified and prioritized in AB 617 community emissions reduction programs. As a criterion for CARB's approval of a Community Emissions Reduction Program (CERP), air districts must describe the level of support for the CERP and its strategies to the Community Steering Committee. Subsequent proposed project plans to implement incentive-based strategies must also document strong, widespread, and clear community support and include descriptions of community benefits, both those benefits that are quantifiable and those more qualitative in nature. The graphic below illustrates the process by which a CERP is developed and approved. This iterative process allows districts and CARB to account for complicated, unique, or unusual projects and ensure that they will be responsive to community needs.

Community Air Protection Project Plan Review Process



Several innovative incentive projects were initiated in 2022 and funded by Community Air Protection Program Incentives. San Joaquin Valley Air Pollution Control District (SJVAPCD) has numerous Community Identified Projects totaling over \$3 million, including wood stove replacements, EV charging infrastructure, dust harvesters, lawn and garden, and alternatives to agricultural burning. With support from Portside Environmental Justice Neighborhoods' CSC, SDAPCD proposed, and CARB approved, an electric truck pilot project for Portside to incentivize e-truck purchases without requiring scrapping old trucks as a Community Air Protection Incentives – Community Identified Project. On behalf of their AB 617 communities, South Coast Air Quality Management District (SCAQMD) has submitted a Draft AB 617 Truck Incentives Workplan to CARB for review that will provide opportunities for fleet owners to assess the suitability of zero-emission or near-zero-emission medium- or heavy-duty trucks and supporting infrastructure by allowing them to test drive the cleaner trucks for some time.

Staff recognizes that other communities, particularly those that have been consistently nominated but not yet selected for participation in AB 617, could likewise benefit from their air districts implementing these kinds of innovative new projects. CARB staff is currently working with the air districts to revise the CAP Guidelines to incorporate many of these approved community-identified projects as new chapters eligible for any air district to implement in their most heavily

impacted communities. New chapters will include incentives for agency partnerships, vegetative barriers and urban greening, emergency diesel generator replacement, paving, sidewalk, and bike path projects, dial-a-ride vehicle replacement, alternatives to agricultural burning, and low-dust nut harvesters. Staff will continue to work with the air districts to develop these revisions, and plan to publish these revised Guidelines in Spring 2024.

Regulatory Programs

Federal, State, and local air quality agencies all work together to reduce emissions. At the federal level, the U.S. Environmental Protection Agency (U.S. EPA) has primary authority to control emissions from certain mobile sources, including sources that are all or partly under federal jurisdiction (e.g., some farm and construction equipment, aircraft, marine vessels, locomotives), which it shares in some cases with air districts and CARB. The U.S. EPA also establishes ambient air quality standards for some air pollutants. At the State level, CARB is responsible for controlling emissions from mobile sources and consumer products (except where federal law preempts CARB's authority), controlling toxic emissions from mobile and stationary sources, controlling greenhouse gases from mobile and stationary sources, developing fuel specifications, and coordinating State-level air quality planning strategies with other agencies.

Regionally, air districts are primarily responsible for controlling emissions from stationary and indirect sources (with the exception of consumer products in most cases) through rules and permitting programs within their regions.

CARB regulatory programs are designed to reduce emissions to protect public health, achieve air quality standards, reduce greenhouse gas emissions, and reduce exposure to toxic air contaminants. CARB establishes regulatory requirements for cleaner technologies (both zero and near-zero emissions) and their deployment into the fleet for cleaner fuels and to ensure in-use performance. CARB's regulatory programs are broad – impacting stationary sources, mobile sources, and multiple points within product supply chains from manufacturers to distributors, retailers, and end-users. CARB's regulations affect cars, trucks, ships, off-road equipment, consumer products, fuels, and stationary sources.

One important and relevant regulatory authority of CARB is to adopt measures to reduce emissions of toxic air contaminants from mobile and non-mobile sources, known as Airborne Toxic Control Measures (ATCM).⁶³ These regulatory measures include process requirements, emissions limits, or technology requirements. Additionally, CARB implements the Statewide Air Toxics "Hot Spots" Program⁶⁴ to address the health risk from toxic air contaminants at individual facilities across the State. The Air Toxics "Hot Spots" Program includes several components to collect emissions data, identify facilities having localized impacts, ascertain health risks, notify nearby residents of significant risks, and reduce those significant risks to acceptable levels.

Under the Air Toxics "Hot Spots" Program, air districts are required to set a threshold for facilities that pose a significant health risk and prioritize facilities for health risk assessments. Air districts also establish a risk value above which facilities must conduct a risk reduction audit and emissions reduction plan. Facilities must develop these health risk assessments, risk reduction audits, and

⁶³ California Health and Safety Code § 39650 et seq.

⁶⁴ Assembly Bill 2588, Air Toxics "Hot Spots" Information and Assessment and Assessment Act, Connelly, Statutes of 1987, California Health and Safety Code § 44300 et seq.

emission reduction plans. CARB provides technical guidance to support smaller businesses in conducting health risk assessments and developing emissions reduction plans.

Additionally, CARB has pursued enforceable agreements with industry that result in voluntary but enforceable adoption of the cleanest technologies or practices and provide assurance that emissions reductions will be realized. CARB's agreement with the Union Pacific Railroad Company and BNSF Railway Company to accelerate the introduction of cleaner locomotives in the South Coast Air Basin is an example of an enforceable agreement.

CARB Actions Related to the PTCA Community

This section highlights CARB actions that specifically relate to the PTCA community. This list should not be interpreted as exhaustive but rather illustrative of some of the major statewide strategies driving emissions reductions in conjunction with those local-level strategies identified in this community emissions reduction program. Additional CARB foundational strategies can be found in Appendix D and Appendix F of the Community Air Protection Blueprint.⁶⁵ The list of CARB actions and their anticipated benefits in current AB 617 communities is also available on the Program CommunityHub.⁶⁶

Recently Adopted CARB Regulations

In August 2022, CARB approved the **Advanced Clean Fleets regulation**.⁶⁷ The Advanced Clean Fleets regulation is part of a comprehensive strategy that would, consistent with public health needs, accelerate the widespread adoption of zero-emission vehicles (ZEV) in the medium- and heavy-duty truck sector and in light-duty package delivery vehicles. The ACF regulation would require certain fleets to deploy ZEVs starting in 2024 and would establish a clear end date for new medium- and heavy-duty internal combustion engine (ICE) vehicle sales in 2040. See Mobile strategies in Chapter 7.

In November 2022, CARB approved the **Advanced Clean Cars II regulations**.⁶⁸ The Advanced Clean Cars II regulations will rapidly scale down light-duty passenger car, pickup truck, and SUV emissions starting with the 2026 model year through 2035. The regulations are two-pronged. First, it amends the Zero-emission Vehicle Regulation to require an increasing number of zero-emission vehicles and relies on currently available advanced vehicle technologies, including battery-electric, hydrogen fuel cell electric, and plug-in hybrid electric vehicles, to meet air quality and climate change emissions standards. These amendments support Governor Newsom's 2020 Executive Order [N-79-20](#), which requires all new passenger vehicles sold in California to be zero emissions by 2035. Second, the Low-emission Vehicle Regulations were amended to include increasingly stringent standards for gasoline cars and heavier passenger trucks to continue to reduce smog-forming emissions. The regulations will substantially reduce air pollutants that threaten public health and cause climate change. While further developing the zero-emission vehicle market, the regulations also take additional steps to clean up internal combustion engines and will provide public health benefits of at least \$12 billion over the life of the

⁶⁵ California Air Resources Board, Final Community Air Protection Blueprint for Selecting Communities, Preparing Community Emissions Reduction Programs, Identifying Statewide Strategies, and Conducting Community Air Monitoring, October 2018, available at: <https://ww2.arb.ca.gov/capp-blueprint>.

⁶⁶ Community Air Protection Program Communities: <https://ww2.arb.ca.gov/capp-communities>

⁶⁷ For more information on the Advanced Clean Fleets regulation, visit: <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets>

⁶⁸ For more information on the Advanced Clean Cars II regulations, visit: <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii>

regulations by reducing premature deaths, hospitalizations, and lost workdays associated with exposure to air pollution. See Mobile strategies in Chapter 7.

In December 2022, CARB approved amendments to the **Commercial Harbor Craft (CHC) regulation**.⁶⁹ CARB has regulated commercial harbor craft since 2009. By the end of 2022, the Current Regulation will require Tier 2 or 3 engines on a subset of harbor craft (excursion vessels, ferries, tugboats, crew & supply vessels, barges, and dredges). The 2022 Amended CHC Regulation adds or expands requirements for vessels regarding emissions, reporting, fuel use, idling, and facility power, among others. Some of these new requirements go into effect as early as January 1, 2023. Harbor craft are in the top three emitting categories at seaports, contributing more diesel particulate matter emissions than trucks in 2023 at the San Pedro Bay Ports. The amendments are expected to reduce diesel PM from covered vessels by 89 percent and NOx by 54 percent at full implementation. This is expected to avoid 531 premature deaths, 161 hospital admissions, and 236 emergency room visits, providing \$5.25 billion in benefits versus \$1.98 billion in costs statewide. See Marine and Rail strategies in Chapter 7.

In April 2023, CARB approved the **In-Use Locomotive regulation**⁷⁰. The In-Use Locomotive Regulation (Regulation) will achieve emission reductions from diesel-powered locomotives and increase the use of zero-emission (ZE) technology. The Regulation will help meet California's public health, air quality, and climate goals by reducing criteria pollutants, toxic air contaminants, and greenhouse gas emissions for locomotives in use. See Marine and Rail strategies in Chapter 7.

In May 2023, CARB adopted the **Hexavalent Chromium Airborne Toxic Control Measure (ATCM)**.⁷¹ The ATCM results in the most stringent regulation of hexavalent chromium emissions from the chrome plating industry (compared to federal standards and District rules), with the goal of eliminating toxic hexavalent chromium emissions from the chrome plating industry in California over time.

Upcoming CARB Regulations

Cargo Handling Equipment Regulation Amendments – Mobile cargo handling equipment is any motorized vehicle used to handle cargo or perform routine maintenance activities at California's ports and intermodal rail yards. The type of equipment includes yard trucks (hostlers), rubber-tired gantry cranes, container handlers, forklifts, etc. The prior Mobile Cargo Handling Equipment (CHE) Regulation was adopted in 2005 to reduce toxic and criteria emissions to protect public health and was fully implemented by the end of 2017. CARB staff is currently assessing the availability and performance of zero-emission technology to further reduce emissions. For more information, visit: <https://ww2.arb.ca.gov/our-work/programs/cargo-handling-equipment>.

Catalytic Converter Theft Reduction - This strategy consists of innovative assistance to deter thefts of vehicle catalytic converters in communities selected for the Community Air Protection Program. For more information, visit: https://ww2.arb.ca.gov/sites/default/files/2018-10/final_community_air_protection_blueprint_october_2018_appendix_f.pdf

⁶⁹ For more information on the Commercial Harbor Craft Amendments, visit: <https://ww2.arb.ca.gov/our-work/programs/commercial-harbor-craft>

⁷⁰ For more information on the In-Use Locomotive Regulation, visit: <https://ww2.arb.ca.gov/our-work/programs/reducing-rail-emissions-california/locomotive-fact-sheets>

⁷¹ For more information on the Hexavalent Chromium Airborne Toxic Control Measure, visit: <https://ww2.arb.ca.gov/our-work/programs/chrome-plating-atcm>

Commercial Cooking Suggested Control Measure - This strategy consists of a two-phase process to evaluate California's current emission reduction requirements for commercial cooking operations that prepare food for human consumption and, if necessary, make improvements to achieve additional reductions in particulate matter 10 microns or less in diameter (PM10), particulate matter 2.5 microns or less in diameter (PM2.5) and volatile organic compound emissions that contribute to ozone formation. For more information, visit: https://ww2.arb.ca.gov/sites/default/files/2018-10/final_community_air_protection_blueprint_october_2018_appendix_f.pdf See Commercial and Industrial Sources Near Community Chapter 7.

Composite Wood Products Control Measure Amendments - This strategy will amend the CARB Composite Wood Products Airborne Toxic Control Measure (ATCM), approved in 2007. The Composite Wood Products ATCM established formaldehyde emission standards for three types of composite wood products (hardwood plywood, particleboard, and medium-density fiberboard) and requires that all consumer goods that contain such materials (e.g., flooring, cabinets, furniture) destined for sale in California must comply with the Composite Wood Products ATCM. For more information, visit: <https://ww2.arb.ca.gov/our-work/programs/composite-wood-products-program>

Consumer Products Standards - The primary goal of this measure is to help attain federal ozone standards in the South Coast by addressing projected growth in consumer product emissions. While this measure focuses on attaining federal air quality standards in the South Coast, where nearly 15 million residents face the most extreme and persistently high ambient ozone levels in the nation, it will also facilitate the attainment of State and federal air quality standards in other California regions. For more information, visit: https://ww2.arb.ca.gov/sites/default/files/2022-08/2022_State_SIP_Strategy.pdf

Future Measures for Aviation Emissions Reductions - The primary goal of future measures for aviation is to reduce emissions from airport and aircraft-related activities. The identified emission sources for the aviation sector are main aircraft engines, auxiliary power units (APU), and airport ground transportation. For more information, visit: https://ww2.arb.ca.gov/sites/default/files/2022-08/2022_State_SIP_Strategy.pdf

Future Measures for Ocean-Going Vessel Emissions Reductions - The primary goal of future measures for OGVs is to further reduce emissions from OGVs that are transiting, maneuvering, or anchoring in Regulated California Waters (RCW) and while docking at berth in California seaports. For more information, visit: https://ww2.arb.ca.gov/sites/default/files/2022-08/2022_State_SIP_Strategy.pdf See Marine and Rail strategies in Chapter 7.

Ocean Going Vessels In-Transit - The 2020 At-Berth Regulation was adopted by CARB's Board in August 2020. The At-Berth Regulation expands existing regulations by adding more types of visits and two new vessel categories: auto carriers and tankers and the new ports and terminals that receive these vessel types. The At-Berth Regulation Interim Evaluation Report (published on December 1, 2022) and provides CARB's Board and the public with an implementation status update for the At-Berth Regulation. One of the key recommendations from the Report is to pursue future reductions from ocean-going vessels while they are transiting, maneuvering, and anchoring, as most emissions from ocean-going vessels occur while they are transiting. CARB will be performing an ocean-going vessel technology assessment during the next 18 months that will explore the best strategies for further reducing emissions from ocean-going vessels (including in transit). See Marine and Rail strategies in Chapter 7.

Off-Road Zero-Emission Targeted Manufacturer Rule - The goal of the Off-Road Zero-Emission Targeted Manufacturer Rule is to achieve criteria pollutant and GHG emissions reductions by accelerating the development and production of zero-emission off-road equipment and powertrains. For more information, visit: https://ww2.arb.ca.gov/sites/default/files/2022-08/2022_State_SIP_Strategy.pdf See "Mobile" Chapter 7.

Spark-Ignition Marine Engine Standards - The goal of this measure is to reduce emissions from new spark-ignition (SI) marine engines by adopting more stringent exhaust standards for outboard and personal watercraft, which currently do not use catalyst control technologies. For more information, visit: https://ww2.arb.ca.gov/sites/default/files/2022-08/2022_State_SIP_Strategy.pdf See Marine and Rail strategies in Chapter 7.

Tier 5 Off-Road Vehicles and Equipment - This measure is to establish more stringent standards and test procedures for new, off-road compression-ignition (CI) engines to reduce NO_x, PM, and carbon (CO₂) emissions (referred to as Tier 5) for all off-road engine power categories, including those that do not currently utilize exhaust after-treatment such as diesel particulate filters (DPF) and selective catalytic reduction (SCR). For more information, visit: https://ww2.arb.ca.gov/sites/default/files/2022-08/2022_State_SIP_Strategy.pdf See "Mobile" Chapter 7.

Transport Refrigeration Unit Regulations, Part 2 – Transport refrigeration units congregate at distribution centers, railyards, and other facilities, resulting in the potential for health risks to those that live and work nearby. In February 2022, CARB adopted amendments to the Transportation Refrigeration Unit Airborne Toxic Control Measures (TRU ATCM). The amendments include requirements for the transition of diesel-powered truck TRUs to zero-emission, a particulate matter emission standard for newly manufactured non-truck TRUs, lower global warming potential refrigerant, facility registration, and reporting expanded TRU reporting and labeling, and fees. Staff are assessing zero emission options for non-truck TRUs and plan to take a second rulemaking (Part 2) to the Board for consideration in 2025. See Commercial and Industrial Sources Near Community strategies in Chapter 7.

Zero-Emission Appliance Standards – Zero-emission standards for new appliances are in alignment with the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) as they would reduce building-related greenhouse gas (GHG) emissions. These standards would also assist California with meeting State and federal air quality standards and achieving public health benefits because they would also provide important smog-forming NO_x emission reductions. CARB committed to exploring developing and proposing zero-emission GHG standards for new space and water heaters sold in California as part of the 2022 State Strategy for the State Implementation Plan (2022 State SIP Strategy) adopted in September 2022. For more information, visit <https://ww2.arb.ca.gov/our-work/programs/zero-emission-appliance-standards> See Public Health and Reducing Exposure strategies in Chapter 7.

Zero-Emissions Truck Measure - This measure would seek to accelerate the number of zero-emissions (ZE) trucks beyond existing measures (including the proposed Advanced Clean Fleets regulation). This strategy is a modification of the publicly suggested On-Road Heavy-Duty Vehicle Useful Life Regulation. The already adopted ACT regulation will result in almost 420,000 ZE trucks on the road by 2037, and the proposed Advanced Clean Fleets (ACF) regulation would increase the number of ZE trucks by another 220,000 to a total of 640,000. However, in 2037, even after the implementation of the ACT and ACF regulations, about 480,000 heavy-duty combustion-powered trucks will still be on the road. In this modified approach, staff would seek

to upgrade these remaining heavy-duty combustion trucks to new or used ZE trucks rather than to trucks with cleaner combustion engines. For more information, visit: https://ww2.arb.ca.gov/sites/default/files/2022-08/2022_State_SIP_Strategy.pdf See Mobile strategies in Chapter 7.

Estimated Emission Reductions from CARB Measures

It is important to note that the Statewide regulations provided in this CERP are in the early phases of development, and their adoption and implementation timelines are not well established. As a result, a draft emissions inventory, and estimated benefits are not yet available for many regulations still in development. As these emissions inventories are developed overtime, CARB staff will provide estimated benefits in future updates.

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Chapter 9 Implementation and Reporting

Achieving the ambitions of the PTCA Plan will require a dedicated commitment to active implementation and ongoing reporting of both successes and challenges. This chapter describes the approach to Plan implementation and annual reporting.

The Plan has a five-year horizon to initiate and complete strategies and actions, and a 10-year horizon for continued tracking to prevent backsliding and to ensure continued progress towards Plan Goals. Plan implementation will require commitments from a variety of agencies, organizations, and stakeholders. The Air District is a key implementation partner and lead, alongside CARB and the local jurisdictions within the PTCA area. The Air District holds the unique role of convening agencies responsible for implementation. The Air District has committed to ensuring adequate resources are provided during Plan implementation (see the Resource PTCA Plan Implementation strategy), for example, make regulations more stringent, enhance enforcement, and incentivize equipment replacements. Local jurisdictions such as the cities of Richmond and San Pablo and Contra Costa County will play a critical role in Plan implementation, for example by updating codes to create health-protective zoning regulations where industrial and residential land uses intersect and considering new multi-jurisdictional planning to better manage truck routes and impacts. The CSC will continue the vital role of pushing for accountability and transparency and will help prioritize and drive Plan implementation. Many other stakeholders will be involved in implementing strategies centered around the needs of people who have been disproportionately harmed by environmental injustice.

In alignment with the PTCA Vision and Principles, the Plan Goals will be achieved by implementing the strategies and actions detailed in Chapter 7.

Key Agencies with Roles in Plan Implementation

Air District

The Air District is the regional agency responsible for assuring clean air in the nine counties that surround the San Francisco Bay (except northeastern Solano and northern Sonoma counties). The Air District writes and implements air quality plans, adopts and enforces regulations to control air pollution from stationary sources, offers incentives to government agencies, businesses, and individuals to voluntarily reduce air pollution, engages with communities and provides technical and policy guidance regarding air quality, and manages the Spare the Air program. The Air District builds and maintains relationships with the CSC and agency stakeholders and sustains partnerships with communities across the region.

Cities of Richmond and San Pablo

The City of Richmond and City of San Pablo have authority for their respective land-use and transportation decisions. Their City Councils make land-use decisions by adopting general and specific plans, zoning regulations, and certifying environmental reports for land-use projects, such as housing, commercial, and industrial developments.

County of Contra Costa

Contra Costa County has authority for growth, conservation, and community life in the unincorporated areas within the County. The County makes decisions about zoning and development, including certifying environmental reports for land-use projects such as housing,

commercial and industrial developments, and decisions about sustainability and environmental justice.

Contra Costa Health Services

Contra Costa Health Services provides health care services to all people in Contra Costa County with special attention to those who are most vulnerable to health problems. Several departments are within the Health Services Division including Environmental Health and Public Health, focusing on communities and populations most at risk for poor health outcomes and those most affected by environmental inequities.

CARB

CARB is the state agency charged with protecting the public from the harmful effects of air pollution and developing programs and actions to fight climate change. CARB identifies pollutants that pose the greatest health risks, such as DPM, benzene in gasoline and formaldehyde in consumer products. CARB is also responsible for establishing the state's air quality standards to protect those at greatest risk – children, older adults and people with lung and heart disease.

As implementation begins and actions are worked on and refined, additional partners will surface and be engaged.

Implementation Mechanisms

The Plan calls on multiple agencies to commit resources to implement the strategies and actions. The following describes the types of mechanisms that can help achieve the ambitions of the Plan.

Incentives. Securing funding for diesel engine and equipment replacements, electric charging and hydrogen fuel station infrastructure can accelerate the turnover of older equipment and facilitate the transition to cleaner equipment and vehicles.

Rule Development. California law sets forth the rulemaking process by which CARB and the Air District are responsible for developing and adopting the specific rules and regulations needed to achieve healthy air quality.

Enforcement. Stricter enforcement is widely recognized as a component of environmental justice. Several agencies have enforcement authority in the PTCA area. CARB enforces “mobile” sources such as heavy-duty truck engine types, ensuring that transport trucks adhere to the latest, cleanest engine requirements. The Air District enforces stationary sources (permitted industrial facilities and wood burning, for example). Cities and counties have local code enforcement authority to make sure businesses comply with zoning regulations and traffic control authority to ensure transport trucks stay on designated truck routes. Additional agencies also are involved in enforcement such as the U.S. EPA.

Permitting and Land Use. Stationary sources, such as factories, are issued permits that define how much air pollution they can emit. In California, local air districts have the authority to grant permits to stationary sources.⁷² Local planning departments issue land use and building permits. The county health department issues hazardous materials permits. Various state agencies also regulate industrial activities involving hazardous materials such as DTSC and Cal EPA.

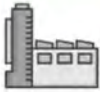



⁷² <https://ww2.arb.ca.gov/permitting>

Advocacy. After the Plan is adopted, the CSC will continue to advocate for Plan implementation, will meet regularly to review progress, evaluate programs and budgets, and make recommendations. In addition, CSC members, community members, business owners, and other stakeholders likely will need to advocate and communicate with collaborating agencies to ensure their continued support for Plan strategies and the resources needed for implementation. The Air District and CSC will work collaboratively to build alliances among allies to help ensure Plan implementation success.

Education. Community education about technical aspects of Plan implementation and agency education about the on-the-ground conditions in the PTCA area will continue during implemented.

Research and Further Study. Several topics will need to be better understood through research, additional study or data analysis to help determine the most strategic course of action.

The table below presents example mechanisms to reduce pollution from four key sectors analyzed in the Plan emissions inventory.

Stationary Point Sources w/Permits  Refineries, power plants, gas stations, autobody shops	Stationary Area Sources  Fireplaces, water heaters, consumer products	On-Road Mobile  Cars, trucks, buses	Off-Road Mobile  Ships, aircraft, rail, construction equipment
Example Mechanisms Enforcement: Enhance enforcement, legal approaches and penalties.	Example Mechanisms Incentives: Offer incentives to replace wood-burning devices or other older home appliances	Example Mechanism Agency operations: City of Richmond, City of San Pablo and Contra Costa County conduct more frequent street sweeping to control road dust	Example Mechanism Regulation: CARB adopts and implements the In-Use Locomotive Regulation that will ensure existing rail cars are as clean as possible and locomotive fleet turnover to newer, cleaner technology is accelerated

CSC, Standing and Ad Hoc Committees Implementation Roles

Once the Plan has been adopted the CSC will begin Plan implementation. The CSC will support and direct activities to achieve Plan Goals in alignment with the PTCA Vision and Principles. The CSC will form, disband, or maintain Standing and Ad Hoc committees with specific and defined roles and responsibilities as well as expected outcomes, as needed. The Air District will participate in up to two standing committees.

- **Current Committees**
 - CSC
 - The CSC will be an important body during Plan implementation. The CSC will be asked to review work progress and provide input on the pollution reduction strategies and Plan actions. This will require strong communication

between the CSC and Air District staff to ensure there are clear priorities established early on, and actions selected for implementation align with the communities' air quality priorities. It is anticipated that the CSC will meet quarterly.

- Community Engagement Standing Committee
 - The Community Engagement Standing Committee will continue to use its member's networks to seek input on Plan actions during implementation. The Committee will determine how best to engage the public in the PTCA area, as well as consider unique outreach tactics for the different types of Plan strategies and actions. The Committee will be encouraged to continue building and strengthening connections with the community to make the most positive impact. The Committee will build coalitions with other community leaders in the Plan area and environmental justice organizations across the Bay Area.
- Governance Ad Hoc Committee
 - The Governance Ad Hoc will assist with decision making, provide feedback on budgetary matters and respond to speaking requests (at Air District Board of Directors meetings, for example) and mentor other CSC members.
- **Proposed Committees** (potential committees that may convene as needed and as resources allow)
 - Implementation Ad Hoc
 - An Implementation Ad Hoc would assist the Air District with the preparation of the annual implementation plan (described below), and help call for, and lead, smaller implementation working teams as necessary.
 - Legislative Ad Hoc
 - A Legislative Ad Hoc would organize support for legislative proposals that protect public health and reduce air pollution. This includes working with the Air District to identify the CSC's legislative priorities if any emerge. The Ad Hoc would develop fact sheets and action alerts to support the CSC in determining legislative priorities and organize support among local leaders and other stakeholders within the PTCA area.
 - Communications Subcommittee
 - A Communications Subcommittee would help design, implement and monitor improved and expanded communications about flaring events for the fuel refining sector in the PTCA area and also for major incidents at both fuel-refining and non-fuel-refining sources. Communications mechanisms would be developed in collaboration with the CSC and include (A) a new webpage and (B) standardized internal and external communication protocols (see Fuel Refining Action 2.2).
 - Just Transition Subcommittee
 - A Just Transition Subcommittee (JTS) would provide a platform for advancing Just Transition and facilitate conversations and potential partnerships with both governmental and non-governmental organizations. The JTS would create an online shareable folder of Just Transition educational materials to help support education and aid communications with key stakeholders and will elevate Just Transition Principles through the PTCA Plan and policy making. (see Fuel Refining Action 1.1 and 1.2).
 - Community Benefits Policy Subcommittee

- A Community Benefits Policy Subcommittee would work with the Air District to gather public input and develop first a Fuel Refining, and then a PTCA wide, Community Benefits Policy. The committee would work to ensure the policy includes criteria for investment, is tied to air quality and climate protection, incorporates Just Transition principles, and has community driven mechanisms to include community voice. (see Fuel Refining Action 3.9).

Annual Implementation Plan

Air District staff and the CSC will co-develop an annual Implementation Plan that will prioritize strategies and actions for implementation in consultation with responsible Air District Divisions and partner agencies. This will be a yearly work plan rather than a full re-planning effort, and it is not expected that developing this work plan will redirect significant resources away from ongoing Plan implementation. The CSC and the Community Engagement Standing Committee may, as needed, identify community-level implementation opportunities such as advocacy, education, securing resources and community engagement activities to include in the Implementation Plan. The Implementation Plan will identify ongoing administrative needs, such as appropriate Air District staff resource needs, and will inform annual Air District budget planning. Ongoing logistical and communications activities such as maintaining the Air District PTCA web pages will also be addressed. After the first year of Plan implementation, development of the annual Implementation Plan will begin with an evaluation of the previous year's implementation activities to identify and address challenges that may blocking progress towards the Plan Goals.

Tracking Plan and Strategy Implementation Progress

The PTCA Plan is a living document. In addition to documenting progress on Plan implementation, the **Annual Report** will provide an opportunity to refine strategies and actions, consider whether additional actions are necessary, and communicate success stories and lessons learned, in accordance with CARB's guidance (*Blueprint 2.0*).

At the minimum, the Annual Report will contain the following:

- report on strategy and action implementation progress from all agencies and stakeholders identified as "lead action implementers"
- description of implementation successes and challenges including describing if the level of allocated staff resources was sufficient or if there were shortfalls
- identification of other barriers to Plan implementation
- identification of new opportunities to advance Plan Goals

The Annual Report will be developed with input from the CSC or a delegated Standing or Ad Hoc committee and will be presented to the full CSC. Development of the Annual Report will offer an opportunity to identify alignment or misalignment with the annual Implementation Plan and make necessary adjustments. In accordance with CARB, the Annual Report will be made available to the public by October 1st every year and will be presented to the Air District Board of Directors and transmitted to CARB. In addition to the content outlined above, the Annual Report will include an emissions management report (described below).

Emissions Inventory Improvement and Reporting

An Emissions Management Report will accompany the Annual Report and is intended to improve the accuracy and transparency of Plan emissions data so that progress toward emissions reductions can be demonstrated over time. The Emissions Management Report will focus on permitted sources and include emissions data for a minimum of five CAPs and a

minimum of 20 high-priority TACs. It will include analysis and commentary on changes in emissions levels (noting whether changes were due to changes in the way emissions are calculated, or industry operational changes, etc.). The Emissions Management Report and a simplified summary of the report will be made available to the CSC, partner agencies and local government officials along with the Annual Report.

For key implementation milestone years 5 and year 10, an emissions inventory update will be completed including all sources (stationary, mobile, etc.). Additionally, the Air District will prepare a tool for converting emissions changes into cancer risks and use the tool to update exposure and health risk data for the 5- and 10-year milestone reports and make information public (to CSC and other stakeholders). The Air District will continue to explore other options for comparing emissions inventory and exposure data, such as calculating "impact per ton" for sources of concern.

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PTCA Plan Glossary

Acronyms

Acronym	Phrase/Term
AB 617	Assembly Bill 617
AIM	Assessment Inventory & Modeling Division of the Air District
Air District	Bay Area Air Quality Management District
BAAQMD	Bay Area Air Quality Management District or Air District
BMP	Best management practices
BRT	Bus rapid transit
BUGs	Backup generators
Cal EPA	California Environmental Protection Agency
C&E	Compliance & Enforcement Division of the Air District
CAMP	Community Air Monitoring Plan
CAP	Criteria air pollutant
CAPP	CARB's Community Air Protection Program
CARB	California Air Resources Board
CBO	Community-based organization
CCCTA	Contra Costa County Transportation Authority
CEQA	California Environmental Quality Act
CHC	Commercial harbor craft
CHE	Cargo handling equipment
DPM	Diesel particulate matter
DTSC	State of California Department of Toxic Substances Control
EBMUD	East Bay Municipal Utility District
EDF	Environmental Defense Fund
FCCU	Fluidized catalytic cracking units
FHWA	Federal Highway Administration
FTG	Freight trip generation
GHG	Greenhouse gases
HDDTs	Heavy Duty Diesel Trucks
HEPA	High efficiency particulate air filter
HRA	Health risk assessment
M&M	Meteorology & Measurements Division of the Air District
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industry Classification System
NOV	Notice of violation
OEHHA	California Office of Environmental Health and Hazard Assessment

OGV	Ocean Going Vessel
PTCA	Path to Clean Air
PM	Particulate matter
PM _{2.5}	Fine particulate matter
PPB	Parts per billion
PPM	Parts per million
PZEV	Partial zero emission vehicle
RELS	Reference exposure levels, can be acute or chronic
RRP	Risk reduction plan
SCAQMD	South Coast Air Quality Management District
TAC	Toxic air contaminant
TMP	Truck management plan
TWE	Toxicity-weighted emissions, can be acute or chronic
TRU	Transportation refrigeration unit
U.S. EPA	United States Environmental Protection Agency
VMT	Vehicle miles traveled
ZEV	Zero emission vehicle

Criteria Air Pollutants and Toxic Air Contaminants

Criteria Air Pollutants

The Clean Air Act requires the U.S. EPA to set National Ambient Air Quality Standards (NAAQS) for six common CAPs. These pollutants are found all over the U.S. They can harm your health and the environment, and cause property damage. Read more about each of these criteria pollutants summarized on the [US EPA website](#).

Carbon Monoxide: CO is a colorless, odorless gas that can be harmful when inhaled in large amounts. CO is released when something is burned.

Ground-level Ozone: Ozone is a gas composed of three atoms of oxygen. Ozone occurs both in the Earth's upper atmosphere and at ground level. Ozone can be good or bad, depending on where it is found. Ozone at ground level is a harmful air pollutant, because of its effects on people and the environment, and it is the main ingredient in "smog."

Lead: Lead is a naturally occurring element found in small amounts in the earth's crust. While it has some beneficial uses, it can be toxic to humans and animals, causing health effects.

Nitrogen Dioxide (NO₂): Nitrogen Dioxide (NO₂) is one of a group of highly reactive gases known as oxides of nitrogen or nitrogen oxides (NO_x). Other nitrogen oxides include nitrous acid and nitric acid. NO₂ is used as the indicator for the larger group of nitrogen oxides.

Particulate Matter (PM): A mixture of solid particles and liquid droplets found in the air. Some particles, such as dust, dirt, soot, or smoke, are large or dark enough to be seen with the naked eye.

Sulfur Dioxide (SO₂): U.S. EPA's national ambient air quality standards for SO₂ are designed to protect against exposure to the entire group of sulfur oxides (SO_x). SO₂ is the component of greatest concern and is used as the indicator for the larger group of gaseous sulfur oxides (SO_x).

Toxic Air Contaminants

According to section 39655 of the California Health and Safety Code, a TAC is "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." Below are the top 20 toxic air contaminants in the PTCA emissions inventory. These compounds were identified by weighting emissions of individual TACs by health values compiled by OEHHA: cancer potency factors and chronic and acute reference exposure levels (RELs). These 20 TACs account for at least 96% of the cancer, chronic, and acute toxicity-weighted emissions (TWE) in the PTCA emissions inventory.

1,3-butadiene: Produced through the processing of petroleum and is mainly used in the production of synthetic rubber but is also found in smaller amounts in plastics and fuel.

Acrolein: Primarily used as an intermediate in the synthesis of acrylic acid and as a biocide. It may be formed from the breakdown of certain pollutants in outdoor air or from the burning of organic matter including tobacco, or fuels such as gasoline or oil. It is toxic to humans following inhalation, oral or dermal exposures.

Acrylonitrile (CH₂=CHCN): A toxic, colorless to pale-yellow liquid, harmful to the eyes, skin, lungs, and nervous system. It may cause cancer. Workers may be harmed from exposure to acrylonitrile. The level of exposure depends upon the dose, duration, and work being done.

Ammonia (NH₃) is a common toxicant derived from wastes, fertilizers and natural processes. Ammonia nitrogen includes both the ionized form (ammonium, NH₄⁺) and the unionized form (ammonia, NH₃). Ammonia occurs naturally in air, soil, and water. Ammonia is used as an agricultural fertilizer and in many cleaning products.

Arsenic: A naturally occurring element widely distributed in the earth's crust. In the environment, arsenic is combined with oxygen, chlorine, and sulfur to form inorganic arsenic compounds. Arsenic in animals and plants combines with carbon and hydrogen to form organic arsenic compounds.

Benzene: Also known as benzol, a colorless liquid with a sweet odor. Benzene is used as a constituent in motor fuels; as a solvent for fats, waxes, resins, oils, inks, paints, plastics, and rubber; in the extraction of oils from seeds and nuts; and in photogravure printing. It is also used as a chemical intermediate. Benzene is also used in the manufacturing of detergents, explosives, pharmaceuticals, and dyestuffs.

Chromium (hexavalent): A naturally occurring element in rocks, animals, plants, soil, and volcanic dust and gases. Chromium compounds, in either the chromium (III) or chromium (VI) forms, are used for chrome plating, the manufacture of dyes and pigments, leather and wood preservation, and treatment of cooling tower water.

Cobalt: Cobalt (chemical symbol Co) is a hard, gray-blue metal that is solid under normal conditions. Cobalt is like iron and nickel in its properties and can be magnetized like iron. The most common radioactive isotope of cobalt is cobalt-60 (Co-60). Cobalt-60 is a byproduct of

nuclear reactor operations. It is formed when metal structures, such as steel rods, are exposed to neutron radiation.

Diesel Particulate Matter (DPM): A component of diesel exhaust that includes soot particles made up primarily of carbon, ash, metallic abrasion particles, sulfates, and silicates. Diesel soot particles have a solid core consisting of elemental carbon, with other substances attached to the surface, including organic carbon compounds known as aromatic hydrocarbons.

Ethylene Dichloride: A colorless, toxic, volatile liquid having an odor resembling that of chloroform. It is denser than water, and it is practically insoluble in water.

Formaldehyde: A colorless flammable gas with a pungent odor that is highly reactive with many substances.

Hydrochloric Acid: Used in the production of chlorides, for refining ore in the production of various manufacturing operations.

Hydrogen Cyanide: The primary source of cyanide in the air is from car exhaust. Other airborne sources include emissions from chemical processing, other industries, and municipal waste incinerators.

Hydrogen Sulfide (H₂S): A flammable, colorless gas that smells like rotten eggs. People usually can smell hydrogen sulfide at low concentrations in air ranging from 0.0005 to 0.3 parts per million (ppm).

Maleic Anhydride: Lube oil adhesives synthesized from maleic anhydride that are used to prolong oil-change intervals and improve engine efficiency.

Manganese: Metallic manganese is used primarily in steel production to improve hardness, stiffness, and strength. It is also used in carbon steel, stainless steel, and high-temperature steel, along with cast iron and superalloys.

Nickel Carbonyl: Occurs naturally in the environment at low levels. Nickel is an essential element in some animal species, and it has been suggested it may be essential for human nutrition.

Sulfuric Acid: A colorless oily liquid. It is soluble in water with release of heat. It is corrosive to metals and tissue. It will char wood and most other organic matter on contact but is unlikely to cause a fire.

Vinyl Chloride: Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products.

Definition of terms

AB 617 – Assembly Bill (AB) 617 (C. Garcia, Chapter 136, Statutes of 2017) directs the state, in consultation with local air districts, to select communities in California that are exposed to high levels of air pollution. Selected communities will work with local air districts on action plans to reduce people's exposure to particulate matter and toxic air contaminants, and/or to develop community air monitoring plans.

AB 2449 – AB 2449 allows the legislative body of a local agency to use teleconferencing without complying with the traditional Brown Act teleconferencing rules or the modified AB 361 rules in certain circumstances.

Abatement Device – Devices designed to capture, remove and/or reduce pollutants that would otherwise be emitted into the air. Examples are baghouses, scrubbers, dust collectors, direct flame afterburners, vapor recovery units, and water sprayers.

Air District or BAAQMD – The regional air pollution control agency with jurisdiction over the counties of Alameda, Contra Costa, Marin, Napa, San Francisco, Santa Clara, San Mateo, and the southern portions of Solano and Sonoma counties. The Air District oversees policies and adopts regulations for the control of air pollution from stationary sources, adopts clean air plans, offers incentives for emission reductions from mobile sources, enforces air quality rules, and collects, monitors, and models air quality data.

Best Practices to Reduce Emissions – Measures that reduce emissions, and therefore reduce health risks from air pollution. Examples include retrofitting diesel generators to low or zero emitting technology, electrifying loading docks, limiting truck idling times, requiring low or zero emitting truck engines, and adding abatement devices to stationary sources.

Best Practices to Reduce Exposure – Measures that may not reduce actual emissions but reduce people's exposure to pollutants and reduce health risks. Examples include HVAC (heating ventilation, air conditioning) air filters, planting vegetation between a source of pollution and residential units and prohibiting trucks on residential streets.

Back-up Diesel Generator (BUG) – BUGs include stationary generators and portable generators. Stationary generators are often sources of emergency power for commercial, industrial, and residential buildings. Portable generators are used as temporary power when and where an electrical grid is not available, at construction sites, outdoor gatherings such as concerts and festivals, and disaster recovery sites. See also diesel engine.

Black Carbon – Black carbon is the sooty black material emitted from gasoline and diesel engines, coal-fired power plants, and other sources that burn fossil fuel. It comprises a significant portion of particulate matter. Inhalation of black carbon is associated with health problems including respiratory and cardiovascular disease, cancer, and birth defects.

Bus Rapid Transit (BRT) – Bus rapid transit (Also called a busway or transitway) is a public transport system designed to improve capacity and reliability relative to a conventional bus system, by prioritizing intersection signals for transit, creating bus-only lanes and bus loading platforms, collecting fares on the platform before entering the bus, and serving limited stops.

California Air Resources Board (CARB) – The state agency that oversees policies and adopts regulations for the control of air pollution from mobile sources and some stationary sources. CARB's mission is to promote and protect public health, welfare, and ecological resources through the reduction of air pollutants.

California Environmental Quality Act (CEQA) – State environmental legislation designed to protect the environment and to inform and engage the public about projects considered by California public agencies. Applies to many projects proposed to be conducted or approved by a California public agency, including private projects requiring government approval. The public is engaged through scoping meetings, public notice, public review, hearings, and the

judicial process. Documents to inform the public include an initial study (IS), to determine if a negative declaration or environmental impact report is needed; a negative declaration (ND), if no environmental impacts are identified in the initial study; and an environmental impact report (EIR), if the initial study does identify environmental impacts that need to be mitigated. On whole, CEQA and these documents help prevent or minimize environmental impacts through development of project alternatives, mitigation measures, and mitigation monitoring.

Cargo Handling Equipment (CHE) – Includes a variety of equipment at ports, warehouses, and rail yards including yard tractors, cranes, forklifts, and container handlers such as top picks and side picks, and bulk handling equipment, such as tractors, loaders, dozers, excavators, and backhoes.

Chrome Plating – Often referred to simply as “chrome” a technique of electroplating a thin layer of chromium onto a metal object. The chromed layer can be decorative, provide corrosion resistance, ease cleaning procedures, or increase surface hardness. The process of chrome plating causes hexavalent chromium, a toxic air contaminant, to be emitted as an aerosol that can be inhaled and entrained inside the lungs.

Complete Streets – A transportation policy to design and operate streets to enable safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. A complete street may include sidewalks, bike lanes (or wide paved shoulders), dedicated bus lanes, comfortable and accessible public transportation stops, frequent and safe crossing opportunities, median islands, accessible pedestrian signals, curb extensions, narrower travel lanes, roundabouts, and other features. See also transit-oriented development and mixed-use land use.

Cooling Towers – A cooling tower is a heat rejection device that transfers the waste heat from a water stream to the atmosphere through the cooling of the water stream to a lower temperature. Common applications for cooling towers include cooling the circulating water used in oil refineries, petrochemical and other chemical plants, thermal power stations and HVAC systems for cooling buildings.

Commercial Land Use – Commercial land use is a land use designated by the local governing body for retail, service, or office use, such as shopping malls, restaurants, office buildings, grocery stores, pharmacies, banks, hotels, or movie theatres.

Community-scale Modeling – Community scale modeling is air quality modeling at the local level, to determine air pollution concentrations within a community. See also regional-scale modeling.

Criteria Air Pollutants (CAP) – Criteria air pollutants are defined by the U.S. EPA and include six air pollutants that the Clean Air Act directs the U.S. EPA to set standards for: particulate matter, photochemical oxidants (including ozone), carbon monoxide, sulfur oxides, nitrogen oxides and lead. These pollutants are found all over the U.S. They can harm human health and the environment, and cause property damage. See also National Ambient Air Quality Standards (NAAQS).

Cumulative Air Quality Impact – A cumulative air quality impact is an environmental impact which results from the incremental impacts of an action or project when added to other past, present, and reasonably foreseeable future actions. For example, a manufacturing facility, a high-traffic freeway, and a construction site may each have an air quality impact that is not

substantial when considered by itself but may have a substantial cumulative air quality impact when all three are considered together.

Diesel Engine – A diesel engine is an internal combustion engine powered by diesel fuel that creates incomplete combustion that results in the release of particulate matter emissions. Also called a compression-ignition engine. Diesel engines can power mobile, portable, and stationary equipment.

Diesel particulate matter (DPM) – Diesel particulate matter is the solid material in diesel exhaust. Diesel particulate matter is typically composed of carbon particles (“soot”, also called black carbon) and numerous organic compounds, including over 40 known cancer-causing organic substances. DPM is a toxic air contaminant.

Environmental Protection Agency (U.S. EPA) – The environmental protection agency is the federal agency responsible for control of air and water pollution, toxic substances, solid waste, and cleanup of contaminated sites. The U.S. EPA sets national ambient air quality standards for criteria air pollutants, such as ozone, particulate matter, and lead.

Excavators – Excavators are used for digging, material handling, construction, demolition, and other tasks. Excavators consist of a boom, dipper, bucket, and cab on a rotating platform.

Fine Particulate Matter (PM_{2.5}) – See particulate matter.

Gasoline Dispensing Facilities (GDF) – Gasoline dispensing facilities are gas stations.

Green Workforce: A broad group of careers that contribute directly to moving society and the built environment towards sustainability.

Greenhouse Gases (GHG) – Greenhouse gases are gases in the atmosphere that have a warming effect on the climate, including but not limited to: carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, perfluorocarbons and hydrofluorocarbons.

Health Risk Assessment (HRA) – A health risk assessment is the calculation of probable health impacts based on exposure to pollution. See also toxic air contaminants.

High Efficiency Particulate Air Filters (HEPA filters) – High efficiency particulate air filters are a type of mechanical air filter that work by forcing air through a fine mesh filter that traps small harmful particles such as pollen, pet dander, dust mites, and tobacco smoke. HEPA filters can also remove between 50% and 98% of particles in air, depending on the particle size and the filter minimum efficiency reporting value (MERV) rating. See also minimum efficiency reporting value.

Hot Spot – A hot spot is an area where air toxic contaminant concentration levels are higher than in the overall region. See also toxic air contaminants.

Indirect Sources – Indirect sources are land uses and facilities that attract or generate motor vehicle trips and thus result in air pollutant emissions, for example, shopping centers, office buildings, warehouses, and airports.

Industrial Land Use – Industrial land use is land designated by the local governing body for manufacturing, assembly, and distribution of goods; may include land uses such as ports, factories, warehouses, and repair and equipment maintenance shops.

Minimum Efficiency Reporting Value (MERV) – Minimum efficiency reporting values are values that rate the effectiveness of air filters on a scale of 1 to 16. Higher MERV ratings correspond to a greater percentage of particles captured. See also high efficiency particulate air filters.

Mixed-use Land Use – Mixed-used land use is land designated by the local governing body for two or more land uses, such as residential, commercial, cultural, institutional, and/or industrial uses. For example, mixing housing with office and retail uses (both considered commercial land use). Often designed to be a pedestrian-friendly development. See also transit-oriented development and complete streets.

Mobile Sources of Air Pollution – Mobile sources of air pollution are sources of air pollution such as automobiles, motorcycles, trucks, off-road vehicles, boats, trains, and airplanes.

National Ambient Air Quality Standards (NAAQS) – National Ambient Air Quality Standards are standards for the allowable ambient air concentrations of harmful pollutants, established by the U.S. EPA under authority of the Clean Air Act. See also criteria air pollutants. See also ppm and ppb.

Off-road Vehicles – Off-road vehicles are vehicles designed for use on steep or uneven ground or roads, for example, in construction, freight, and agricultural uses. Types include scrapers, backhoes, loaders, and forklifts. Quad bikes and ATVs (all-terrain vehicles) are also off-road vehicles.

On-road Vehicles – On-road vehicles are vehicles designed for use on paved roads, for example passenger cars, buses, motor homes, vans, motorcycles, and various sizes of trucks.

Particulate Matter (PM) – Particulate matter includes a wide range of disparate particles that vary greatly in terms of their size and mass, physical state (solid or liquid), chemical composition, toxicity, and how they behave and transform in the atmosphere. PM is commonly characterized based on particle size. Ultrafine PM includes the very smallest particles less than 0.1 micron in diameter (one micron equals one-millionth of a meter). Fine PM or PM_{2.5} consists of particles 2.5 microns or less in diameter (includes ultrafine PM). Coarse PM refers to particles between 2.5 microns and 10 microns in diameter. The term “coarse” particles may be misleading; it should be emphasized that even “coarse” particles are still very tiny, many times smaller than the diameter of a human hair. PM₁₀ consists of particles 10 microns or less in diameter (includes ultrafine, fine and coarse PM).

Parts Per Billion (ppb) – Parts per billion is a unit of measurement used to specify the concentration of a pollutant, such as in ambient air quality standards. For reference, ppb is the equivalent of one drop in one billion drops of water or about one drop of water in a swimming pool. The NAAQS standard for sulfur dioxide (SO₂) is measured in ppb. See also ppm and NAAQS.

Parts Per Million (ppm) – Parts per million is a unit of measurement used to specify the concentration of a pollutant, such as in ambient air quality standards. For reference, one ppm is the equivalent of about one cup of water in a swimming pool, and one ppm is equivalent to 1,000 ppb. The NAAQS standards for carbon monoxide (CO), nitrogen dioxide (NO₂) and Ozone (O₃) are measured in ppm. See also ppb and NAAQS.

Partial Zero Emission Vehicle (PZEV) – A partial zero emission vehicle is an automobile that has zero evaporative emissions from its fuel system and meets Super Ultra Low Emissions Vehicle

(SULEV) tailpipe-emission standards. Evaporative emissions are the gasoline fumes that escape during refueling or from the fuel tank and supply lines. See also ZEV.

Regional-scale Modeling – Regional-scale modeling is air quality modeling at a regional level, to determine air pollution concentrations within the region. See also community-scale modeling.

Residential Land Use – Residential land use is land designated by the local governing body for dwelling units. Can include single-family and/or multi-family housing, often specifies the number of dwelling units allowed per lot or acre; for example, R-1 means the parcel is zoned for a single-family residence.

Rule Development - Rule Development is the process the Air District uses to write regulations that govern stationary sources of air pollution in the Bay Area, including technical research, engagement with affected stakeholders, public meetings to allow input by affected parties such as industries and communities, and the preparation of CEQA and socio economic analyses (for a list of current rules and regulations see: <https://www.baaqmd.gov/rules-and-compliance/current-rules>).

Safe Routes to School (SRTS) – Safe Routes to School is an international movement and a federal program to make it safe, convenient, and fun for children, including those with disabilities, to bicycle and walk to school.

Sensitive Land Uses – Sensitive land uses are places where sensitive populations are most likely to spend their time, such as schools, playgrounds, daycare centers, nursing homes, medical facilities, and residential communities. See also sensitive populations or sensitive receptors.

Sensitive Populations or Sensitive Receptors – Sensitive populations or sensitive receptors are people, including infants, children, the elderly, those with pre-existing conditions (such as asthma), pregnant women, and athletes (due to higher breathing rates) that are at greater risk than the general population to the adverse health effects of air pollutants. See also sensitive land uses.

Stationary Sources of Air Pollution – Stationary sources of air pollution are non-mobile sources of air pollution such as boilers, gas turbines, petroleum refining and processing units, and manufacturing equipment that emit air pollutants. A facility, such as a power plant or refinery, houses multiple sources within its property.

Solvent Cleaning Operations A process using solvents or solvent vapor to remove water insoluble contaminants such as grease, oils, waxes, carbon deposits, fluxes, and tars from metal, plastic, glass, and other surfaces.

Transloading – The operation of transferring cargo from one transportation mode to another. May also refer to the operation of transferring cargo from one container to another for any of several reasons, such as for consolidation, weight restrictions, palletizing, leasing contract requirements, or supply chain management (e.g., to synchronize delivery of goods to meet real time demands).

Transit-oriented Development (TOD) – A type of land use that includes a mixture of housing, office, retail and/or other amenities integrated into a walkable neighborhood and located within a half-mile of quality public transportation. See also mixed-use land use and complete streets.

Toxic Air Contaminants (TACs) – Toxic air contaminants (also toxic air pollutants or air toxics) are those pollutants that cause, or may cause, cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental and ecological effects. Includes formaldehyde, methanol, ammonia, diesel particulate matter, and many others. See also diesel particulate matter.

Transportation Refrigeration Unit (TRU) – Transportation refrigeration units are refrigeration systems commonly powered by diesel internal combustion engines designed to refrigerate or heat perishable products that are transported in various containers, including semi-trailers, truck vans, shipping containers, and rail cars.

Vehicle Miles Traveled (VMT) – Vehicle miles traveled is the number of miles a vehicle is driven and can be used to measure the number of miles traveled for all vehicles in a geographic region over a given time period. Annual VMT denotes the miles driven over a one-year period.

Zero-emission Vehicle (ZEV) – A zero-emission vehicle is a battery electric, hydrogen fuel cell electric, or other alternatively fueled vehicle that has no direct emissions (evaporative or tailpipe) of pollution. See also PZEV.

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Appendix A – Detailed Action Descriptions

Contents

Appendix A – Detailed Action Descriptions	1
Commercial & Industrial Sources Near Community (C&I)	3
C&I Strategies	3
Detailed Action Descriptions	3
Strategy 1 – Control Fugitive Dust – Actions	3
Strategy 2 – Utilize Permitting to Address Commercial and Industrial Sources Near Community – Actions	7
Strategy 3 – Reduce Exposure from Food Preparation – Actions	11
Strategy 4 – Large Industrial Sources - Actions	14
Strategy 5 – Smaller Commercial and Industrial Sources – Actions	24
Fuel Refining, Support Facilities, Storage, and Distribution	29
Fuel Refining (FR) Strategies	29
Detailed Action Descriptions	30
Strategy 1 – Move Towards a Just Transition – Actions	30
Strategy 2 – Reduce Persistent Flaring and Improve Incident Response – Actions	33
Strategy 3 – Hold Chevron and Other Emitters Accountable for Reducing Pollution and Negative Public Health Impacts from their Operations – Actions	42
Strategy 4 – Reduce Exposure and Public Health Impacts from Toxic Air Contaminants Emitted by the Fuel Refining Sector – Actions	63
Strategy 5 - Reduce Exposure and Public Health Impacts from Particulate Matter and Other Criteria Air Pollutants Emitted by the Fuel Refining Sector – Actions	73
Marine and Rail (M&R)	79
M&R Strategies	79
Detailed Action Descriptions	79
Strategy 1 – Reduce Cancer and Chronic Health Risk from Rail Operations and Facilities – Actions	79
Strategy 2 – Reduce Cancer and Chronic Health Risk from Ocean Going Vessel Operations – Actions	87
Strategy 3 – Reduce Cancer and Chronic Health Risk from Commercial Harbor Craft – Actions	90
Strategy 4 – Reduce Cancer and Chronic Health Risk from Cargo Handling Equipment – Actions	92
Strategy 5 – Reduce Cancer and Chronic Health Risk from Cumulative Impact Facilities and Operations – Actions	93

Public Health	95
Public Health (H) Strategies	95
Detailed Action Descriptions	96
Strategy 1 – Increase Health Resilience and Improve Social Determinants of Health – Actions	96
Strategy 2 – Reduce Air Pollution at Home – Actions	102
Strategy 3 – Promote Healthy Food Access – Actions	113
Strategy 4 – Promote Resilience Centers – Actions	118
Strategy 5 – Pollution & Public Health Education, Outreach, Accountability, and Health Data Tracking – Actions	121
Strategy 6 – More complete health risk data and HRAs, including pollutant interactions – Actions	125
Vehicles and Trucks, Streets and Freeways, Logistics and Warehouses (“Mobile”)	131
Mobile Strategies	131
Detailed Action Descriptions	131
Strategy 1 – Truck-Attracting Businesses – Actions	131
Strategy 2 – Prioritize Air Quality Benefits of Traffic Calming and Other Safety Improvements on Local Streets and Freeways - Actions	136
Strategy 3 – Multi-Jurisdictional Truck Management Plan – Actions	139
Strategy 4 – Equitable Street Sweeping – Actions	141
Strategy 5 – Supporting Transition to Clean Fleets – Actions	145
Strategy 6 – Public Transit, Bike, and Pedestrian Infrastructure – Actions	147
Compliance and Enforcement (C&E)	152
C&E Strategy - Detailed Action Descriptions	152
Strategy 1 Actions	152
Land Use (LU)	156
Land Use Strategy – Detailed Action Descriptions	156
Strategy 1 Actions	156
Resource PTCA Plan Implementation	168
Resource (R) Strategy – Detailed Action Descriptions	168
Strategy 1 Actions	168
Urban Greening (UG)	171
UG Strategy – Detailed Action Descriptions	171
Strategy 1 Actions	171

Commercial & Industrial Sources Near Community (C&I)

C&I Strategies

Control Fugitive Dust

1. Utilize Permitting to Address Commercial and Industrial Sources Near Community
2. Reduce Exposure from Food Preparation
3. Large Industrial Sources
4. Commercial and Smaller Industrial Facilities

Detailed Action Descriptions

Strategy 1 – Control Fugitive Dust – Actions

Action #	C&I 1.1
Action name/brief description	<p>Dust White Paper (identify Best Management Practices (BMPs), evaluate Rule Development opportunities, and implement recommendations)</p> <p>Air District:</p> <ul style="list-style-type: none"> ● Develop and Disseminate Dust White Paper (beginning in 2023) <ul style="list-style-type: none"> ○ identify Best Management Practices (BMPs) ○ evaluate Rule Development opportunities ○ share with community and collect feedback on recommendations/next steps ● Implement White Paper Recommendations <ul style="list-style-type: none"> ○ Develop and adopt rule amendments identified ○ Implement any other recommendations identified <p>CSC and/or community:</p> <ul style="list-style-type: none"> ● Provide feedback via comment letter and/or participation in public workshops on the Dust White Paper ● Provide feedback via comment letter and/or participation in public workshops on draft and proposed rule amendments
Type of action	Regulatory (Air District)
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Advisory Council Particulate Matter Reduction Strategy Report; PM _{2.5} Local Risk Methodology
Partners in action implementation	Local Government Agencies (e.g., planning bodies, Local Enforcement Agencies (LEAs)), rule development stakeholders (community, industry/facilities)
Key stakeholders to engage in action implementation	Community, especially in areas with greater fugitive dust exposure; Industry
Potential obstacles	Ensuring enforceability of BMPs; determining the appropriate level of community engagement on white paper and how to get feedback (as this is the first white paper produced by rule development); Industry resistance to additional burden/costs (potential pushback with respect to best practices and what is appropriate to implement); Differences of opinion on what best practices are (industry may already have self-identified BMPs); Air District staff resources
Action initiation timeframe	Near=<2 years

Action #	C&I 1.1
Action intervention point	Emissions and Exposure (after white paper recommendations are implemented)
Action impact timeframe	Near=<2 years; Mid=2-4 years
Measure/metric of action implementation	Was the White Paper finalized? (yes/no) Were any regulatory actions started due to the White Paper? (yes/no)
Can any emission/exposure reduction be estimated	Too prospective at this time

Action #	C&I 1.2
Action name/brief description	<p>Advocate for and/or Implement Local Best Practices (locally-required BMPs; outreach/education on dust control and BMPs) with Partners</p> <p>Air District:</p> <ul style="list-style-type: none"> ● Recommend local governments include BMPs for Fugitive Dust in their conditions of approval for their projects (with an accessible list of up-to-date BMPs available via the web; See an initial list of BMPs provided below): <ul style="list-style-type: none"> ○ BMP #1: All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. ○ BMP #2: All haul trucks transporting soil, sand, or other loose material off-site shall be covered. ○ BMP #3: All visible mud or dirt trackout onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. ○ BMP #4: All vehicle speeds on unpaved roads shall be limited to 15 mph. ○ BMP #5: All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. ○ BMP #6: All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph. ○ BMP #7: All trucks and equipment, including their tires, shall be washed off prior to leaving the site. ○ BMP #8: Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel. ○ BMP #9: Publicly visible signs shall be posted with the telephone number and name of the person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's General Air Pollution Complaints number shall also be visible to ensure compliance with applicable regulations.

Action #	C&I 1.2
	<ul style="list-style-type: none"> ○ Additional BMP: Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent. ○ Additional BMP: Limit the simultaneous occurrence of excavation, grading, and ground-disturbing construction activities. ○ Additional BMP: Install wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity. ○ Additional BMP: Plant vegetative ground cover (e.g., fast-germinating native grass seed) in disturbed areas as soon as possible and watered appropriately until vegetation is established ○ Additional BMP: Minimize the amount of excavated material or waste materials stored at the site. ○ Additional BMP: Hydroseed or apply non-toxic soil stabilizers to construction areas, including previously graded areas, that are inactive for at least 10 calendar days. ○ Additional BMP: Require zero visible fugitive dust and use fence line air monitoring to demonstrate compliance with this requirement. ○ Additional BMP: Set requirements for when dust generating operations have to be shut down due to dust crossing the property boundary or if dust is contained within the property boundary but not controlled after a specified number of minutes. ○ Additional BMP: Prohibiting grading on days when a Spare the Air is in effect (https://www.sparetheair.org/) ○ Additional BMP: Prohibiting grading on days with an Air Quality Index forecast of greater than 100 for particulates for the PTCA area ● Ensure BMPs are easily accessible by Local Government agencies as well as project implementers <ul style="list-style-type: none"> ○ Work with local government partners to define what is easily accessible (e.g., website posting in an intuitive location) ○ Update initial list of BMPs as necessary, informed by work such as the Dust White Paper
Type of action	Regulatory (Local Government)
Lead action implementor	Local Government Planning Agencies, including: City of Richmond Planning Division, City of Richmond Building Division, Contra Costa County Department of Conservation and Development, City of San Pablo Planning & Zoning Division, City of San Pablo Building Services Division
Related existing Program, Policy, or Initiative	Advisory Council Particulate Matter effort - Particulate Matter Reduction Strategy Report; Air District Local Government Program
Partners in action implementation	Air District
Key stakeholders to engage in action implementation	Community; industry/construction development stakeholders

Action #	C&I 1.2
Potential obstacles	Need for enforcement resources for conditions of approval; political pushback on additional burden imposed for projects; Staff resources at local jurisdictions to champion the implementation of BMPs
Action initiation timeframe	Near=<2 years
Action intervention point	Emissions
Action impact timeframe	Near=<2 years
Measure/metric of action implementation	Number of standard conditions of approval updated to include fugitive dust provisions (e.g., counts from all three jurisdictions - unincorporated Contra Costa County, City of Richmond and City of San Pablo)
Can any emission/exposure reduction be estimated	Can estimate post-implementation, but too speculative pre-implementation because of variability of projects and BMPs

Action #	C&I 1.3
Action name/brief description	Gap Analysis RE Dust White Paper and BMPs for Community-Identified Sources Air District: <ul style="list-style-type: none"> ● Conduct a gap analysis, after implementing C&I 1.1 and 1.2, to determine if additional emissions and exposure reduction actions are needed for Community-Identified Sources (including large sources) <ul style="list-style-type: none"> ○ Determine whether implementation of the white paper recommendations and/or BMPs was sufficient ○ If not, work with CSC to address remaining concerns
Type of action	Further research
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Actions 1.1 and 1.2 for Control Fugitive Dust
Partners in action implementation	Community
Key stakeholders to engage in action implementation	Community; Industry
Potential obstacles	See C&I 1.1 and 1.2; Additionally, there may be challenges finding additional solutions that go beyond C&I 1.1 and 1.2, if these actions do not adequately decrease and/or address all fugitive dust concerns
Action initiation timeframe	Near=<2 years; Mid=2-4 years (note: timeframe is dependent on progress on C&I 1.1 and 1.2)
Action intervention point	Emissions
Action impact timeframe	Near=<2 years; Mid=2-4 years (note: timeframe is dependent on progress on C&I 1.1 and 1.2)
Measure/metric of action implementation	Gaps analysis conducted (yes/no) Facilities reviewed via further study (#)

Action #	C&I 1.3
Can any emission/exposure reduction be estimated	-

Strategy 2 – Utilize Permitting to Address Commercial and Industrial Sources Near Community – Actions

Action #	C&I 2.1
Action name/brief description	<p>Undertake an Education, Outreach, and Communications effort with respect to Air District permitting:</p> <p>Air District:</p> <ul style="list-style-type: none"> ● Conduct Education and Outreach around <ul style="list-style-type: none"> ○ Navigating the Air District website, which could cover topics such as <ul style="list-style-type: none"> ■ Permit applications received (https://www.baaqmd.gov/permits/public-notices/permit-applications-received) ■ Listserv sign-ups for notifications ■ Opportunities for community participation to meaningfully impact the permitting process (https://www.baaqmd.gov/permits/public-notices/public-comments-on-permit-applications) ■ Accessing information in permits, including <ul style="list-style-type: none"> ● Title V compliance schedules ● Monitoring requirements <ul style="list-style-type: none"> ○ use a fuel refining facility permit as an example when developing materials for this ○ Utilizing the Air District Permit Ombudsman ● Consider additional education and outreach tools, like <ul style="list-style-type: none"> ○ Developing a video or instruction for how to use these features ● Consider additional staffing in order to cover additional work for this effort. ● Cross-reference: Community Engagement Subcommittee <ul style="list-style-type: none"> ○ Consider need for translating permit notices into various languages ○ And consider creating focused sign-up opportunities for receiving notices about new permit applications - via listserv emails or text notification - that could be set for an area (e.g., the PTCA area) or facility type (e.g., for fuel refining activities)
Type of action	Education/Outreach
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Permitting
Partners in action implementation	n/a

Action #	C&I 2.1
Key stakeholders to engage in action implementation	CSC, community
Potential obstacles	Staff resources; Identifying the best mechanisms for education and outreach could take some iteration, which could be seen as an obstacle as well
Action initiation timeframe	Near =<2 years
Action intervention point	n/a
Action impact timeframe	Near=<2 years; Mid=2-4 years
Measure/metric of action implementation	Have education and outreach materials been developed? Have education and outreach materials been translated and distributed?
Can any emission/exposure reduction be estimated	-

Action #	C&I 2.2
Action name/brief description	Maintain and strengthen collaborative efforts with other Air District Divisions and external partners Air District Engineering Division: <ul style="list-style-type: none"> ● Continue with effort to develop protocols for working with enforcement, meteorology and measurements, and legal staff to ensure enforceability of permit conditions and continuous compliance with emissions limits ● Continue to coordinate with the Planning division to comment on CEQA projects early on, including administrative drafts <ul style="list-style-type: none"> ○ Consider additional staffing in order to cover larger numbers of projects in greater detail ● Work with Community Engagement and District Counsel to develop equitable protocols for responding to requests to extend comment periods for permits. ● Strengthen relationship with the City and County and other entities that often act as CEQA lead agencies Cross-cutting for Fuel Refining: <ul style="list-style-type: none"> ● Specifically, for fuel refining work, the Permit Ombudsman, C&E Ombudsman and Meteorology and Measurements, should identify opportunities to strengthen collaboration ● Cross-references: FR 3.5 (NOVs), 3.14 (monitoring), FR 3.12 (CEQA)
Type of action	Permitting
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Permitting
Partners in action implementation	various Air District divisions (including enforcement, meteorology and measurements, legal, and planning)

Action #	C&I 2.2
Key stakeholders to engage in action implementation	City, County, other entities that often act as lead agencies CSC, community
Potential obstacles	Resources, in terms of staff time, can be an obstacle that limits collaboration. Establishing lasting relationships with CEQA lead agencies could be affected by any turnover of CEQA-related staffing either internally or externally over time
Action initiation timeframe	Near =<2 years
Action intervention point	n/a
Action impact timeframe	Near=<2 years
Measure/metric of action implementation	How many CEQA projects in the PTCA area have been commented on by Engineering and Planning? (#) Have equitable protocols for responding to requests to extend comment periods for permits been developed? (y/n)
Can any emission/exposure reduction be estimated	-

Action #	C&I 2.3
Action name/brief description	Conduct periodic reviews of emissions reduction progress for Title V facilities <ul style="list-style-type: none"> ● Conduct a detailed analysis, including looking for trends across years <ul style="list-style-type: none"> ○ work with CSC to define objectives of what analysis should accomplish ● As applicable, produce a transparent overview of emissions reduction progress <ul style="list-style-type: none"> ○ Include these overviews as part of PTCA CERP Annual Reports ● Prioritize implementation of this action for Fuel refining facilities first Cross-reference: Resource PTCA Plan Implementation
Type of action	Permitting
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Permitting; Emissions reporting
Partners in action implementation	CSC
Key stakeholders to engage in action implementation	CSC
Potential obstacles	Staffing resources to conduct additional analyses will present an obstacle
Action initiation timeframe	Near=<2 years

Action #	C&I 2.3
Action intervention point	n/a
Action impact timeframe	Near=<2 years; Mid=2-4 years
Measure/metric of action implementation	How many Title V facilities received a review? (#)
Can any emission/exposure reduction be estimated	-

Action #	C&I 2.4
Action name/brief description	<p>Open permitting rules for rule development. Evaluate rule amendment opportunities</p> <ul style="list-style-type: none"> ● Evaluate rule amendments covering: <ul style="list-style-type: none"> ○ Clean up of exemptions ○ Rule 2-1: Consider improvements to overburdened community (OBC) maps, including expanded buffer zones to resolve any idiosyncrasies in the maps ○ Rule 2-2: Consider updates to New Source review requirements with respect to PM_{2.5} NAAQS revisions ○ Rule 2-5: modify Table 2-5-1 Toxic Air Contaminant Trigger Levels, which contains the list of TACs and health effects values <ul style="list-style-type: none"> ■ to add newer OEHHA compounds and values and become consistent with the state ● When the rule development process is started, engage CSC and community to identify rule concepts ● Cross-reference: Implement PM_{2.5} Local Risk Methodology (FR 5.3) ● Cross-reference: FR 3.10 Title VI and Disparate Impact Analysis ● Cross-reference: Land Use Action 1.4 (LU 1.4): Site Development Standards and Conditions of Approval
Type of action	Regulatory (Air District)
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Permitting, Rules 2-1, 2-5, and Regulation 3
Partners in action implementation	Air District: various divisions
Key stakeholders to engage in action implementation	CSC, community
Potential obstacles	Staffing resources
Action initiation timeframe	Near=<2 years; Mid=2-4 years
Action intervention point	Emissions, Exposure

Action #	C&I 2.4
Action impact timeframe	Mid=2-4 years; Long > 4 years
Measure/metric of action implementation	<ul style="list-style-type: none"> • Were draft rule amendments developed and released for feedback? (y/n) • Were rule amendments adopted? (y/n)
Can any emission/exposure reduction be estimated	Too speculative

Strategy 3 – Reduce Exposure from Food Preparation – Actions

Action #	C&I 3.1
Action name/brief description	<p>Restaurants White Paper</p> <p>Develop a white paper that will consider any need for a PTCA inventory refinement (e.g., for emissions from charbroilers, cooking beef or other meats etc., evaluations of volumes cooked; impacts from wood-burning cooking), any unintended consequences from regulation (e.g., impacts on small businesses) and how best to engage with restaurants (especially small businesses). Initiate by the end of 2024.</p> <p>Specifically, the white paper will research control technologies: venting, and controls for emissions into ambient air; the indoor impacts from cooking (including with respect to the source of energy used – e.g., Natural Gas). The white paper could consider implementation in coordination with Environmental Health restaurant inspections. The use of incentives for driving change in this industry should also be seriously evaluated within the white paper.</p> <p>This action will involve engagement with restaurant and food preparation stakeholders and the public.¹</p>
Type of action	Further research; Regulatory; Incentives
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Air District Healthy Homes Program; Contra Costa County Electrification Ordinance; City of Richmond Electrification Ordinance; City of San Pablo Electrification Ordinance
Partners in action implementation	Community, Restaurants; East Bay Small Business Development Center (https://www.eastbaysbdc.org/), Chamber of Commerce, Richmond Main Street
Key stakeholders to engage in action implementation	Community, Restaurants; East Bay Small Business Development Center (https://www.eastbaysbdc.org/), Chamber of Commerce, Richmond Main Street

¹ See Jamboard slides from 11/28/22 PTCA CSC Meeting (Slide 20) regarding ideas for engaging small businesses and the public in this white paper and the implementation of all actions under this Strategy: <https://jamboard.google.com/d/1zhAZH-dlHXNeqFDIzAo5MOI2Oj3e6wkcCBqoeJuMAM4/viewer?f=19>

Action #	C&I 3.1
Potential obstacles	Air District staff time available to draft the white paper; Any data gaps in restaurant data needed to fulfill the goals of the white paper could delay implementation of findings from the white paper
Action initiation timeframe	Near=<2 years
Action intervention point	Emissions
Action impact timeframe	Mid=2-4 years
Measure/metric of action implementation	<ul style="list-style-type: none"> ● Was a white paper produced? ● Was a rule development effort or incentive program initiated?
Can any emission/exposure reduction be estimated	-

Action #	C&I 3.2
Action name/brief description	<p>Other Food Preparation: Evaluate the Need for Further Study and/or Additional Actions</p> <p>Evaluate the need for further study (e.g., using monitoring results from the CAMP; modeling findings) regarding potential additional actions that would cover the emissions and exposure from other food preparation activities, outside of standard restaurants. This could include, but is not limited to:</p> <ul style="list-style-type: none"> ● Impacts from and solutions for other misc. sources such as: <ul style="list-style-type: none"> ○ Coffee roasters; Banana ripening rooms; Bakeries; Breweries; Food Trucks and Food Sales Events (including clean energy alternatives for powering these operations)
Type of action	Further research
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	PTCA CAMP Results and Monitoring Outreach Team (MOT) work; Social Pinpoint findings
Partners in action implementation	CARB, Operators of other food preparation facilities (as listed above)
Key stakeholders to engage in action implementation	Other food preparation facilities, and Communities living nearby
Potential obstacles	Obstacles would include access to information and data for other food preparation facilities, which is likely needed to be able to assess if additional controls or actions are needed.
Action initiation timeframe	Near=<2 years
Action intervention point	Emissions
Action impact timeframe	Near=<2 years; Mid=2-4 years

Action #	C&I 3.2
Measure/metric of action implementation	<ul style="list-style-type: none"> • Were any food preparation activities identified via review of the CAMP results (to determine if further study is needed)? • Were additional actions undertaken to address any identified food preparation activities, including further study?
Can any emission/exposure reduction be estimated	-

Action #	C&I 3.3
Action name/brief description	<p>Evaluate potential mechanisms for achieving voluntary emissions reductions from food preparation facilities and operations (i.e., incentives and/or behavioral change campaigns) and implement promising mechanisms on a rolling basis</p> <p>This action entails evaluating the potential for incentives to reduce PM, such as small business incentives, as well as researching simpler ways that would help restaurants reduce their PM_{2.5} emissions (whether via outreach encouraging voluntary action or monetary incentives). This is intended to encourage more immediate reductions, before any potential rule requirements are developed and go into effect. This could also inform the white paper evaluation of incentives opportunities.</p> <p>For example, this action could evaluate and/or implement an outreach and education campaign to partner with restaurants, to become “air quality friendly” partners in reducing PM from cooking meat. This could involve a “certification” for restaurants as “air quality friendly” partners of Air District, once they have either achieved a certain reduction in PM, and/or a certain reduction in the amount of meat cooked (to be determined by community). This action would be similar to restaurant partnerships formed as part of the Billion Oyster Project on the East Coast, for example: https://www.billionoysterproject.org/restaurants</p> <p>It should be noted that further evaluation for incentives and/or outreach mechanisms are not dependent upon each other, and evaluation for both mechanisms does not need to be finished before starting implementation for one or the other. Early action is the key for this approach.</p>
Type of action	Further research; Incentives; Education/Outreach
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	CARB Statewide Strategy for Commercial Cooking Air District and CARB incentives programs
Partners in action implementation	CARB; Small businesses; Community living or working adjacent to these businesses; Small business associations; Contra Costa County Health Services
Key stakeholders to engage in action implementation	CARB; Small businesses; Community living or working adjacent to these businesses; Small business associations; Contra Costa County Health Services
Potential obstacles	Staff capacity to research into the potential for incentives and into simpler ways to reduce PM _{2.5} before a potential rule requirement. It could also be

Action #	C&I 3.3
	possible that there are not many options available for mechanisms to reduce emissions, aren't any relevant incentives, and/or that an outreach campaign would be ineffective. Administrative work associated with setting up a funding source would require resources, which may not be easily available. There also may be issues with availability of funds. Technical feasibility may be an obstacle with respect to identifying mechanisms that can achieve reductions.
Action initiation timeframe	Near=<2 years
Action intervention point	Emissions
Action impact timeframe	Near=<2 years; Mid=2-4 years
Measure/metric of action implementation	Was the research conducted for an incentive and/or outreach campaign to reduce PM from food preparation facilities and/or operations? (yes/no) Was an outreach and education campaign created? (yes/no) Were incentives opportunities identified? (yes/no)
Can any emission/exposure reduction be estimated	-

Strategy 4 – Large Industrial Sources - Actions

Action #	C&I 4.1
Action name/brief description	<p>Implement Rule 11-18 at Large Facilities (Non-Fuel Refining)</p> <p>This action will cover all non-fuel refining facilities subject to Rule 11-18 (See Fuel Refining Strategy 1 for strategies regarding Fuel Refining facilities subject to Rule 11-18). It seeks to reduce localized exposure from TAC emissions from large facilities in the PTCA area.</p> <p>Air District:</p> <ul style="list-style-type: none"> Implement 11-18 at all non-fuel-refining facilities subject to the rule <ul style="list-style-type: none"> ● For Phase 1 facilities (non-fuel refining), implement 11-18 in an expeditious manner <ul style="list-style-type: none"> ○ Complete and publish the Health Risk Assessment (HRA) <ul style="list-style-type: none"> ■ Finalize HRA expeditiously ○ If an RRP is required, <ul style="list-style-type: none"> ■ Evaluate the Risk Reduction Plan (RRP) expeditiously <ul style="list-style-type: none"> ● Perform all applicable global best practices analyses to ensure RRP is maximally stringent ■ Perform retrospective analysis on RRP to identify any gaps in risk reduction that would remain after Rule 11-18 implementation <ul style="list-style-type: none"> ● Consult with CSC on RRP targets in order to determine priority concerns with respect to remaining risk ● For any Phase 2 facilities (non-fuel refining), implement 11-18 in an expeditious manner

Action #	C&I 4.1
	<ul style="list-style-type: none"> ○ Via the same flow of steps outlined above for Phase 1 facilities ● Also, provide CSC and stakeholders listed above regular Rule 11-18 HRA and RRP implementation status reports <ul style="list-style-type: none"> ○ Cross-reference Fuel Refining Action 4.4: Rule 11-18 Implementation Status Report <p>CSC and community:</p> <ul style="list-style-type: none"> ● For any Phase 1 and Phase 2 facilities (non-fuel refining) consider the following: <ul style="list-style-type: none"> ○ Comment on HRA during public comment period ○ Comment on RRP during public comment period ○ Consult with NGO support for a third-party perspective <p><u>Phase 1 and 2 Facilities – Non-Fuel Refining (as of 6.1.2023)</u></p> <p>Phase 1:</p> <ul style="list-style-type: none"> ● West Contra Costa Landfill (see C&I Action 4.4) <p>Phase 2:</p> <ul style="list-style-type: none"> ● Levin Richmond Terminal Corporation (see C&I Action 4.2) ● Gold Bond Building Products, LLC (New NGC, Inc.) ● West County Wastewater District ● City of Richmond Wastewater Treatment Plant ● East Bay MUD ● State of California (Richmond Parkway Laboratory) ● BNSF Railway Company ● Wareham Property Group – EPA Lab
Type of action	Regulatory (Air District) Implementation
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Rule 11-18
Partners in action implementation	Phase 1 and 2 facilities (that are non-fuel refining)
Key stakeholders to engage in action implementation	CSC and community
Potential obstacles	Staffing for the implementation of Rule 11-18 can be an obstacle, as the rule implementation timelines are impacted by resource limitations. Additionally, any facility subject to Rule 11-18 may respond to the HRA and RRP steps in 11-18 implementation in a way that extends timelines for implementation to the maximum extent possible. Further, there might be obstacles with respect to engaging NGO partners for support on HRA and RRP reviews, should an NGO not have capacity at any given time to provide said support.
Action initiation timeframe	Near=<2 years; Mid=2-4 years
Action intervention point	Emissions, Exposure
Action impact timeframe	Long > 4 years

Action #	C&I 4.1
Measure/metric of action implementation	<ul style="list-style-type: none"> • Was an HRA produced (for a given facility)? • If an RRP was required: <ul style="list-style-type: none"> ○ Was an RRP produced (for a given facility)? ○ Was an RRP implemented (for a given facility)?
Can any emission/exposure reduction be estimated	Too speculative until RRP's are available

Action #	C&I 4.2
Action name/brief description	<p>Levin Terminal: Implement Rule 11-18 and Conduct Gap Analysis</p> <p>This action will seek to reduce both exposure to toxics and particulate matter emissions that result in community exposure from Levin Terminal.</p> <p>Air District:</p> <ul style="list-style-type: none"> • Implement Rule 11-18 at Levin Terminal (See Action 4.1) <p>and</p> <ul style="list-style-type: none"> • Evaluate implementation of Settlement Agreement between City of Richmond and Levin Terminal, addressing the City Ordinance and requirements for the period of time leading up to the 2026 phase out of coal and petroleum coke (“petcoke”) storage and handling • Working with the City of Richmond, ensure compliance with conditions and terms included in the Settlement Agreement • Further, identify any gaps in the Settlement Agreement, or potential for expedition of conditions and terms. Specifically: <ul style="list-style-type: none"> ○ Amendments to Ordinance: <ul style="list-style-type: none"> ■ Air District and the CSC and/or broader community meet with the City of Richmond to explore potential for expediting the amortization by 1-3 years. ○ Facilitation of Transition to Other Commodities: <ul style="list-style-type: none"> ■ Track and weigh-in on the transition to alternate uses and other commodities (for post-2026), and comment as applicable and necessary to protect public health and reduce emissions. Including but not limited to: <ul style="list-style-type: none"> • Any CEQA analysis undertaken (cross-reference C&I 2.2) ○ Additional Dust Control Measures: <ul style="list-style-type: none"> ■ Evaluate mechanisms to impose additional dust control measures, including: <ul style="list-style-type: none"> • Working with the City of Richmond to either require and/or incentivize additional Dust Control Measures, such as those identified in the C&I Fugitive Dust Strategy. • Utilizing the Dust White Paper from the C&I Fugitive Dust Strategy to identify regulatory and/or incentive mechanisms that could be applied at the Air District level.

Action #	C&I 4.2
	<ul style="list-style-type: none"> ● Air District: Include in Annual C&E Report (see C&E 1.3: Update CSC regularly (with annual community-friendly reports)) a Status and Overview of Levin Terminal Issues <ul style="list-style-type: none"> ○ additionally, <ul style="list-style-type: none"> ■ provide information in the annual report on any actions taken, processes put in place, measures implemented to address emissions and/or exposure ■ upload NOV information to NOV query tool as soon as available ■ and, as requested by the CSC, report out more frequently ● Air District or CSC: Share Annual C&E report and, as applicable, any interim reports, with any nearby community associations (e.g., neighborhood councils) ● Air District: Cross-reference Fuel Refining Action 3.8: Legal Approaches <ul style="list-style-type: none"> ○ include review of compliance history for facilities identified in 'C&I Strategy 4 Large Industrial Facilities', as part of collaborative development
Type of action	Further research; Incentives; Regulatory
Lead action implementor	Air District; City of Richmond
Related existing Program, Policy, or Initiative	City of Richmond and Levin Terminal Settlement Agreement; Air District CEQA Thresholds; Air District CEQA commenting practice
Partners in action implementation	City of Richmond; CSC; Levin Terminal
Key stakeholders to engage in action implementation	City of Richmond; CSC and community; Levin Terminal
Potential obstacles	Resources; City of Richmond capacity to revisit Settlement Agreement and/or pursue additional actions to this end; Facility willingness to add additional controls/best practices to their operations
Action initiation timeframe	Near=<2 years
Action intervention point	Emissions, Exposure
Action impact timeframe	Near=<2 years; Mid=2-4 years
Measure/metric of action implementation	<ul style="list-style-type: none"> ● Was an HRA produced (for a given facility)? ● If an RRP was required: <ul style="list-style-type: none"> ○ Was an RRP produced (for a given facility)? ○ Was an RRP implemented (for a given facility)? ● Was a gap analysis conducted with respect to the settlement agreement and additional PM reduction opportunities? (yes/no?)
Can any emission/exposure reduction be estimated	-

Action #	C&I 4.3
Action name/brief description	<p>Gold Bond (New NGC, Inc.): Implement Rule 11-18 and Conduct Gap Analysis</p> <p>This action will seek to reduce both exposure to toxics and reduce particulate matter exposure and visible emissions from Gold Bond (New NGC, Inc.).</p> <p>Air District:</p> <ul style="list-style-type: none"> ● Implement Rule 11-18 at Gold Bond (See Action 4.1) <p>and</p> <p>Air District and/or CSC:</p> <ul style="list-style-type: none"> ● Air District: Track success of relevant C&I strategies expected to address particulate matter issues at Gold Bond. <ul style="list-style-type: none"> ○ Specifically, <ul style="list-style-type: none"> ▪ C&I Strategy 1: Control Fugitive Dust, ▪ C&E 1.2: Conduct targeted investigations of facilities of community concern ○ Additionally, if any gaps are identified where existing strategies/actions do not sufficiently address concerns with Gold Bond, determine additional actions needed ● Air District: Include in Annual C&E Report (see C&E 1.3: Update CSC regularly (with annual community-friendly reports)) a Status and Overview of Gold Bond Issues <ul style="list-style-type: none"> ○ additionally, <ul style="list-style-type: none"> ▪ provide information in the annual report on any actions taken, processes put in place, measures implemented to address emissions and/or exposure ▪ upload NOV information to NOV query tool as soon as available ○ and, as requested by the CSC, report out more frequently ● Air District or CSC: Share Annual C&E report and, as applicable, any interim reports, with any nearby community associations (e.g., neighborhood councils) ● Air District: Cross-reference Fuel Refining Action 3.8: Legal Approaches <ul style="list-style-type: none"> ○ include review of compliance history for facilities identified in 'C&I Strategy 4 Large Industrial Facilities', as part of collaborative development
Type of action	Further Study; Regulatory; Enforcement
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Air District Compliance and Enforcement; Dust White Paper; PM _{2.5} Local Risk Methodology
Partners in action implementation	Community, CSC, Gold Bond
Key stakeholders to engage in action implementation	Community, CSC, Gold Bond
Potential obstacles	Current penalty practices may not be sufficient motivation for facilities known to be repeat violators. Gold Bond has already received Notices of Violation

Action #	C&I 4.3
	<p>for excessive visible emissions and public nuisance. While the Air District has been working with the facility to solve these issues, if the pattern does not change and these violations continue, Air District may need to revisit their approach.</p> <p>Further, as a result of the white paper evaluation under C&I Strategy 1: Control Fugitive Dust, it may be determined that a regulatory mechanism to require additional Fugitive Dust Control measures is not the most effective tool to use. There also may be challenges with enforceability of certain requirements, including issues with measuring fugitive dust emissions and/or documenting exceedances. For these reasons, there may be obstacles with respect to better controlling or containing Gold Bond’s emissions from offloading and stockpiles.</p>
Action initiation timeframe	Near=<2 years
Action intervention point	Emissions, Exposure
Action impact timeframe	Near=<2 years; Mid=2-4 years
Measure/metric of action implementation	<ul style="list-style-type: none"> • Was an HRA produced (for a given facility)? • If an RRP was required: <ul style="list-style-type: none"> ○ Was an RRP produced (for a given facility)? ○ Was an RRP implemented (for a given facility)? • Were additional enforcement mechanisms implemented? (yes/no) • Were additional Fugitive Dust controls implemented? (yes/no) • Has the number of Notices of Violations decreased? (yes/no) • Was an annual report produced and shared? (yes/no)
Can any emission/exposure reduction be estimated	-

Action #	C&I 4.4
Action name/brief description	<p>West Contra Costa County (WCCC) Landfill</p> <p>This strategy will seek to decrease particulate matter from the WCCC Landfill site, as well as address the source of the facility’s complaints and violations.</p> <p>Air District:</p> <ul style="list-style-type: none"> • Implement Rule 11-18 at West Contra Costa County (WCCC) Landfill (See Action 4.1) <p>and</p> <p>Air District and/or CSC:</p> <ul style="list-style-type: none"> • Air District: Track success of other relevant C&I strategies expected to address particulate matter issues at WCCC Landfill. <ul style="list-style-type: none"> ○ Specifically, <ul style="list-style-type: none"> ▪ C&I Strategy 1: Control Fugitive Dust, ▪ C&E 1.2: Conduct targeted investigations of facilities of community concern

Action #	C&I 4.4
	<ul style="list-style-type: none"> ○ Additionally, if any gaps are identified where existing strategies/actions do not sufficiently address concerns with WCCC Landfill, determine additional actions needed ● Air District: Include in Annual C&E Report (see C&E 1.3: Update CSC regularly (with annual community-friendly reports)) a Status and Overview of WCCC Landfill Issues <ul style="list-style-type: none"> ○ additionally, <ul style="list-style-type: none"> ▪ provide information in the annual report on any actions taken, processes put in place, measures implemented to address emissions and/or exposure ▪ upload NOV information to NOV query tool as soon as available ○ and, as requested by the CSC, report out more frequently ● Air District or CSC: Share Annual C&E report and, as applicable, any interim reports, with any nearby community associations (e.g., neighborhood councils) ● Air District: Cross-reference Fuel Refining Action 3.8: Legal Approaches <ul style="list-style-type: none"> ○ include review of compliance history for facilities identified in ‘C&I Strategy 4 Large Industrial Facilities’, as part of collaborative development ● Air District: Track Raven SR Bioenergy Project for potential impacts, including the following topics of concern: toxics, odors <ul style="list-style-type: none"> ○ Track CEQA commitments: implementation of AQ-related mitigations included in the Mitigated Negative Declaration
Type of action	Further Study; Regulatory; Enforcement
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Air District Compliance and Enforcement; Dust White Paper; PM _{2.5} Local Risk Methodology
Partners in action implementation	Community, CSC, WCCC Landfill
Key stakeholders to engage in action implementation	Community, CSC, WCCC Landfill
Potential obstacles	<p>Current penalty practices may not be sufficient motivation for facilities known to be repeat violators. Since the WCCC has already received Notices of Violation for excessive visible emissions and public nuisance, if there haven’t been any changes since these violations, Air District may need to revisit their approach.</p> <p>As a result of the white paper evaluation under C&I Strategy 1: Control Fugitive Dust, it may be determined that a regulatory mechanism to require additional Fugitive Dust Control measures is not the most effective tool to use. There also may be challenges with enforceability of certain requirements, including issues with measuring fugitive dust emissions and/or documenting exceedances. For these reasons, there may be obstacles.</p>
Action initiation timeframe	Near=<2 years

Action #	C&I 4.4
Action intervention point	Emissions, Exposure
Action impact timeframe	Near=<2 years; Mid=2-4 years
Measure/metric of action implementation	<ul style="list-style-type: none"> • Was an HRA produced (for a given facility)? • If an RRP was required: <ul style="list-style-type: none"> ◦ Was an RRP produced (for a given facility)? ◦ Was an RRP implemented (for a given facility)? • Was a gap analysis conducted with respect to the settlement agreement and additional PM reduction opportunities? (yes/no?) • Were additional enforcement mechanisms implemented? (yes/no) • Were additional Fugitive Dust controls implemented? (yes/no) • Has the number of Notices of Violations decreased? (yes/no) • Was an annual report produced and shared? (yes/no)
Can any emission/exposure reduction be estimated	-

Action #	C&I 4.5
Action name/brief description	<p>Metal Recycling (Sims, Pick n Pull): Source Evaluation</p> <p>Air District and/or CSC:</p> <ul style="list-style-type: none"> • Air District: Develop Metals White paper evaluating problems and solutions to address community concerns and environmental impacts associated with metals facilities (beginning in 2023) <ul style="list-style-type: none"> - align with WCOAP Strategy # 68: "amendments to further reduce emissions from metal recycling and foundry operations..." • Air District: Improve emissions inventory data for Sims Metals <ul style="list-style-type: none"> - estimate fugitive PM and TAC emissions - e.g., deploy fallout plates • Air District: Track success of relevant C&I strategies expected to address particulate matter issues at metal recycling facilities in Richmond (Sims Metal and Pick n Pull). <ul style="list-style-type: none"> - Specifically, <ul style="list-style-type: none"> - C&I Strategy 1: Control Fugitive Dust, - C&E 1.2: Conduct targeted investigations of facilities of community concern - Additionally, if any gaps are identified where existing strategies/actions do not sufficiently address concerns with Sims Metal and/or Pick n Pull, determine additional actions needed • Air District: Include in Annual C&E Report (See C&E 1.3: Update CSC regularly (with annual community-friendly reports)) a Status and Overview of Metal Recycling facility Issues <ul style="list-style-type: none"> - additionally, <ul style="list-style-type: none"> - provide information in the annual report on any actions taken, processes put in place, measures implemented to address emissions and/or exposure

Action #	C&I 4.5
	<ul style="list-style-type: none"> - upload NOV information to NOV query tool as soon as available - and, as requested by the CSC, report out more frequently • Air District or CSC: Share Annual C&E report and, as applicable, any interim reports, with any nearby community associations (e.g., neighborhood councils) • Air District: Cross-reference Fuel Refining Action 3.8: Legal Approaches <ul style="list-style-type: none"> - include review of compliance history for facilities identified in 'C&I Strategy 4 Large Industrial Facilities', as part of collaborative development
Type of action	Further Study; Regulatory; Enforcement
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Rule Development Source Evaluations, C&E, PM _{2.5} Local Risk Methodology
Partners in action implementation	CSC
Key stakeholders to engage in action implementation	CSC, community, Sims Metals, Pick n Pull
Potential obstacles	Resources to conduct and complete actions (e.g., white paper); challenges in estimating fugitive emissions
Action initiation timeframe	Near=<2 years
Action intervention point	Emissions, Exposure
Action impact timeframe	Near=<2 years; Mid=2-4 years
Measure/metric of action implementation	<p>Was a white paper drafted? (yes/no)</p> <p>Was a white paper released for public input? (yes/no)</p> <p>Was a white paper finalized? (yes/no)</p> <p>Were emissions estimates updated? (yes/no)</p> <p>Were additional enforcement mechanisms implemented? (yes/no)</p> <p>Were additional Fugitive Dust controls implemented? (yes/no)</p> <p>Has the number of Notices of Violations decreased? (yes/no)</p> <p>Was an annual report produced and shared? (yes/no)</p>
Can any emission/exposure reduction be estimated	Too speculative at this time

Action #	C&I 4.6
Action name/brief description	<p>Other Large Industrial Facilities: Gap Analysis</p> <p>Air District and/or CSC:</p> <ul style="list-style-type: none"> • Air District: Track success of relevant Commercial & Industrial strategies and actions expected to address toxic air contaminant and/or particulate matter issues at other large industrial facilities of concern

Action #	C&I 4.6
	<p>(in addition to the facilities identified in C&I Actions 4.2-4.5) in Richmond.</p> <ul style="list-style-type: none"> ○ These relevant actions include <ul style="list-style-type: none"> ▪ C&I Strategy 1: Control Fugitive Dust ▪ Compliance & Enforcement Strategy ○ If any gaps are identified where existing strategies/actions do not sufficiently address concerns with a given facility, determine additional actions needed ● Air District: Include in Annual C&E Report (see C&E 1.3: Update CSC regularly (with annual community-friendly reports)) a Status and Overview of facility issues <ul style="list-style-type: none"> ○ additionally, <ul style="list-style-type: none"> ▪ provide information in the annual report on any actions taken, processes put in place, measures implemented to address emissions and/or exposure ▪ upload NOV information to NOV query tool as soon as available ○ and, as requested by the CSC, report out more frequently ● For additional facilities, specifically: <ul style="list-style-type: none"> ○ <i>Veolia: include, as well, a review of</i> <ul style="list-style-type: none"> ▪ <i>the effectiveness of facility capital improvements made to reduce odors</i> ▪ <i>the plant equipment and operations for compliance following the completion of improvements made</i> ▪ <i>in partnership with the City, persistence of any odor issues and impact on the community</i> ○ <i>Bio-Rad Laboratories: include, as well, a review of</i> <ul style="list-style-type: none"> ▪ <i>odor issues (vapors from the ground)</i> ▪ <i>remediation efforts/needs</i> ○ <i>Any other industrial or larger commercial facilities of community concern, including facilities that fall into the following categories:</i> <ul style="list-style-type: none"> ▪ <i>bulk material handling</i> ● Air District or CSC: Share Annual C&E report and, as applicable, any interim reports, with any nearby community associations (e.g., neighborhood councils) ● Air District: Cross-reference Fuel Refining Action 3.8: Legal Approaches <ul style="list-style-type: none"> ○ include review of compliance history for facilities identified in 'C&I Strategy 4 Large Industrial Facilities', as part of collaborative development
Type of action	Further Study; Regulatory; Enforcement
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Rule Development Source Evaluations, C&E, PM _{2.5} Local Risk Methodology
Partners in action implementation	CSC
Key stakeholders to engage in	CSC, community, Sims Metals, Pick n Pull

Action #	C&I 4.6
action implementation	
Potential obstacles	Resources to conduct and complete actions
Action initiation timeframe	Near=<2 years
Action intervention point	Emissions, Exposure
Action impact timeframe	Near=<2 years; Mid=2-4 years
Measure/metric of action implementation	<ul style="list-style-type: none"> • For any additional facilities identified, were the actions applied? (y/n) • Were updates on Veolia and BioRad incorporated into the annual C&E report? (y/n)
Can any emission/exposure reduction be estimated	Too speculative at this time

Strategy 5 – Smaller Commercial and Industrial Sources – Actions

Action #	C&I 5.1
Action name/brief description	<p>Backup Generators (BUGs): Reduce localized exposure from BUGs</p> <p>Air District:</p> <ul style="list-style-type: none"> • Conduct source evaluation for BUGs, by the end of 2026 - via white paper and/or rulemaking, including: <ul style="list-style-type: none"> ○ <u>Review of BUGs, BUG usage, and impacts</u> <ul style="list-style-type: none"> ■ review of validity of use of BUGs during emergencies, looking for opportunity to reduce emissions from BUG use, including <ul style="list-style-type: none"> • trends related to PSPSs • higher-usage individual BUGs (e.g., above some threshold of hours logged) ■ scrutinize facilities above a certain BUG-usage threshold ○ <u>Review of controls and alternative technologies</u> <ul style="list-style-type: none"> ■ Tier 4 for smaller engines (i.e., engines <1000 horsepower) ■ Non-diesel backup power ■ Zero emission backup power and energy storage ○ <u>Potential amendments to permitting rules for new/modified BUGs</u> <ul style="list-style-type: none"> ■ Update BACT or pursue Rule 2-5 amendments ○ <u>Potential amendments/new rules for existing BUGs</u> <ul style="list-style-type: none"> ■ Rule amendments to <ul style="list-style-type: none"> • strengthen emissions limits • further control when appropriate to use BUGs ■ stronger requirements for sources near sensitive receptors, such as schools

Action #	C&I 5.1
	<ul style="list-style-type: none"> ● pull from South Coast AQMD amendments to Rule 1401.1 for opportunities to strengthen Bay Area rules <ul style="list-style-type: none"> ○ expand ban on reliability-related testing for emergency diesel engines during hours when children are present, beyond solely K-12 schools (e.g., to include preschools and/or TK) ○ cover emergency engines located within 500 feet of a preschool or other sensitive receptor ■ stronger requirements for sources at facilities with significant cumulative impacts <ul style="list-style-type: none"> ● define cumulative impact facilities (e.g., facilities with total emissions above a certain level and/or facilities with a variety of sources creating impacts) ○ <u>Incentive programs</u> <ul style="list-style-type: none"> ■ Align and build upon WOCAP strategy #14 regarding an action for the Air District to provide “subsidized loans for local small businesses to install energy storage systems (e.g., batteries, fuel cells) to replace stationary sources of pollution (e.g., back-up generators)” ■ Existing funding programs that could be targeted at the PTCA area ■ Creation of an AB617 Community Identified Incentives Program² ○ <u>Outreach and education programs</u> <ul style="list-style-type: none"> ■ Including targeted outreach to larger users/facilities about cleaner technologies <ul style="list-style-type: none"> ● emphasize zero emission technology options with the lowest lifecycle GHG impacts (e.g., batteries or green hydrogen-powered fuel cells) ● include information about incentives opportunities ○ <u>Requirements via Authority of Local Jurisdictions</u> <ul style="list-style-type: none"> ■ Evaluate Local Requirements (see bullet below “Pursue Local Requirements”) <p>Air District and Local Entities:</p> <ul style="list-style-type: none"> ● Pursue Local Requirements: Either via the white paper process or sooner, identify potential for incentivizing or requiring cleaner sources of backup power at the local jurisdictional level <ul style="list-style-type: none"> ○ Evaluate mechanisms for local jurisdictions to require cleaner sources of backup power ahead of regional regulatory requirements (i.e., Air District requirements) <ul style="list-style-type: none"> ■ partner with local entities that would be responsible for implementation

² CAP program in Feather River
<https://www.fragmd.org/files/65408ead8/Final+Ch+6+Project+Plan+Stationary+Engines.pdf>

Action #	C&I 5.1
	<ul style="list-style-type: none"> ■ implement as soon as feasible; if not implemented prior to white paper drafting, address as recommendations in white paper ○ Local Requirements to evaluate: <ul style="list-style-type: none"> ■ Use of zoning codes (e.g., utilizing by right uses and the variance process), ordinances, and/or other city practices to use authority to control exposure from certain sources/practices ■ Development of conditions of approval for new permits -- conditions of approval, ordinances, or other city practices to control exposure (especially at facilities with greater cumulative impacts) <ul style="list-style-type: none"> ● Specifically for facilities with significant cumulative impacts (cross-cutting with magnet sources like marine and rail) ● Look for opportunities to strengthen requirements (E.g., zero emission or non-diesel)
Type of action	Further research; Regulatory; Incentives; Education/Outreach
Lead action implementor	Air District and Local Regulatory Partners
Related existing Program, Policy, or Initiative	Air District Permitting; Incentives Programs, including Feather River Community Identified Incentive Program; Air District Diesel Free (by '33) Initiative
Partners in action implementation	CSC, Local Regulatory Partners
Key stakeholders to engage in action implementation	CSC, community, small businesses with BUGs, clean technology manufacturers, nonprofits providing services that connect cleaner technologies with community/customers
Potential obstacles	Resources and timelines may present obstacles. Local government entities may not have the capacity to quickly incorporate requirements for cleaner backup power. They may need significant assistance from Air District technical experts to develop details for these types of requirements. Further, the Air District will need to work with the CSC to determine prioritization of white paper and regulatory efforts from the PTCA CERP. If the white paper/regulatory effort for BUGs does not come to the top of the list, it may take longer for staffing resources to become available to undertake this effort.
Action initiation timeframe	Near=<2 years
Action intervention point	Emissions
Action impact timeframe	Mid=2-4 years; Long > 4 years
Measure/metric of action implementation	Was a source evaluation (e.g., white paper) completed?
Can any emission/exposure	Too speculative at this stage

Action #	C&I 5.1
reduction be estimated	
Action #	C&I 5.2
Action name/brief description	<p>Auto Body Shops: Address Concerns with Auto Body Shops</p> <ul style="list-style-type: none"> ● Conduct source evaluation for Autobody shops and produce White Paper <ul style="list-style-type: none"> ○ Initiate by end of 2024 and align with West Oakland strategy #71, focused on autobody and other coating operations ○ Consider education and outreach approach, including evaluating the need to tailor an approach to account for these sources tending to be small local businesses ○ Cross-reference: C&I Action 2.4 regarding amendments to Rule 2-5, via addition of new TACs to the Table 2-5-1 Toxic Air Contaminant Trigger Levels in Rule 2-5 (including changes relevant to autobody shops) ● Cross-cutting: follow up as needed per results of any C&E strategy actions or monitoring findings <ul style="list-style-type: none"> ○ including looking at locations in PTCA area with larger concentrations of auto body shops ● Evaluate an Education and Outreach effort, including <ul style="list-style-type: none"> ○ developing an outreach tool (e.g., a flier) to promote public health benefits of water-based options ○ consider protocol for C&E to distribute materials during inspections
Type of action	Regulatory; Enforcement; Further research; Education/Outreach
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Air District Rule 8-45
Partners in action implementation	PTCA CSC; WOCAP Implementation CSC
Key stakeholders to engage in action implementation	PTCA CSC, WOCAP Implementation Leads (WOEIP), Autobody Facilities, PTCA community
Potential obstacles	Resource limitations may present an obstacle with respect to timeliness of implementation of this action (and thus the implementation timeframe). Costs of water-based options for facilities to utilize to reduce emissions are another obstacle to consider.
Action initiation timeframe	Near=<2 years
Action intervention point	Emissions
Action impact timeframe	Mid=2-4 years; Long > 4 years
Measure/metric of action implementation	Was a source evaluation (e.g., white paper) completed?

Action #	C&I 5.2
Can any emission/exposure reduction be estimated	-

Action #	C&I 5.3
Action name/brief description	<p>Other Smaller Businesses (Dry Cleaners, others): Follow up, as needed, for smaller businesses identified as concerns via Implementation of the PTCA CERP, via any Monitoring work, and/or via Compliance and Enforcement strategy actions (e.g., CAMP results review; patterns of noncompliance; complaints and community concerns). This responsive follow-up action is meant to cover all business types: permitted, non-permitted, regulated, and non-regulated operations.</p> <p>Follow up as appropriate, including potentially</p> <ul style="list-style-type: none"> • working with the CSC to consider adding any identified small business facilities to list under Compliance & Enforcement Action 1.2 • evaluate any local-scale air monitoring results or source-oriented monitoring that are relevant for PTCA sources • Cross-reference: Compliance & Enforcement Action 1.2
Type of action	Enforcement; Further research
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Community-scale air monitoring; C&E Strategy; Dust White Paper
Partners in action implementation	
Key stakeholders to engage in action implementation	CSC, community, identified facilities
Potential obstacles	
Action initiation timeframe	Near=<2 years
Action intervention point	Emissions
Action impact timeframe	Mid=2-4 years; Long > 4 years
Measure/metric of action implementation	<ul style="list-style-type: none"> • Were any facilities identified for follow-up? • If yes, was the follow-up conducted?
Can any emission/exposure reduction be estimated	-

Action #	C&I 5.4
Action name/brief description	Enhanced Small Business Outreach Air District: <ul style="list-style-type: none"> Evaluate enhanced outreach and compliance assistance opportunities that could be implemented and shared via the National Small Business Environmental Assistance Program <ul style="list-style-type: none"> identify any best practices from around the state or nation discuss with CSC any ideas to enhance Education and Outreach around small business regulatory requirements and voluntary reduction opportunities, with respect to the PTCA area
Type of action	Education/Outreach
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	National Small Business Environmental Assistance Program; Section 507 of the Clean Air Act; U.S. EPA's Office of Small Business
Partners in action implementation	CSC
Key stakeholders to engage in action implementation	CSC; CAPCOA
Potential obstacles	Resources and prioritization may present an obstacle to timely implementation of this action, as larger concerns may be prioritized first
Action initiation timeframe	Near=<2 years
Action intervention point	Emissions
Action impact timeframe	Mid=2-4 years; Long > 4 years
Measure/metric of action implementation	Was an evaluation conducted?
Can any emission/exposure reduction be estimated	-

Fuel Refining, Support Facilities, Storage, and Distribution

Fuel Refining (FR) Strategies

1. Move Towards a Just Transition
2. Reduce Persistent Flaring and Improve Incident Response
3. Hold Chevron and Other Emitters Accountable for Reducing Pollution and Negative Public Health Impacts from their Operations
4. Reduce Exposure and Public Health Impacts from Toxic Air Contaminants Emitted by the Fuel Refining Sector
5. Reduce Exposure and Public Health Impacts from Particulate Matter and Other Criteria Air Pollutants Emitted by the Fuel Refining Sector

Detailed Action Descriptions

Strategy 1 – Move Towards a Just Transition – Actions

Action #	FR 1.1
Action name/brief description	<p>Educate the CSC and Air District on how Just Transition would apply to the Zero Emission Future and a managed phase-down of fossil fuels in the PTCA area. The CSC will establish a Just Transition Subcommittee (JTS) as part of Path to Clean Air Plan Implementation by Q2 2024.</p> <p>The Just Transition Subcommittee will:</p> <ul style="list-style-type: none"> ● Discuss membership, roles and responsibilities, meeting frequency, and format <ul style="list-style-type: none"> ○ Work with Air District to identify funds to support the JTS from CARB, Air District, and other funders as available ● Coordinate educational sessions with Air District support that address the following areas: <ul style="list-style-type: none"> ○ A deeper understanding of what happens when a refinery shuts down in an industry town ○ Ensuring that another hazardous facility is not introduced ○ Identification of alternatives for shifting towards a green enterprise zone ○ Alignment with the IPCC 1.5 degree target ○ A managed phase-down of oil refining in California ● Research communities that are applying Just Transition (JT) Principles and Frameworks to their processes, alliances engaging in Just Transition, and Labor’s ongoing Just Transition work ● Compile online educational resources into a shareable folder including: <ul style="list-style-type: none"> ○ Research ○ Articles ○ Case Studies ○ Contacts ○ EJ/JT websites ○ Videos + social media links ● Serve as a CSC liaison to government and nongovernmental agencies to become actively engaged in Just Transition Work, including: <ul style="list-style-type: none"> ○ Air District ○ The cities of Richmond and San Pablo and County of Contra Costa ○ The Contra Costa County Conservation & Development Sustainability Committee ○ Office of Environmental Health Hazard Assessment (OEHHA) ○ CARB ○ Any other governmental, regulatory agencies, community-based organizations, non-governmental organizations, etc. ● Collaborate with Air District to identify ongoing support needs, including:

Action #	FR 1.1
	<ul style="list-style-type: none"> ○ Consideration of the appointment of a Just Transition Project Consultant to support the JTS’s future visions and plan ○ Identify funding needs and resources ○ Identification of workforce development funding from the federal, state, county, and city levels to invest in green jobs and training ○ Support for the City of Richmond Resolution 88-21 Green-Blue New Deal and Just Transition to 21st Century Jobs Plan ● Create a Just Transition Vision Plan that outlines the key elements of a transition away from fossil fuels. A Vision Plan should incorporate critical criteria to plan and assess for a Just Transition, such as: <ul style="list-style-type: none"> ○ Demographics ○ Judicial ○ Legislative ○ Economic ○ Corporate ○ Communications and Culture ● Explore how a Title VI and Gov. Code section 11135 lens could be used to identify opportunities to limit impacts from fuel refining sector emissions in a manner aligned with the JT Vision Plan and principles by: <ul style="list-style-type: none"> ○ Conducting research on opportunities and challenges to applying Title VI and Gov. Code section 11135 within a JT framework ○ Seeking legal guidance on best approach, pros/cons
Type of action	Education/Outreach; Further research
Lead action implementor	CSC Just Transition Subcommittee
Related existing Program, Policy, or Initiative	Contra Costa Conservation & Development Sustainability Committee, City of Richmond Resolution 88-21 Green-Blue New Deal and Just Transition to 21st Century Jobs Plan; federal Green-Blue New Deal; IPCC 1.5 degree target
Partners in action implementation	Air District
Key stakeholders to engage in action implementation	Community, including industry workers (e.g., USW Local 5); Air District; The cities of Richmond and San Pablo and County of Contra Costa; The Contra Costa Conservation & Development Sustainability Committee; Office of Environmental Health Hazard Assessment (OEHHA); CARB; Any other governmental, regulatory agencies, community-based organizations, non-governmental organizations, etc.
Potential obstacles	Resources; barriers to political support; limitations of regulatory authority; the complexity of a Just Transition and the variety of aspects and stakeholders that must be considered
Action initiation timeframe	Near=<2 years
Action intervention point	-
Action impact timeframe	Near=<2 years; Mid=2-4 years

Action #	FR 1.1
Measure/metric of action implementation	Was a JTS formed? (y/n) Was a shareable online folder of educational resources created? (y/n) Was a vision plan produced and/or considered? (y/n) Was research conducted on how a Title VI and Gov. Code section 11135 lens could be applied? (y/n)
Can any emission/exposure reduction be estimated	-

Action #	FR 1.2
Action name/brief description	Incorporate Just Transition Principles and Criteria in the prioritization and implementation of the PTCA Plan and explore incorporating these in governmental policymaking and rulemaking. The Just Transition Subcommittee (JTS) will <ul style="list-style-type: none"> ● Finalize a set of Just Transition Principles and Criteria <ul style="list-style-type: none"> ○ JTS will create and disseminate the principles and criteria ○ The initial set of 6 criteria is included above in the Just Transition Preamble ○ The principles and criteria will be reviewed and updated as needed ● The criteria will: <ul style="list-style-type: none"> ○ Be voted on by the CSC ○ Be considered in Air District’s legal approaches for the fuel refining and non-fuel refining sector (as specified in FR Action 3.8) ● Track and evaluate the application of Just Transition Principles and Criteria ● Research the legal and feasible means to require that JT principles and criteria are applied in current and future governmental policies
Type of action	Further Study
Lead action implementor	JTS and Air District
Related existing Program, Policy, or Initiative	-
Partners in action implementation	CSC
Key stakeholders to engage in action implementation	CSC; community
Potential obstacles	Resources; barriers to political support; limitations of regulatory authority; the complexity of a Just Transition and the variety of aspects and stakeholders that must be considered
Action initiation timeframe	Near=<2 years
Action intervention point	-

Action #	FR 1.2
Action impact timeframe	Near=<2 years; Mid=2-4 years; Long > 4 years
Measure/metric of action implementation	Were the JT Principles and Criteria reviewed and voted on? (y/n) Was the incorporation of JT Principles and Criteria into rule development projects evaluated? (# of meetings/conversations)
Can any emission/exposure reduction be estimated	-

Strategy 2 – Reduce Persistent Flaring and Improve Incident Response – Actions

Action #	FR 2.1
Action name/brief description	<p>Air District and the CSC will work with the City of Richmond to strengthen the Industrial Safety Ordinance (ISO).</p> <ul style="list-style-type: none"> ● Strengthening the ISO will include better <ul style="list-style-type: none"> ○ enforcement and enforceability ○ reporting of data by industry subject to the ISO ○ collaboration and sharing of data among the City and Air District, to benefit enforcement and aid in proper communications with the public ● Air District will provide support by <ul style="list-style-type: none"> ○ working with the City to better characterize the likely health risk from inhalation of emissions from flaring events, with risk data associated with the type of material being flared and the volume ○ conducting complementary inspections, as appropriate ○ continuing to work with City of Richmond and County Health to <ul style="list-style-type: none"> ■ ensure alignment with the Air District Rules, including flaring rules Rule 12-11 and 12-12 ■ collaboratively share data, as applicable ● The City of Richmond will <ul style="list-style-type: none"> ○ update, adopt, and enforce the City’s ISO <ul style="list-style-type: none"> ■ reflecting lessons learned from the safety audit for Chevron, as well as from recent ISO violations ○ create a permanent and properly resourced enforcement mechanism ○ work with the City of Richmond, Contra Costa County and Air District to coordinate on enforcement of matters related to the ISO and allocate necessary resources ● The City of Richmond will evaluate the ISO yearly for continual improvement and report to CSC annually with a summary of any potential PTCA Plan updates with input from Air District where appropriate
Type of action	Regulatory; Enforcement
Lead action implementor	City of Richmond

Action #	FR 2.1
Related existing Program, Policy, or Initiative	City of Richmond ISO; Contra Costa County ISO
Partners in action implementation	Air District; County Health
Key stakeholders to engage in action implementation	CSC, community
Potential obstacles	Resources for establishing a process to update the City ISO; Resources for enforcing the ISO
Action initiation timeframe	Near=<2 years
Action intervention point	n/a
Action impact timeframe	Mid=2-4 years
Measure/metric of action implementation	Was the ISO updated? (yes/no) Was an enforcement mechanism for the ISO clearly established? (y/n)
Can any emission/exposure reduction be estimated	-

Action #	FR 2.2
Action name/brief description	<p>The Air District will coordinate with the CSC to improve and expand communications about all flaring events for the fuel refining sector in the PTCA area and also for major incidents at both fuel-refining and non-fuel-refining sources. Communications mechanisms will be developed in collaboration with a CSC Communications Subcommittee and include (A) a new webpage and (B) standardized internal and external communication protocols.</p> <p>The CSC will form a Communications Subcommittee to help design, implement, and monitor the improved communications mechanisms. This subcommittee's work may include:</p> <ul style="list-style-type: none"> ● Meetings with the Air District Communications Division, Community Engagement Division, and Information Technology (IT) Section ● Reviewing other communication alert systems to identify best practices, including, but not limited to: <ul style="list-style-type: none"> ○ Martinez Alerts³ ○ Flare Event Notification System (FENS) implemented by South Coast Air Quality Management (SCAQMD)⁴ ● Analyzing major incident responses to identify potential communications improvements, including

³ <https://www.cityofmartinez.org/Home/Components/News/News/208/15>

⁴ <http://www.aqmd.gov/docs/default-source/news-archive/2019/south-coast-aqmd-launches-fens.pdf>

Action #	FR 2.2
	<ul style="list-style-type: none"> ○ a review of incidents from recent years ○ a review after each major future incident ● Collaborating with Air District to implement other Fuel Refining incident response/communications-based Actions: FR 2.3, 2.4, 2.5 <ul style="list-style-type: none"> ○ (i.e., improvements to the County CWS via the Board of Supervisors ISO/CWS Ad Hoc and to Air District communications via the Board of Directors Incident Response Ad Hoc) ● Collaborating with Air District to evaluate the improved communications mechanisms <ul style="list-style-type: none"> ○ Assessing results from FR Actions 2.3, 2.4, 2.5, 2.2A, and/or 2.2B ○ Identifying any remaining communications gaps, from the community perspective and proposing solutions <p>2.2(A): Air District will create a new landing page on its website and add a quick access button on its homepage. The landing page will be informed by a proposed CSC Communications Subcommittee and be specifically devoted to public outreach about all flaring events and other major incidents in the PTCA area. Air District will:</p> <ul style="list-style-type: none"> ● Partner with Contra Costa County to obtain notifications on all flaring events and/or directly pull information from the County Warning System (CWS) ● Coordinate with the CSC and CSC Communications Subcommittee on development of additional website content. Discuss and evaluate the following: <ul style="list-style-type: none"> ● Posting information to the webpage for flaring and incidents (including information identified as necessary to fill gaps from other communications alert systems (like CWS)). This may include, but is not limited to: <ul style="list-style-type: none"> ○ Alert Level: (e.g., Level 1) ○ Date & Time ○ For flaring specifically: <ul style="list-style-type: none"> ■ Type of Flare: (e.g., Hydrogen or Process) ■ Event: Planned or Unplanned ■ YTD Count for this type of flaring: (e.g., 20) ● Customizable opt-in push notifications for the landing page ● Translating posts to English, Spanish, and other major languages spoken in PTCA area including Arabic, Laotian, Tagalog, Chinese in alignment with the Air District Language Access Policy ● Incorporating trauma-informed language and principles into posts ● Including a button for filing a complaint ● Including a link to sign up for County Community Warning System (CWS) alerts ● Including a link to an FAQ document with basic information about flaring ● Posting a link with a comprehensive final report for each flaring event and major incident, including: <ul style="list-style-type: none"> ○ All information initially posted ○ Root cause information ○ Source of the flaring or incident: (e.g., FCC unit)

Action #	FR 2.2
	<ul style="list-style-type: none"> ○ Type of Emissions: (e.g., NO_x, SO_x, PM_{2.5}, TACs (such as benzene)) ● Posting an annual report on all flaring incidents and remedies ● Partnering with Contra Costa County to create an outreach campaign to inform the public about the new website page <p>2.2(B): Air District will develop standardized internal and external communication protocols regarding all flaring events and major incidents.</p> <ul style="list-style-type: none"> ● Air District will establish effective internal collaboration protocols between divisions, including, but not limited to, the following: <ul style="list-style-type: none"> ○ Communications ○ Community Engagement ○ Compliance & Enforcement ○ Meteorology & Measurements ○ Engineering ● Air District will establish effective collaboration protocols between the Air District and external entities such as: <ul style="list-style-type: none"> ○ County of Contra Costa (CCHS HazMat) ○ Chevron ○ Other industry from which receipt of information during major incidents is critical ○ Cross-reference FR 2.4 on coordination ● A standardized protocol for outgoing communications will be developed in collaboration with the CSC Communications Subcommittee. Development will evaluate instituting: <ul style="list-style-type: none"> ○ A mechanism for sharing flaring information onto the Air District website within binding timelines ○ Advanced notification of all planned flaring events via the Air District website ○ Community-education and awareness notifications to the public on follow-up steps in the aftermath of major refinery incidents including, but not limited to: <ul style="list-style-type: none"> ■ Press Releases and/or social media posts including applicable information on NOVs, penalties, legal proceedings and outcomes ■ Information about any planned Community Forums <p>Cross-references: Resource PTCA Plan Implementation</p>
Type of action	Communications; Education/Outreach
Lead action implementor	Air District, CSC
Related existing Program, Policy, or Initiative	County Warning System (CWS); Air District BOD Incident Response Ad Hoc; Air District Incident Response Notification System (emergency text alerts)
Partners in action implementation	CSC; Air District; community; Local Government (i.e., County, CCHS)
Key stakeholders to engage in action implementation	CSC; community

Action #	FR 2.2
Potential obstacles	Air District staff resources may be a challenge, based on the extent to which custom communications are needed (versus improving and utilizing existing communications systems in place, e.g., CWS). For the mid to most complex solutions, there may be a need to scope, fund, & possibly procure a vendor. In order to proactively account for potential resource constraints, the approach is outlined to first look at communications processes already in the process of being improved: CWS improvements via the County ISO/CWS Ad Hoc and Air District improvements via the BOD Incident Response Ad Hoc. For remaining gaps not addressed via the ISO/CWS Ad Hoc or Air District Incident Response Ad Hoc, the CSC Communications Subcommittee can work with Air District to determine any customization of communications that would need to be addressed via information posted on the new web landing page.
Action initiation timeframe	Near=<2 years
Action intervention point	n/a
Action impact timeframe	Near=<2 years; Mid=2-4 years
Measure/metric of action implementation	Was a Communications Subcommittee established? (y/n) Was a website page created? (y/n) Were standardized internal and external communication protocols implemented (y/n)?
Can any emission/exposure reduction be estimated	-

Action #	FR 2.3
Action name/brief description	Air District and CSC will collaborate with Contra Costa County to recommend improvements for their Community Warning System <ul style="list-style-type: none"> ● CSC and Air District will advocate to establish a mechanism to ensure the CSC's voice is heard by the County's ISO/CWS Ad Hoc committee ● CSC and Air District will present to the County's ISO/CWS Ad Hoc committee. The presentation will cover our recommendations for improved and expanded CWS alerts on all flaring including: <ul style="list-style-type: none"> ○ Alert Level: (e.g., Level 1) ○ Type of Flare: (e.g., Hydrogen or Process) ○ Event: Planned or Unplanned ○ Date & Time ○ YTD Count for this type of flaring: (e.g., 20) ○ A beta-test and pilot program approach ● Additional partners may include the City of Richmond, Contra Costa County Health Services Department, Office of the Sheriff's Office of Emergency Services, as well as representatives from the Unincorporated Areas in Contra Costa County
Type of action	Communications; Education/Outreach
Lead action implementor	Air District, CSC

Action #	FR 2.3
Related existing Program, Policy, or Initiative	County Alert System
Partners in action implementation	Contra Costa County; County Board of Supervisors; CSC; Air District; community; Local Government entities listed (i.e., City of Richmond, CCHS)
Key stakeholders to engage in action implementation	CSC; community
Potential obstacles	
Action initiation timeframe	Near=<2 years
Action intervention point	n/a
Action impact timeframe	Near=<2 years; Mid=2-4 years
Measure/metric of action implementation	Were recommendations made to the ISO/CWS Ad Hoc Committee? (y/n) Were recommendations incorporated into the CWS by the Board of Supervisors? (y/n)
Can any emission/exposure reduction be estimated	-

Action #	2.4
Action name/brief description	<p>Air District will improve its incident response program to get more transparent and user-friendly information to a wider audience faster during and after major incidents.</p> <p>The Board of Directors' Incident Response Ad Hoc Committee will be making recommendations on specific work, but it is expected to include:</p> <ul style="list-style-type: none"> • Strengthening coordination within the Air District and with other incident response agencies • Improving the analysis and reporting of existing incident-related monitoring data during and after incidents to share more user-friendly information with the public • Developing a protocol including a decision-making framework, criteria, and documentation for deploying currently available monitoring tools to collect more air data during major incidents <p>Cross references: Other Incident response-related actions: FR 2.2, FR 2.3, FR 2.5, Resource PTCA Plan Implementation</p>
Type of action	Communications; Education/Outreach; Air monitoring; Data analysis and reporting
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Incident response

Action #	2.4
Partners in action implementation	CSC, Board of Directors, county and city health agencies and first responders, CARB, CalOES, U.S. EPA
Key stakeholders to engage in action implementation	CSC, community, CCHS, CalOES, CARB, U.S. EPA
Potential obstacles	Staffing resources at the Air District and at partner agencies; limitations to what can be measured and reported on the timeframe of short incidents
Action initiation timeframe	Near=<2 years
Action intervention point	-
Action impact timeframe	Near=<2 years; Mid=2-4 years; Long > 4 years (Some work is ongoing with near-term changes, and other work to be completed in the mid to long term timeframes)
Measure/metric of action implementation	Is the District's reporting of understandable and useful information (including information about air impacts, during and after an incident improved)? (yes/no)
Can any emission/exposure reduction be estimated	-

Action #	FR 2.5
Action name/brief description	CSC will make recommendations on the improved communications protocols to the Air District Board of Directors (BOD) Incident Response Ad Hoc <ul style="list-style-type: none"> ● CSC provides feedback on improvements/gaps the Air District implements at the direction of the Board of Directors (BOD) Incident Response Ad Hoc <ul style="list-style-type: none"> ○ for both fuel refining incidents and non-fuel refining incidents ○ including suggesting what additional air monitoring during incidents would be useful (with support provided by Air District staff on determining these suggestions) <p>Cross-references: FR 2.2, FR 2.4</p>
Type of action	Communications; Education/Outreach
Lead action implementor	CSC
Related existing Program, Policy, or Initiative	Air District Communications protocols for Incident Response
Partners in action implementation	Air District; community
Key stakeholders to engage in action implementation	Board of Directors (BOD) Incident Response Ad Hoc; CSC; community;
Potential obstacles	

Action #	FR 2.5
Action initiation timeframe	Near=<2 years
Action intervention point	n/a
Action impact timeframe	Near=<2 years
Measure/metric of action implementation	Was feedback presented to the Air District BOD Incident Response Ad Hoc Committee? (y/n) Were recommendations incorporated by the Air District BOD Incident Response Ad Hoc Committee? (y/n)
Can any emission/exposure reduction be estimated	-

Action #	FR 2.6
Action name/brief description	<p>Air District will initiate a rule development effort, further evaluating potential updates to flaring rules (Rule 12-11: Flare Monitoring at Refineries and Rule 12-12: Flares at Refineries), by the end of 2024. Rule development efforts will aim to incorporate health impacts analyses, enhance rule enforceability, and establish new and/or more stringent limits. Health and Safety Code requirements will be satisfied as well.</p> <p>Evaluate:</p> <ul style="list-style-type: none"> ● Incorporating information on health impacts from flaring: <ul style="list-style-type: none"> ○ such as findings from Flaring Health Impacts Analysis: Air District review of Flaring Emissions and Impacts Estimations, including reviewing current methods for calculating emissions and ground-level impacts from flaring and ensuring the most current and best available methods are being used. This will include an improved analysis of risks from air toxics from flaring ● Incorporating any relevant aspects from enhanced ISO evaluation (cross-reference FR 2.1) ● Potential for periodic audits that could include appropriate elements from the following list: <ul style="list-style-type: none"> ○ Draft Flare Audits List: <ul style="list-style-type: none"> ■ Obtain and review refinery Piping and Instrumentation Diagrams (P&ID) <ul style="list-style-type: none"> ● Ensure diagrams match reality at the refinery (this may require contracting with a third party with expertise in this area) ■ Evaluate any changes to the facility <ul style="list-style-type: none"> ● Require permit updates ● Cite for any changes that do not meet New Source Review requirements ■ Require a comprehensive site audit after each turnaround to ensure any changes comply with permitting requirements (New Source Review). Audits will more than likely need to be conducted by third parties hired by the refinery.

Action #	FR 2.6
	<p>flaring (including reviewing any Prop 26 preemption implications)</p> <ul style="list-style-type: none"> ■ SCAQMD Rule, for excesses above applicable thresholds: \$25,000 per ton of excess SO₂; if excess is greater than 10%, \$50,000/ton; if excess is greater than 20%, \$100,000/ton ○ Consider incorporating a similar structure for PM emissions ○ Cross-reference: Legal Approaches Action (FR 3.8)
Type of action	Regulatory (Air District)
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Rules 12-11 and 12-12
Partners in action implementation	CSC
Key stakeholders to engage in action implementation	CSC; Community
Potential obstacles	
Action initiation timeframe	Near=<2 years; Mid=2-4 years
Action intervention point	Emissions; Exposure
Action impact timeframe	Mid=2-4 years; Long > 4 years
Measure/metric of action implementation	<p>Were rule concepts produced for public input? (y/n)</p> <p>Were draft rule amendments produced? (y/n)</p> <p>Were rule amendments proposed to the Board of Directors? (y/n)</p> <p>Were rule amendments adopted? (y/n)</p>
Can any emission/exposure reduction be estimated	Too speculative

Strategy 3 – Hold Chevron and Other Emitters Accountable for Reducing Pollution and Negative Public Health Impacts from their Operations – Actions

Action #	FR 3.1
Action name/brief description	<p>Air District will develop and implement a standardized Chevron inspection protocol in partnership with the CSC.</p> <p>The protocol will include:</p> <ul style="list-style-type: none"> ● enforcement response deadlines ● prioritization of inspections and investigations based on CSC and community input. The input will include a review of: <ul style="list-style-type: none"> ○ NOVs, air quality complaints, fines, fees, all other outcomes

Action #	FR 3.1
	<ul style="list-style-type: none"> ● prioritized consultation with USW Local 5 Health and Safety Representatives and Operators for Chevron investigations (in addition to Environmental staff and office-based staff) <ul style="list-style-type: none"> ○ Seek to work with USW Local 5 Health and Safety Representatives to find a process of reporting and investigating that is conducive to their workflow ● evidence-based decision-making involving environmental impacts, public and worker health impacts, and other risk factors ● additional scrutiny over self-reported information from Chevron by seeking consultation with USW Local 5 workers <p>Cross-references to related actions: C&E 1.2, FR 2.2, FR 2.4, FR 2.6</p>
Type of action	Enforcement
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	-
Partners in action implementation	Union Health and Safety representatives and operators
Key stakeholders to engage in action implementation	-
Potential obstacles	
Action initiation timeframe	Near=<2 years
Action intervention point	-
Action impact timeframe	Near=<2 years; Mid=2-4 years
Measure/metric of action implementation	Was an inspection protocol developed that addresses the goals of the action description (y/n)?
Can any emission/exposure reduction be estimated	-

Action #	FR 3.2
Action name/brief description	<p>Increase the frequency of Air District inspections, audits, and investigations at Chevron and Chemtrade</p> <ul style="list-style-type: none"> ● Determine an appropriate increase in frequency for inspections and audits, with respect to those conducted in 2023, to ensure compliance and accountability <ul style="list-style-type: none"> ○ With input from the CSC (cross-reference FR 3.1) ● Adequately resource investigations of Chevron + Chemtrade to clear backlog and stay current on them going forward ● Conduct comprehensive flare audits periodically (cross-reference Flaring Action 2.6)

Action #	FR 3.2
	<ul style="list-style-type: none"> Report quarterly outcomes of inspections and investigations to the City of Richmond, Contra Costa County Board of Supervisors and CSC (e.g., via a memo) <p>Cross-reference: Resource PTCA Plan Implementation Strategy, including adequate coverage for off hours</p>
Type of action	Enforcement
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Title V
Partners in action implementation	-
Key stakeholders to engage in action implementation	CSC; community; City of Richmond, Contra Costa County Board of Supervisors
Potential obstacles	staffing resources
Action initiation timeframe	Near=<2 years
Action intervention point	n/a
Action impact timeframe	Near=<2 years; Mid=2-4 years
Measure/metric of action implementation	How many additional inspections were conducted at Chevron (#; % increase from 2023) How many additional inspections were conducted at Chemtrade (#; % increase from 2023)
Can any emission/exposure reduction be estimated	Too speculative

Action #	FR 3.3
Action name/brief description	<p>Seek to establish and build a strong collaborative relationship with operators and Union Health and Safety representatives</p> <ul style="list-style-type: none"> Create an annual outreach campaign to inform Union health and safety representatives and operators about mechanisms for communicating and collaborating with the Air District, including sharing information about <ul style="list-style-type: none"> relevant Air District staff contacts use of the Complaints system, and protections for complainants Work to establish a liaison role, with a dedicated representative from both the Air District and from within the Union (i.e., USW) Health and Safety representatives <ul style="list-style-type: none"> Conduct a monthly meeting to review health and safety concerns When necessary, Air District will facilitate consultation from outside agencies and community partners All inspections, investigations, and audits will include:

Action #	FR 3.3
	<ul style="list-style-type: none"> ○ The presence of Union (e.g., USW) Health and Safety representatives and/or explore identifying a relevant Union liaison ○ An interview with workers, Union Health and Safety representatives, and/or explore relevant Union liaison before and/or after inspections
Type of action	Enforcement; Education/Outreach
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Union (e.g., USW) Health and Safety Program
Partners in action implementation	Union Health and Safety workers (e.g., USW Local 5)
Key stakeholders to engage in action implementation	CSC; Union (e.g., USW)
Potential obstacles	-
Action initiation timeframe	Near=<2 years
Action intervention point	n/a
Action impact timeframe	Near=<2 years
Measure/metric of action implementation	Was an outreach campaign conducted in order to reach the USW Local 5 Health and Safety workers (y/n)?
Can any emission/exposure reduction be estimated	-

Action #	FR 3.4
Action name/brief description	<p>Transparent, Regular, and Inclusive Updates on Compliance and Enforcement Activity at Chevron</p> <ul style="list-style-type: none"> ● Produce quarterly reports on Chevron Compliance and Enforcement activity, including: <ul style="list-style-type: none"> ○ inspections conducted, NOVs issued and status of enforcement and remedies, including timing of enforcement response ○ Cross-reference FR 3.7 (quarterly updates to CSC about penalties assessed against fuel refining sector facilities) ○ Compile these quarterly reports into the annual reporting on C&E activities specified in C&E 1.3 ○ Include NOV data on the website via the searchable NOV query tool (C&E 1.3) ● Provide reports to: <ul style="list-style-type: none"> ○ The PTCA CSC ○ Air District Executive Officer, Deputy Executive Officer of Equity and Community Programs, and Environmental Justice Officer

Action #	FR 3.4
	<ul style="list-style-type: none"> ○ Air District Community Advisory Council ○ The City council and County for the PTCA area ○ NGOs identified by the CSC or that request to receive the updates
Type of action	Enforcement, Education/Outreach
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	-
Partners in action implementation	CSC
Key stakeholders to engage in action implementation	CSC, Air District Executive Officer, Deputy Executive Officer of Equity and Community Programs, and Environmental Justice Officer, Air District Community Advisory Council, The City council and County for the PTCA area, NGOs identified by the CSC or that request to receive the updates
Potential obstacles	Any potential obstacles to implementation of action, and plan for overcoming that obstacle
Action initiation timeframe	Near=<2 years
Action intervention point	n/a
Action impact timeframe	Near=<2 years
Measure/metric of action implementation	Were quarterly reports produced and shared (y/n)?
Can any emission/exposure reduction be estimated	-

Action #	FR 3.5
Action name/brief description	<p>Air District will expedite the Notice of Violations resolution process in the fuel refining sector:</p> <ul style="list-style-type: none"> ● Resolve all outstanding NOVs ● Continue to prioritize Chevron Refinery when resolving backlog of NOVs ● Cross-references: <ul style="list-style-type: none"> ○ Resource PTCA Plan Implementation ○ C&E 1.3 - NOV Query Tool ○ FR 3.4 - Quarterly Updates ○ C&I 2.2 - to maintain and strengthen collaborative efforts with other Air District Divisions and external partners
Type of action	Legal; Enforcement
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Air District Strategic Planning Process

Action #	FR 3.5
Partners in action implementation	-
Key stakeholders to engage in action implementation	CSC; community; Air District divisions (including Engineering, M&M, AIM)
Potential obstacles	budget; competing resource needs
Action initiation timeframe	Near=<1 year
Action intervention point	n/a
Action impact timeframe	Near=<2 years; Mid=2-4 years
Measure/metric of action implementation	Number of NOVs in fuel refining sector resolved (#)
Can any emission/exposure reduction be estimated	-

Action #	FR 3.6
Action name/brief description	<p>Air District will coordinate on enforcement with federal, state (USEPA, CARB, and the Attorney General’s Office), and local enforcement partners (District Attorneys, City and County Counsel) on fuel refining violations, enforcement, and other legal issues, as appropriate</p> <ul style="list-style-type: none"> • Create an annual forum through the Interagency Refinery Task Force and CalEPA’s (multi-agency) Environmental Justice Task Force to agendaize enforcement issues pertaining to the fuel refining sector with a focus on: <ul style="list-style-type: none"> ○ environmental elements, including air, water, waste, and chemicals (i.e., multimedia enforcement) ○ public health and safety ○ just transition principles ○ Title VI and Gov. Code section 11135 violations ○ Indigenous Rights Violations • Work with appropriate legal partners (e.g., state and/or federal government prosecutors, or contracted outside counsel) to identify and prosecute the most serious violations from the fuel refining sector, especially those carrying public health harm and repeat offenses. <ul style="list-style-type: none"> ○ Outside counsel selection must consider appropriate expertise and background of attorneys/firms (e.g., environmental justice background such as from Earth Justice, CBE, and/or SF Baykeeper) ○ Consult CSC to identify the “most serious violations” that carry public health harm and/or are repeat offenses, with respect to the application of this action in the PTCA area ○ Prosecution may include seeking abatement orders, consent judgments, etc. ○ Cross-reference FR 3.8 Legal Approaches, specifically with respect to Objectives listed

Action #	FR 3.6
	<ul style="list-style-type: none"> ○ Cross-reference: FR 3.9 Community Benefits Policy (CBP) ○ Create a Just Transition policy containing legal provisions which utilize all possible options to prevent the corporation/facility from discharging any legal obligations in the event of bankruptcy, insolvency, or closure ● Establish a formal relationship with City and County attorneys involved in legal actions regarding the fuel refining sector: <ul style="list-style-type: none"> ○ Hold meetings when appropriate with Air District, City, and County legal staff to coordinate all legal actions re: the fuel refining sector ○ Meetings will include Richmond Council Members, Richmond Mayor, Richmond City Attorney, County Board of Supervisor Representative ○ Hold collaborative and consultation meetings with CSC and partners to ensure legal interventions prioritize public health, safety, and just transition principles including: <ul style="list-style-type: none"> ▪ Union (e.g., USW) Local Health and Safety representatives and bargaining committee ▪ Richmond Council Members, Mayor, and City Attorney ▪ County Board of Supervisor Representative and County Attorney ▪ Earthjustice, CBE, SF Bay Keeper and other relevant NGOs and others CBOS ▪ Indigenous Tribal Spokespeople + Sogorea Te' Land Trust ▪ Local Health Care Providers ▪ Cross-reference: FR 3.8 ○ Consult with CSC and community stakeholders to better understand: <ul style="list-style-type: none"> ▪ Community priorities ▪ Community impacts from violations ▪ Community impacts from enforcement settlement negotiations ○ Provide an annual status report on all legal investigations, actions, and outcomes ● CSC will: <ul style="list-style-type: none"> ○ Gather and synthesize community input to inform Air District legal enforcement practices with respect to the Fuel Refining sector ○ Cross-reference FR 3.8 ● Update the PTCA Plan annually to incorporate and reflect any lessons learned from legal investigations, actions, and outcomes
Type of action	Legal; Enforcement
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	N/A
Partners in action implementation	Proposed partners: Union (i.e., USW Local 5) Health and Safety representatives and bargaining committee; City of Richmond City Council members, Mayor, and or City Attorney, County Supervisors; Air District Legal

Action #	FR 3.6
	Division, state and/or federal government prosecutors, or contracted outside counsel, CSC; Interagency Refinery Task Force, CalEPA's (multi-agency) Environmental Justice Task Force; federal, state (USEPA, CARB, and the Attorney General's Office) and local enforcement partners (District Attorneys, City and County Counsel)
Key stakeholders to engage in action implementation	Air District, CSC, community/PTCA residents; Agency partners (e.g., CalEPA, USEPA, CARB, and the Attorney General's Office, District Attorneys, City and County Counsels)
Potential obstacles	Coordination difficulties; Lack of interest/cooperation from proposed partners; Increased timeline for prosecution with additional agency involvement; General timeframe of litigation matters (i.e., years); Consensus on what is considered a "most serious violation"; Outside counsel expenses; Staff capacity issues.
Action initiation timeframe	Near =<2 years
Action intervention point	n/a
Action impact timeframe	Near=<2 years; Mid=2-4 year
Measure/metric of action implementation	Was there a creation of a forum through the Interagency Refinery Task Force and when appropriate CalEPA's (multi-agency) Environmental Justice Task Force to agendize enforcement issues pertaining to the fuel refining sector? (yes/no?) Has there been an increase in coordination among appropriate legal partners (e.g., state and/or federal government prosecutors, or contracted outside counsel) to implement enforcement efforts, including to identify and prosecute the most serious violations from the fuel refining sector? (yes/no?)
Can any emission/exposure reduction be estimated	-

Action #	FR 3.7
Action name/brief description	Air District will provide quarterly and annual updates to CSC about penalties assessed against fuel refining sector facilities and all other sources in the PTCA area. <ul style="list-style-type: none"> ● Quarterly, submit an update to the CSC ● Annually, as part of the PTCA Plan annual report, provide summaries on legal outcomes that occurred in the fuel refining sector ● Regularly brief the CSC <ul style="list-style-type: none"> ○ Meet annually with the CSC to share major settlement updates, resolutions, or projects funded by the Community Benefit Policy (cross-reference: FR 3.9) ○ Meet with the CSC when the Air District has significant settlement or resolution milestones to share or when it is mutually decided that a meeting is needed ○ During these briefings the Air District will share a description of how the Air District incorporated legal enforcement approaches in the PTCA Plan into the Air District's enforcement

Action #	FR 3.7
	<p>process, while still protecting confidentiality (cross-reference: FR 3.8)</p> <ul style="list-style-type: none"> ● Work with CSC to determine the best format for providing information in a transparent manner including: <ul style="list-style-type: none"> ○ All legal outcomes including penalties assessed, court proceedings, abatements, variance applications, etc. ○ The origin of the violations that were resolved (e.g., public complaints, mandated reporting by the facility, Air District inspections, and information received from other agencies) ○ The amount of time it took to resolve fuel refining sector violations ○ Description of how the Air District incorporated legal enforcement approaches in the Plan into the Air District's enforcement process, while still protecting confidentiality (cross-reference: FR 3.8) <p>CSC will:</p> <ul style="list-style-type: none"> ● Review quarterly reports and amend the PTCA Plan annually <p>Cross-references: FR 3.4; FR 3.8</p>
Type of action	Legal; Enforcement
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	-
Partners in action implementation	CSC
Key stakeholders to engage in action implementation	Air District Legal Division, CSC, Community
Potential obstacles	Confidentiality limitations; Staff resources and capacity concerns; Information is "backwards looking" not a proactive approach; Information may not provide all the details of how the penalty assessment was arrived at.
Action initiation timeframe	Near =<2 years
Action intervention point	N/A
Action impact timeframe	Near=<2 years
Measure/metric of action implementation	How many quarterly reports were shared in the past year (#) Was information on legal outcomes in the PTCA area provided in the Annual Report? (yes/no) Was an annual meeting held? (y/n)
Can any emission/exposure reduction be estimated	-

Action #	FR 3.8
Action name/brief description	<p>Air District will collaboratively develop, with the CSC, and pilot legal enforcement approaches for fuel refining facilities within one year of final approval of the PTCA Plan. Then this will be expanded to cover all PTCA sources.</p> <p>As part of development, CSC will provide insight on legal approaches from the perspective of front-line community members' experiences. Collaborative discussion will cover:</p> <ul style="list-style-type: none"> ● Incorporating the following specific Just Transition Principles set forth in FR Strategy 1 (Cross-Reference) <ul style="list-style-type: none"> ○ Principle 3: Improve enforcement of existing regulations ○ Principle 5: Embrace community-driven planning and decision-making ○ Principle 6: Stress the need for broad social healing and restoration ● Establishing appropriate penalty valuation approaches, including significantly increasing penalties for repeat, serious, and/or continued violations that impact public health, safety, and/or disproportionately impacted communities ● Incorporating public health data into penalty valuations <ul style="list-style-type: none"> ○ Working with Contra Costa Health and the CSC, as needed, to gather information from community members regarding the health impacts of flaring and other harmful emissions incidents to increase penalty amounts (i.e., penalties are increased when the emission results in bodily injury or death) <p>Objectives of the enforcement approaches include:</p> <ul style="list-style-type: none"> ● Maximizing penalties (including increased penalties when the emission results in bodily injury or death) ● Deterring future non-compliance ● Removing profit and avoided costs gained from noncompliance ● Assessing penalties based on all the relevant circumstances, including any of the following: <ul style="list-style-type: none"> ○ the severity of the violation ○ public health harm ○ negligent, knowing, or intentional behavior ○ non-compliance history ○ lack of cooperation of violator <p>Once the fuel refining-specific pilot has been implemented, this collaborative approach will then be expanded to cover all other sources of concern in the PTCA area, to strategically address facilities with non-compliances that affect air quality, community health, safety, and quality of life.</p>
Type of action	Legal; Enforcement
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	AB 1465
Partners in action implementation	Air District Legal Division

Action #	FR 3.8
Key stakeholders to engage in action implementation	CSC; community
Potential obstacles	There are limits to how much penalties can be maximized within the current legal framework. The Health and Safety Codes (H&S Codes) limit the maximum penalties that can be assessed. Supporting legislation that increases penalty ceilings should also be considered. Penalty policy/matrix may inform violators of the penalty amounts the Air District will assess and build that amount into their cost of doing business. As a result, the penalty may have no deterrent effect. A penalty policy/matrix will create uniformity as to the penalty demanded but not necessarily the penalty accepted based on the facts and circumstances of the case. Facilities may challenge the legality of a penalty matrix which focuses solely on refineries. Penalty assessments may not be high enough to deter. A multi-pronged approach is required. Development of the penalty policy/matrix may take several months or longer.
Action initiation timeframe	Near=<2 years
Action intervention point	-
Action impact timeframe	Near=<2 years; Mid=2-4 years
Measure/metric of action implementation	Did the Air District meet with the CSC to discuss legal approaches? (# of meetings) Were fuel refining-specific approaches developed within 1 year? (y/n) Were the approaches expanded to cover all sources (beyond just fuel refining)? (y/n)
Can any emission/exposure reduction be estimated	-

Action #	FR 3.9
Action name/brief description	<p>First, Air District will partner with the CSC to develop, within 1 year of PTCA Plan adoption, a Community Benefits Policy (CBP) that invests up to 100% of penalty monies from the fuel refining sector back into the PTCA area. Then, Air District will partner with the CSC to expand the Fuel Refining Community Benefits Policy (CBP) to cover the full PTCA area.</p> <ul style="list-style-type: none"> • CSC will establish a CBP Subcommittee • Air District will work with CSC and CBP Subcommittee to facilitate public engagement during development of Air District policies regarding a CBP: <ul style="list-style-type: none"> ○ The CSC or its CBP Subcommittee will help the Air District gather community input ○ The CSC or its CBP Subcommittee and Air District will meet with Indigenous Tribal Leaders and/or Sogorea Te' Land Trust ○ The CSC or its CBP Subcommittee will communicate with CAC to learn about its position on the CBP

Action #	FR 3.9
	<p>Air District and the CBP Subcommittee will develop a specific CBP for the distribution of funds in the PTCA that includes:</p> <ul style="list-style-type: none"> ● Criteria for investment, tied to air quality and climate protection, including criteria incorporating Just Transition principles (Cross-reference FR Strategy 1) ● A community-driven mechanism to incorporate the community voice, including the CSC in an advisory role, with respect to: <ul style="list-style-type: none"> ○ Mechanisms to invest in community to improve air quality and public health, including: <ul style="list-style-type: none"> ■ Public Transportation ■ Residential Ventilation & Air Filtration ■ Urban Greening ■ Public Health Programs & Research ○ Investment Mechanisms should also draw from community investment projects included throughout the PTCA Plan, including, but not limited to, Public Health Action 1.4 - Asthma management (Cross-reference) ● The CBP will speak to the following stages of implementation: <ul style="list-style-type: none"> ○ Length of fuel refining focused CBP ○ Fuel refining focused CBP success evaluation (criteria, timelines, and longevity) ○ Expansion from fuel-refining CBP into a PTCA-wide CBP (Step 2 below), which would include decisions about resource needs and governance ● The CBP will establish a long-term mechanism to allow the CSC and/or CBP Subcommittee to provide consultation on CBP implementation with respect to local input ● The Fuel Refining CBP will be launched within 30 days of a policy (including CBP implementation mechanisms) being approved by the Air District Board of Directors ● The Fuel Refining Community Benefits Policy will be expanded into a PTCA-wide community benefits policy. <p>CBP Subcommittee and Air District will:</p> <ul style="list-style-type: none"> ● incorporate successes and lessons learned from the PTCA Fuel Refining CBP. ● draft a proposal for a PTCA-wide CBP and share it through a transparent and inclusive public review process. ● CBP Subcommittee will provide guidance on public engagement for the review.
Type of action	Legal; Financial
Lead action implementor	Air District Board of Directors
Related existing Program, Policy, or Initiative	Air District Press release: Contra Costa County and the Bay Area Air Quality Management District push for at least 40 percent of Tesoro settlement funds to stay local. Proposals include funding countywide health initiatives.
Partners in action implementation	Air District Board of Directors, Air District Legal and Financial Divisions, CSC CBP Subcommittee,
Key stakeholders to engage in	CSC, CAC, and Community

Action #	FR 3.9
action implementation	
Potential obstacles	Developing and implementing the policy could take several months; Determining which group(s) will oversee the budget/determine where money will be invested once the fund is created; Coordination, communication and cooperation amongst stakeholders; Divergent views amongst community members on how money should be used; Ensuring that programs/investments will continue/can be sustained by the community into the future if there is a reduction in penalty monies as a result of fewer violations at the facility; Promoting/Sustaining community involvement in the process.
Action initiation timeframe	Near=<2 years
Action intervention point	-
Action impact timeframe	Mid=2-4 years; Long > 4 years
Measure/metric of action implementation	Was a CBP Subcommittee created? (yes/no) Was the fuel refining CBP developed and taken to the Board of Directors? (yes/no?) Was the fuel refining CBP approved by the Board? (yes/no?) Was a clear protocol/guidance for the management and oversight of the CBP created? (yes/no?) Does the management and oversight of the CBP include and consider community input/concerns? (yes/no?) Was the fuel refining CBP expanded to cover the full PTCA area? (y/n) Is there consensus among the stakeholders/partners as to how the funds should be used in the community? (yes/no?)
Can any emission/exposure reduction be estimated	Too speculative

Action #	FR 3.10
Action name/brief description	<p>Air District will develop a program by 2026 to apply a Title VI/Gov. Code section 11135 lens including, but not limited to, a process for applying civil rights/disparate impact analyses for Air District refinery-related permitting activities in the PTCA area.</p> <ul style="list-style-type: none"> ● Air District EJ Officer and Community Engagement will collaborate with the CSC and community, Air District Engineering and Planning, in developing the program. <ul style="list-style-type: none"> ○ Development must include, but not be limited to, the following: <ul style="list-style-type: none"> ■ An evaluation of Just Transition principles ■ An evaluation of when in the project review (e.g., CEQA analysis) and permitting process it would be most effective to apply the elements of such a program. <ul style="list-style-type: none"> ● E.g., Implement in the early stages in the CEQA process ■ Develop guidance for program implementation, including

Action #	FR 3.10
	<ul style="list-style-type: none"> ● Triggers for implementing the analysis ● Thresholds to incorporate results of the analyses into non-discretionary decision-making ■ Cross-reference: Resource PTCA Plan Implementation ■ Cross-reference: Strategy 1 – Move Towards a Just Transition ○ A disparate impact analysis may include, but is not limited to: <ul style="list-style-type: none"> ■ Further evaluation of demographic data indicating vulnerabilities in the affected population; ■ An evaluation of existing environmental data, including air monitoring, air modeling, or, as appropriate, data from other media; ■ An evaluation of the facility’s compliance record; ■ An evaluation of existing public health data about the affected community; ■ An evaluation of harm done to indigenous tribes and/or Sogorea Te’ Land Trust ■ An evaluation of the permitting action’s potential health and non-health adverse effects (e.g., noise, odor, and traffic), such as a health impact assessment; ■ An evaluation of the cumulative impact of the permitting action under consideration, together with impacts from other regulated and non-regulated sources of pollution in the community; ■ An evaluation of the potential effects of the permitting action under consideration on the health of a population and the distribution of those effects within the population ■ An evaluation of potential methods for minimizing or mitigating adverse effects on the community; and ■ An evaluation of less discriminatory alternatives to the proposed action.
Type of action	Regulatory; Further research
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Title VI, Gov. Code section 11135
Partners in action implementation	CSC
Key stakeholders to engage in action implementation	CSC, community, EPA, CARB, interested NGOs, academia and research institutes, Contra Costa County; medical experts; Air District Advisory Council
Potential obstacles	The timeframe for this action is aggressive, so implementing it within the specified timeframe may be a challenge. If the timeframe becomes infeasible, this action would require more time to implement. Additional internal resources will be critical to this program, and without them the current level of resources will be an obstacle to implementation. In terms of implementing the action, this will also require a good deal of discussion with,

Action #	FR 3.10
	and input from, the CSC and community, so there will need to be resources there in terms of people and time available. In terms of some of the potential aspects of a disparate impact analysis, such as the health impact assessment, partnerships and/or collaboration with academia or other entities with appropriate expertise could help address any obstacles with respect to Air District staffing, resources, and expertise.
Action initiation timeframe	Near=<2 years
Action intervention point	n/a
Action impact timeframe	Mid=2-4 years; Long > 4 years
Measure/metric of action implementation	Was a collaborative workgroup convened to develop the program (y/n)? Was a program proposed (y/n)?
Can any emission/exposure reduction be estimated	Too speculative

Action #	FR 3.11
Action name/brief description	Air District will expand the distance and circumstances covered by Air District notifications for fuel refining permit actions <ul style="list-style-type: none"> ● Update current policy to provide notification to the entire PTCA area about fuel refining permit actions that would affect the PTCA area ● Discuss with CSC on the following: <ul style="list-style-type: none"> ○ Best Method of notification (e.g., via web posting, e-mail listserv announcements, physical mailing) ○ Changes to triggers for notification (e.g., a distance radius greater than 1000 ft, other circumstances) ○ What fuel refining facilities should be subject to this increased radius or other conditions ○ Varying thresholds for notification based on level of impact (e.g., for emissions from a tall stack, account for potential impacts covering a relatively wider area) ○ Time frames for permitting actions that account for time needed for any additional mailings and responses to any comments received ● Evaluate charging permit fees to recover added cost for additional mailing, including <ul style="list-style-type: none"> ○ Amending permitting or fee rules as needed to charge for additional costs ○ Cross-reference: C&I Strategy 2.4: Open Permitting Rules for Rule Development ● Cross-reference Chapter 9 <ul style="list-style-type: none"> ○ As needed, utilize Community Engagement Subcommittee to inform discussion (e.g., to get feedback on the best forms of notification to use; languages to provide notification in)

Action #	FR 3.11
	<ul style="list-style-type: none"> • Cross-reference: Resource PTCA Plan Implementation - may need additional staffing to cover work for this expansion
Type of action	Education/Outreach; Permitting
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Rule 2-5
Partners in action implementation	CSC; Air District Engineering
Key stakeholders to engage in action implementation	CSC, community; regulated facilities
Potential obstacles	Time frames for permitting actions may need to be expanded to account for this, because additional time to increase notifications could be an obstacle to meeting regulatory deadlines for processing permits. Fees for added cost for additional mailing could require rule development in order to recover cost, which is a larger resource need with respect to staffing.
Action initiation timeframe	Near=<2 years; Mid=2-4 years
Action intervention point	n/a
Action impact timeframe	Near=<2 years; Mid=2-4 years
Measure/metric of action implementation	Was the CSC consulted on how best to expand notification practices (y/n)? Were the factors used for notification expanded beyond current practices (y/n)?
Can any emission/exposure reduction be estimated	-

Action #	FR 3.12
Action name/brief description	<p>Follow the Air District's new EJ Chapter in its California Environmental Quality Act (CEQA) Guidance⁵, which includes:</p> <ul style="list-style-type: none"> • When the Air District is the Lead Agency, <ul style="list-style-type: none"> ◦ Limit use of ministerial CEQA exemptions in the fuel refining sector, consistent with state CEQA Statute and Guidelines and Air District EJ Chapter ◦ Conduct enhanced public notification of any and all proposed fuel refining CEQA exemptions (even informal ones) in the PTCA area, informed by CSC input ◦ Use agency discretion to protect public health (e.g., setting baseline conditions to favor robust analysis/mitigation measures)

⁵ <https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-2-environmental-justicefinal.pdf.pdf?la=en>

	<ul style="list-style-type: none"> ○ Develop timelines and protocols for public-facing, language-accessible, and appropriately scheduled workshops/opportunities for public input early in the CEQA process for significant fuel refining activities, well before issuing draft permits ○ Provide information on how community participation can meaningfully impact the CEQA process ● When another entity is the Lead Agency, the Air District shall use its role as Responsible Agency to advocate for implementation of the above list, including working with the Lead Agency
Type of action	Permitting
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	CEQA
Partners in action implementation	Other CEQA Lead Agencies
Key stakeholders to engage in action implementation	Other CEQA Lead Agencies, community interested participating in CEQA process
Potential obstacles	The Air District is not always a Lead Agency, and therefore that can present an obstacle to implementing the guidance from the EJ CEQA chapter. Utilizing the Air District's role as Responsible Agency is intended to help with this, but the Air District's authority is more limited in those circumstances. This will also require additional staffing resources in order to cover a larger number of CEQA projects and to coordinate with external agencies acting at Lead Agency
Action initiation timeframe	Near =<2 years
Action intervention point	n/a
Action impact timeframe	Near=<2 years; Mid=2-4 years
Measure/metric of action implementation	<ul style="list-style-type: none"> ● Did the Air District implement the Guidance for a CEQA project? (y/n; # of projects) ● Did an external Lead Agency implement the Guidance? (y/n; # of projects)
Can any emission/exposure reduction be estimated	-
Action #	FR 3.13
Action name/brief description	<p>Improve refinery fenceline and community air monitoring programs</p> <ul style="list-style-type: none"> ● The Meteorology and Measurement Division (M&M) will coordinate with CSC to develop and implement a plan to improve fenceline and Ground Level Monitoring that the refinery is required to conduct.

Action #	FR 3.13
	<ul style="list-style-type: none"> ○ Evaluate improvements such as those from SB674, which include new requirements for additional monitoring, data reporting, quality assurance systems, and transparency. <ul style="list-style-type: none"> ▪ This may include requirements for alerts to the public when monitored values are above health thresholds (Cross-reference FR 2.2) ▪ Additional pollutants to be considered include those identified by OEHHA in their 2019 report on refinery emissions, and other refinery-emitted pollutants identified by the PTCA technical assessment. ○ It also includes specific requirements for the refinery around notifications and investigating, reporting, and addressing the root cause of higher pollutant levels. ○ In addition to changes from SB 674, this strategy includes the Air District conducting additional data review and analysis, as well as follow-up of the resulting findings. ○ This effort will be coordinated with the PTCA CSC and includes changes to rules and guidelines (Rules 9-1, 9-2, 12-15) and permits. ○ The CSC and Air District will work with Chevron and the City of Richmond to develop a Memorandum of Understanding (MOU) for improved access to the raw and summarized air quality data and metadata from the three Community Monitoring Stations Chevron operates in accordance with their agreement with the City of Richmond. ● M&M will work with the PTCA CSC to implement enhancements of District long-term air monitoring for the Major Stationary Source Community Air Monitoring Program (Schedule X), including discussing locations, specific pollutants to be measured, and how the data will be made available to the public with context. ● M&M will continue to work with bill authors for SB 674 (if it is going to become a 2-year bill, as it did not pass in 2023) to help the codified language meet the intended goals of improved fence-line and community air monitoring. <p>Cross-reference: Resource PTCA Plan Implementation</p>
Type of action	Emissions and Air Monitoring
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	SB674
Partners in action implementation	CSC, City of Richmond
Key stakeholders to engage in action implementation	CSC, City of Richmond, Community, other refinery communities
Potential obstacles	Staffing resources, logistical constraints on feasible monitoring due to topography, limited technology for accurate monitoring to detect some pollutants in real time.

Action #	FR 3.13
Action initiation timeframe	Near=<2 years
Action intervention point	Concentration and Exposure
Action impact timeframe	Long > 4 years (expected implementation deadline of January 1, 2028. Some tasks to be completed sooner per the approved plan developed as a part of this strategy)
Measure/metric of action implementation	Was a plan for improving refinery monitoring developed with the CSC (yes/no?) Were the interim milestones identified in the monitoring improvement plan completed in a timely fashion (yes/no?) Were the new requirements for refinery monitoring programs operational by the deadline (yes/no?)
Can any emission/exposure reduction be estimated	-

Action #	FR 3.14
Action name/brief description	<p>Improve source emissions monitoring and reporting for sources at the Chevron Refinery and fuel refining-related facilities</p> <p>Air District will:</p> <ul style="list-style-type: none"> ● Expand and/or clarify emissions monitoring, recordkeeping, or reporting requirements for sources in fuel refining-related facilities' operating permits to assure compliance with existing emission limits or other operational requirements. <ul style="list-style-type: none"> ○ The Meteorology and Measurement and Engineering Divisions will evaluate this for new, revised, and renewed permits. ○ Changes should include, but are not limited to, the frequency and pollutants measured by source tests or Continuous Emission Monitoring Systems (CEMS), evaluating advancement in emissions measurement technologies such as CEMS or other types of monitoring, required quality management systems to document the data uncertainty, standardizing data reporting, and increasing transparency. ● Improve emissions monitoring, recordkeeping and reporting requirements in District regulations governing sources at refineries and auxiliary facilities, including the applicable parts of the Manual of Procedures. <ul style="list-style-type: none"> ○ Meteorology and Measurement will work with Rule Development and other divisions to develop a list of rules that have opportunities for strengthening requirements for emissions monitoring, recordkeeping, and reporting, or other practical enforceability issues, and to assure that the requirements included in revised rules are as robust and up to date as possible, increasing the effectiveness of the rule. ● These improvements will incorporate lessons learned from recent enforcement actions, to help prevent recurrence. ● Cross-reference: Resource PTCA Plan Implementation
Type of action	Emissions and Air Monitoring; Regulatory; Permitting

Action #	FR 3.14
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Emissions monitoring, Manual of Procedures, Permitting
Partners in action implementation	CSC
Key stakeholders to engage in action implementation	CSC, community, regulated facilities
Potential obstacles	Staffing resources, technical challenges around defining standard data formats and data management systems for such a wide variety of data types and circumstances
Action initiation timeframe	Long > 4 years
Action intervention point	Emissions
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	Lists of permit or rule changes for monitoring, recordkeeping, or reporting requirements. Were lessons learned from enforcement actions incorporated into future permit/rule revisions (yes/no?)
Can any emission/exposure reduction be estimated	-

Action #	FR 3.15
Action name/brief description	<p>Refinery-related measurement data accessibility improvements</p> <ul style="list-style-type: none"> • The Air District and the CSC Implementation team will develop and implement a plan, including timelines, to make refinery-related air and emissions data more accessible • The Air District will conduct analyses of various refinery related and PTCA area air and emissions data and communicate insights from this work on an ongoing basis. Analyses will evaluate <ul style="list-style-type: none"> ○ Long-term and seasonal trends in measured CAPs and TACs ○ Short-duration episodes of higher levels of CAPs and TACs ○ Patterns of CAPs and TACs throughout the PTCA area • This work will include data from Air District ongoing air and emissions monitoring programs or short-term monitoring projects, refinery-conducted monitoring including fenceline systems, and from community-led monitoring projects or other publicly available air sensor networks. This work will also coordinate with other Air District air quality information, for example the emissions inventory and air quality modeling work. • Outcomes of the pilot project will include <ul style="list-style-type: none"> ○ A web page or resources that describes how to access different datasets

Action #	FR 3.15
	<ul style="list-style-type: none"> o Reports, fact sheets, or other updates that communicate the information and insights that result from summarizing and analyzing the air quality and emissions monitoring data will be provided annually for ongoing data collection, and also after special monitoring studies. o Improved communication approaches for air quality impacts that aren't directly comparable to a health-based standard (e.g., high hours of PM_{2.5} compared to 24-hour levels.) o Hold a public meeting to introduce new monitoring data and insights resources to the community and provide opportunities for ongoing sharing of improvement suggestions. <p>Cross-reference: Resource PTCA Plan Implementation</p>
Type of action	Air and Emissions Monitoring; Data Transparency
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Air District long-term air monitoring, short-term community-focused air monitoring, emissions measurements and oversight, and technical support to overburdened communities for air monitoring and data.
Partners in action implementation	Community organizations conducting air monitoring
Key stakeholders to engage in action implementation	Work with the CSC Implementation Team to refine plans for data accessibility to ensure it meets the PTCA community's information needs. This could include scoping how datasets and air quality findings are communicated and displayed, and a process for ongoing and routine feedback from the community as the plans are implemented, or as the community's needs for air quality information evolve. Engagement could also include other refinery corridor community groups.
Potential obstacles	Time to build new data systems for datasets that vary widely in format and meaning. Time to collate and verify various datasets to be able to say something about known data quality.
Action initiation timeframe	Near=<2 years
Action intervention point	-
Action impact timeframe	Ongoing though near-, mid-, and long-term. Develop the initial plan for the refinery-related data accessibility pilot project by mid-2024.
Measure/metric of action implementation	Timely completion of the deliverables according to the scope and timeline described in the Refinery Data Accessibility Project workplan
Can any emission/exposure reduction be estimated	-

Strategy 4 – Reduce Exposure and Public Health Impacts from Toxic Air Contaminants Emitted by the Fuel Refining Sector – Actions:

Action #	FR 4.1
<p>Action name/brief description</p>	<p>Amend Rule 11-18 to improve stringency, efficiency, transparency, and public engagement</p> <p>Air District will:</p> <ul style="list-style-type: none"> • Collaborate with CSC on the following processes: <ul style="list-style-type: none"> ○ amendment concepts ○ draft language ○ proposed language ○ proposed timelines ○ stakeholder engagement <p>Rule development for amendments will evaluate the following (via one or more rounds of rule development, initiated in 2023):</p> <ul style="list-style-type: none"> • Expedited timelines in the rule, such as <ul style="list-style-type: none"> ○ combining facility and public review periods into a single period for Phase 1 Facilities ○ reducing time allocated to complete a Risk Reduction Plan (RRP) after a Health Risk Assessment (HRA) is finalized • Additional mechanisms to increase implementation efficiency, including <ul style="list-style-type: none"> ○ prioritizing rule implementation at priority facilities (e.g., AB617 communities and Overburdened Communities) ○ for facilities below a certain prioritization score (e.g., below a prioritization score of 1000), requiring facilities submit their own HRAs in order to more quickly move into Air District review of the HRA • Improved health protection and assurance of continuous improvement by <ul style="list-style-type: none"> ○ Incorporating population-based risk into action requirements (or an additional risk-based factor) <ul style="list-style-type: none"> ▪ to account for risk for the nearby population, beyond just risk to the Maximally Exposed Individual (MEI) ○ Establishing a mandatory risk reduction level independent of TBARCT (Toxics Best Available Retrofit Control Technology) installation status ○ Assessing the cancer risk threshold ○ Assessing the Toxic Air Contaminants-based (TAC-based) chronic hazard index • Periodic re-evaluations of TBARCT, such as <ul style="list-style-type: none"> ○ Re-evaluations of TBARCT status every 10 years, for facilities with health risk greater than the RAL • Removing exemptions for emergency use-diesel engines and for Gasoline Dispensing Facilities (GDFs) • Incorporating the shortest implementation timeline(s) feasible for the rule amendments <p>Cross-references:</p> <ul style="list-style-type: none"> • Public Health Strategy 6, with respect to potentially incorporating any future findings from improvements in health risk data, analyses, and research • Resource PTCA Plan Implementation

Action #	FR 4.1
Type of action	Regulatory (Air District)
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Rule 11-18 Implementation; SCAQMD Rule 1401 (New Source Review of Toxic Air Contaminants) and Rule 1402 (Control of Toxic Air Contaminants from Existing Sources)
Partners in action implementation	CSC, community, Air District Engineering
Key stakeholders to engage in action implementation	CSC, community, regulated entities, CAC
Potential obstacles	<p>The rule amendment items will be focused on expediting the implementation of the rule, streamlining the implementation process of the rule, and strengthening the rule to require further health risk reduction. Because of the length of the list of potential amendment concepts to be evaluated, a rule development approach may need to be broken up into more than one round of rule development efforts. This could allow for certain amendments to be brought to the Board of Directors sooner, and a second round of amendments (that may take longer to develop) to be brought forward later.</p> <p>It may be challenging to balance amendment items that will expedite the rule implementation and increase transparency for the community of the rule implementation, as additional public engagement can take time and has the potential to result in longer rule implementation timelines. Stakeholder engagement with the affected facilities, CSC, and the community will be crucial in ensuring the amendment items are viable to all the stakeholders. In addition, staffing for implementation of Rule 11-18 can be another obstacle.</p>
Action initiation timeframe	Near=<2 years
Action intervention point	emissions, exposure
Action impact timeframe	Mid=2-4 years; Long > 4 years
Measure/metric of action implementation	<p>Were rule concepts produced for public input? (y/n)</p> <p>Were draft rule amendments produced? (y/n)</p> <p>Were rule amendments proposed to the Air District Board of Directors? (y/n)</p> <p>Were rule amendments adopted? (y/n)</p>
Can any emission/exposure reduction be estimated	Too speculative to estimate emissions reductions at this time

Action #	4.2
Action name/brief description	<p>Prioritize implementation of Rule 11-18 for Chevron, including the following elements:</p> <p>Health Risk Assessment Air District will:</p> <ul style="list-style-type: none"> Complete and publish the Health Risk Assessment (HRA) for Chevron

Action #	4.2
	<ul style="list-style-type: none"> ○ Prioritize the completion and publication of the final HRA expeditiously <ul style="list-style-type: none"> ■ including regular updates on progress (cross-reference FR 4.4) ○ Engage with the CSC on the HRA <ul style="list-style-type: none"> ■ Notify CSC and CSC-identified external stakeholders upon HRA completion and availability for review ■ Upon request by the CSC, present HRA to the CSC ○ Engage with CSC-identified stakeholders on the HRA <ul style="list-style-type: none"> ■ Air District: Provide the HRA Executive Summary to CSC identified stakeholders, including but not limited to the Cities of Richmond and San Pablo and Contra Costa County Board of Supervisors, as well as a CSC-designated Environmental Justice NGOs ■ Upon request, Air District and CSC will work together to present the HRA at meetings of Cities of Richmond and San Pablo and Contra Costa County Board of Supervisors <p>CSC will:</p> <ul style="list-style-type: none"> ● Provide feedback on the HRA during the public comment period ● Advocate to CSC-identified stakeholders about the importance of engaging in the HRA review process ● Engage Environmental Justice NGO about HRA and ways to advocate for community <p>Risk Reduction Plan</p> <p>Air District will:</p> <ul style="list-style-type: none"> ● Evaluate the Risk Reduction Plan (RRP) required from Chevron expeditiously <ul style="list-style-type: none"> ○ Perform all applicable global best practices analyses to ensure Chevron’s RRP properly complies with Rule 11-18 risk reduction requirements <ul style="list-style-type: none"> ■ including a review of best available controls (see Table FR 4.5: Chevron Source Categories, including best available controls for each category) ○ Limit any proposed facility extensions on RRP timelines ○ Engage with the CSC and CSC-identified stakeholders on RRP contents <ul style="list-style-type: none"> ■ Notify CSC and CSC-identified external stakeholders upon RRP availability for review ■ Upon request, present RRP to CSC <ul style="list-style-type: none"> ● Provide an RRP Executive Summary to CSC identified stakeholders, including but not limited to the Cities of Richmond and San Pablo and Contra Costa County Board of Supervisors, as well as a CSC-designated Environmental Justice NGOs ● Upon request, Air District and CSC will work together to present the RRP at meetings of Cities of Richmond and San Pablo and Contra Costa County Board of Supervisors

Action #	4.2
	<ul style="list-style-type: none"> ■ Following completion of the comment period, present Stakeholder findings including concerns and questions to the full CSC <p>CSC will:</p> <ul style="list-style-type: none"> ● Write and vote on a recommendation letter on the RRP to be presented during Air District’s public comment period ● Advocate to CSC-identified stakeholders about the importance of engaging in the RRP review process ● Engage Environmental Justice NGO about RRP and ways to advocate for community <p>Retrospective Analysis Air District will:</p> <ul style="list-style-type: none"> ● Implement Action FR 4.5 - Evaluate and Implement Targeted Single-Source Category Controls to further reduce public health impact from TACs <p>Additional Efforts Air District will:</p> <ul style="list-style-type: none"> ● Implement changes from Rule 11-18 post-amendment, to incorporate any updated requirements that Chevron becomes subject to <ul style="list-style-type: none"> ○ Cross-reference: FR Action 4.1 ● Report on Implementation progress <ul style="list-style-type: none"> ○ Cross-reference FR Action 4.4: Regular reports on progress of Rule 11-18 Implementation in PTCA area <p>Cross-reference: Resource PTCA Plan Implementation Strategy</p>
Type of action	Regulatory (Air District) Implementation
Lead action implementor	Air District (including Air District Engineering); CSC
Related existing Program, Policy, or Initiative	Rule 11-18
Partners in action implementation	CSC, community, NGOs
Key stakeholders to engage in action implementation	Community, especially those that live in neighborhoods most impacted by TAC exposures from Chevron; Chevron
Potential obstacles	Staffing to implement Rule 11-18 can be an obstacle, as the rule implementation timelines are impacted by resource limitations. Additionally, Chevron may respond to the HRA and RRP steps in 11-18 implementation in a way that extends timelines for implementation to the maximum extent possible. Further, there might be obstacles with respect to engaging NGO partners for support on HRA and RRP reviews, should an NGO not have capacity at any given time to provide said support.
Action initiation timeframe	Near =<2 years (except see FR Action 4.5 timeline for RRP retrospective)
Action intervention point	Emissions, Exposure
Action impact timeframe	Long > 4 years

Action #	4.2
Measure/metric of action implementation	Was an HRA finalized? (yes/no) Was an RRP finalized? (yes/no) Direct emissions reductions Direct risk reductions
Can any emission/exposure reduction be estimated	Too speculative until RRP is available

Action #	4.3
Action name/brief description	<p>Implement Rule 11-18 at Chemtrade, including the following elements:</p> <p>Health Risk Assessment Air District will:</p> <ul style="list-style-type: none"> ● Complete and publish the Health Risk Assessment (HRA) for Chemtrade <ul style="list-style-type: none"> ○ Prioritize the completion and publication of the final HRA expeditiously <ul style="list-style-type: none"> ■ including regular updates on progress (cross-reference FR 4.4) ○ Engage with the CSC on the HRA <ul style="list-style-type: none"> ■ Notify CSC and CSC-identified external stakeholders upon HRA completion and availability for review ■ Upon request by the CSC, present HRA to the CSC ○ Engage with CSC-identified stakeholders on the HRA <ul style="list-style-type: none"> ■ Air District: Provide the HRA Executive Summary to CSC identified stakeholders, including but not limited to the Cities of Richmond and San Pablo and Contra Costa County Board of Supervisors, as well as a CSC-designated Environmental Justice NGOs ■ Upon request, Air District and CSC will work together to present the HRA at meetings of Cities of Richmond and San Pablo and Contra Costa County Board of Supervisors <p>CSC will:</p> <ul style="list-style-type: none"> ● Provide feedback on the HRA during the public comment period ● Advocate to CSC-identified stakeholders about the importance of engaging in the HRA review process ● Engage Environmental Justice NGO about HRA and ways to advocate for community <p>Risk Reduction Plan (should a Plan be required per the HRA) Air District will:</p> <ul style="list-style-type: none"> ● Evaluate the Risk Reduction Plan (RRP) required from Chemtrade expeditiously <ul style="list-style-type: none"> ○ Perform all applicable global best practices analyses to ensure Chemtrade's RRP properly complies with Rule 11-18 risk reduction requirements <ul style="list-style-type: none"> ■ including a review of best available controls ○ Limit any proposed facility extensions on RRP timelines

Action #	4.3
	<ul style="list-style-type: none"> ○ Engage with the CSC and CSC-identified stakeholders on RRP contents <ul style="list-style-type: none"> ■ Notify CSC and CSC-identified external stakeholders upon RRP availability for review ■ Upon request, present RRP to CSC <ul style="list-style-type: none"> ● Provide an RRP Executive Summary to CSC identified stakeholders, including but not limited to the Cities of Richmond and San Pablo and Contra Costa County Board of Supervisors, as well as a CSC- designated Environmental Justice NGOs ● Upon request, Air District and CSC will work together to present the RRP at meetings of Cities of Richmond and San Pablo and Contra Costa County Board of Supervisors ■ Following completion of the comment period, present Stakeholder findings including concerns and questions to the full CSC <p>CSC will:</p> <ul style="list-style-type: none"> ● Write and vote on a recommendation letter on the RRP to be presented during Air District’s public comment period ● Advocate to CSC-identified stakeholders about the importance of engaging in the RRP review process ● Engage Environmental Justice NGO about RRP and ways to advocate for community <p>Retrospective Analysis Air District will:</p> <ul style="list-style-type: none"> ● Implement Action FR 4.5 - Evaluate and Implement Targeted Single-Source Category Controls to further reduce public health impact from TACs <p>Additional Efforts Air District will:</p> <ul style="list-style-type: none"> ● Implement changes from Rule 11-18 post-amendment, to incorporate any updated requirements that Chemtrade becomes subject to <ul style="list-style-type: none"> ○ Cross-reference: Action FR 4.1 ● Report on Implementation progress <ul style="list-style-type: none"> ○ Cross-reference Action FR 4.4: Regular reports on progress of Rule 11-18 Implementation in PTCA area <p>Cross-reference: Resource PTCA Plan Implementation Strategy</p>
Type of action	Regulatory (Air District) Implementation
Lead action implementor	Air District (including Air District Engineering); CSC
Related existing Program, Policy, or Initiative	Rule 11-18
Partners in action implementation	CSC, community, NGOs
Key stakeholders to engage in	Community, especially those that live in neighborhoods most impacted by TACs exposures from Chemtrade; Chemtrade

Action #	4.3
action implementation	
Potential obstacles	Staffing to implement Rule 11-18 can be an obstacle, as the rule implementation timelines are impacted by resource limitations. Additionally, Chemtrade may respond to the HRA and RRP steps in 11-18 implementation in a way that extends timelines for implementation to the maximum extent possible. Further, there might be obstacles with respect to engaging NGO partners for support on HRA and RRP reviews, should an NGO not have capacity at any given time to provide said support.
Action initiation timeframe	Near =<2 years (except see Action 1.5 timeline for RRP retrospective)
Action intervention point	Emissions, Exposure
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	Was an HRA finalized? (yes/no) Was an RRP finalized? (yes/no)
Can any emission/exposure reduction be estimated	Too speculative until RRP is available

Action #	4.4
Action name/brief description	<p>Implement Rule 11-18 at all other fuel-refining and fuel-refining related facilities* subject to the rule and Provide Regular Updates on Rule 11-18 Implementation</p> <p>*(note: see Commercial and Industrial Sources Near Community Strategy 2 for Rule 11-18-related actions covering non-fuel-refining facilities)</p> <p>Air District:</p> <ul style="list-style-type: none"> ● For any additional Phase 1 and Phase 2 facilities that fall under the category of Fuel Refining, outside of Chevron and Chemtrade, implement 11-18 in the same manner outlined in Actions FR 4.2 and FR 4.3 ● Provide regular reports on progress of Rule 11-18 implementation in PTCA area beginning January 2024 <ul style="list-style-type: none"> ○ Align with 9/2/2023 Settlement Agreement with CBE⁶, under which there are specifics regarding 'Regular Meetings of the Parties Regarding Implementation of Regulation 11-18 and Responsiveness to Community Regarding Facilities Subject to Regulation 11-18' ○ Invite PTCA CSC to these meetings <p>CSC and community:</p> <ul style="list-style-type: none"> ● For any additional Phase 1 and Phase 2 facilities that fall under the category of Fuel Refining, outside of Chevron and Chemtrade, engage in 11-18 implementation as outlined in Actions FR 4.2 and 4.3

⁶ https://www.baaqmd.gov/~/media/files/communications-and-outreach/publications/news-releases/2023/2023_022_cbsettlement_090423-pdf.pdf?la=en&rev=ac0ee6906bbb451b916dafeb56b9997b

Action #	4.4
	<p>Phase 1 and 2 Facilities - Fuel Refining (Current as of 6.1.2023; note: with additional analysis, the list is subject to change)</p> <ul style="list-style-type: none"> • Phase 1 (facilities with an unadjusted cancer risk prioritization score of 250 or higher and sites with an unadjusted chronic hazard index of 10 or higher): <ul style="list-style-type: none"> ○ Chevron (see Action FR 4.2) ○ Chemtrade (see Action FR 4.3) • Phase 2 (facilities with an unadjusted cancer risk prioritization score of 10-250 or higher and sites with an unadjusted chronic hazard index of 1 or higher): <ul style="list-style-type: none"> ○ Chevron Richmond Technology Center ○ Richmond Products Terminal (Kinder Morgan)
Type of action	Regulatory (Air District) Implementation
Lead action implementor	Air District; CSC
Related existing Program, Policy, or Initiative	Rule 11-18
Partners in action implementation	CSC, community, NGOs
Key stakeholders to engage in action implementation	Community members, especially those that live in neighborhoods most impacted by TACs exposures from these facilities; Regulated facilities
Potential obstacles	Staffing to implement Rule 11-18 can be an obstacle, as the rule implementation timelines are impacted by resource limitations. Additionally, any facility subject to Rule 11-18 may respond to the HRA and RRP steps in 11-18 implementation in a way that extends timelines for implementation to the maximum extent possible. Further, there might be obstacles with respect to engaging NGO partners for support on HRA and RRP reviews, should an NGO not have capacity at any given time to provide said support.
Action initiation timeframe	Mid=2-4 years; Long > 4 years
Action intervention point	Emissions, Exposure
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	Was an HRA completed at a given facility? (y/n) If required, was an RRP finalized for a given facility? (y/n)
Can any emission/exposure reduction be estimated	Too speculative until RRP is available

Action #	4.5
Action name/brief description	Evaluate and Implement Targeted Single-Source Category Controls to further reduce public health impacts from TACs
	Air District will:

Action #	4.5
	<p>1. Evaluate</p> <ul style="list-style-type: none"> • Following completion of an RRP for a Fuel Refining (or fuel-refining related) facility under Rule 11-18, conduct a retrospective analysis on the facility's risk <ul style="list-style-type: none"> ○ Identify health burden estimated to remain post 11-18 implementation ○ Conduct targeted evaluations for source-specific controls to further reduce public health impact from TACs <ul style="list-style-type: none"> ▪ For Chevron, this is including but not limited to the following: <ul style="list-style-type: none"> ▪ <u>List FR 4.5: Chevron Source Categories and best available controls for each category:</u> <ul style="list-style-type: none"> • <i>Source: Tanks</i> <ul style="list-style-type: none"> ○ Best available controls: <ul style="list-style-type: none"> ▪ Doming ▪ Improvements to inspection and maintenance programs, and increased stringency for vapor recovery standards. <ul style="list-style-type: none"> • Enhanced monitoring for detecting leaks (see FR 3.14) ▪ Best combustion practices (in place) ▪ Additional controls that could be explored*: <ul style="list-style-type: none"> • post-combustion controls • limits on toxic metals in fuel gas • <i>Source: Boilers/Process Heaters</i> <ul style="list-style-type: none"> ○ Best available controls: <ul style="list-style-type: none"> ▪ Best combustion practices (in place) ▪ Additional controls that could be explored*: <ul style="list-style-type: none"> • post-combustion controls • limits on toxic metals in fuel gas • <i>Source: Cogeneration (Turbines and Heat Recovery Steam Generators (HRSGs))</i> <ul style="list-style-type: none"> ○ Best available controls: <ul style="list-style-type: none"> ▪ Best Combustion Practices (in place) ▪ Additional controls that could be explored: <ul style="list-style-type: none"> • post-combustion controls • limits on toxic metals in fuel gas • <i>Source: Sulfur Recovery Unit (SRU)</i> <ul style="list-style-type: none"> ○ Best available controls:

Action #	4.5
	<ul style="list-style-type: none"> <ul style="list-style-type: none"> <ul style="list-style-type: none"> ▪ Tail gas treatment system (in place) • Source: <i>Fugitives</i> <ul style="list-style-type: none"> ○ Best available controls: <ul style="list-style-type: none"> ▪ LDAR (leak detection and repair) programs (in place) <ul style="list-style-type: none"> • gas and light liquids • heavy liquids ▪ Improvements to LDAR programs <ul style="list-style-type: none"> • for heavy liquids (Rule 8-18 amendments) • Enhanced monitoring for detecting leaks (see FR 3.14) • Source: <i>Fluidized Catalytic Cracking Unit (FCCU)</i> <ul style="list-style-type: none"> ○ Best available controls: <ul style="list-style-type: none"> ▪ Wet Gas Scrubber ▪ Levels of control consistent with wet gas scrubber performance, as required by Rule 6-5 ○ Assess added reductions that could be achieved via source-specific rules, to close any gaps ○ Incorporate Community Input <ul style="list-style-type: none"> ▪ Air District: <ul style="list-style-type: none"> • Present the completed retrospective analysis to CSC and all interested external stakeholders including but not limited to the Cities of Richmond and San Pablo and Contra Costa County Board of Supervisors as well as a CSC designated Environmental Justice NGO for feedback ▪ CSC: <ul style="list-style-type: none"> • Vote on RRP targets to determine priority concerns on remaining risks and give Air District direction on implementation of Step 2 of Action FR 4.5
	<p>2. Implement</p> <ul style="list-style-type: none"> • Based on results of step 1, pursue rule development to require source-specific controls for individual source categories • For sources where TBARCT is not in place and is not implemented via 11-18, pursue requirements for source-specific controls in order to implement the best available controls: <ul style="list-style-type: none"> ○ For Chevron, List FR 4.5 (above) includes Chevron Source Categories and best available controls for each category ○ For sources with the best available controls in place, assess pollutant-specific toxics impacts and explore alternative options for control <ul style="list-style-type: none"> ▪ *See List FR 4.5 contents about additional controls that could be explored. It is important to note additional controls included in the above list may have significant issues with respect to feasibility, either because they have

Action #	4.5
	not been achieved in practice for the associated source type and/or because they have not been seen applied in the context of a refinery facility. Alternatives could include specific control technologies, if found feasible, and/or TAC-specific limits Cross-reference: Resource PTCA Plan Implementation
Type of action	Regulatory (Air District); Further research
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Rule 11-18
Partners in action implementation	CSC and CSC-identified external stakeholders; affected fuel refining facilities; Air District Engineering; Air District Rule Development
Key stakeholders to engage in action implementation	CSC, CSC-identified external stakeholders, community, technical experts
Potential obstacles	As noted in the action, in the instance that alternative controls must be explored, there are significant caveats to be aware of with respect to feasibility.
Action initiation timeframe	Long > 4 years
Action intervention point	Emissions, exposure
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	Was remaining burden analyzed based on post-11-18 implementation (y/n) Were sources identified for source-specific application of best available controls (y/n) Was a rule development process undertaken for a source (y/n, # of source categories)
Can any emission/exposure reduction be estimated	Too speculative

Strategy 5 - Reduce Exposure and Public Health Impacts from Particulate Matter and Other Criteria Air Pollutants Emitted by the Fuel Refining Sector – Actions:

Action #	FR 5.1
Action name/brief description	Implement Rule 6-5. Air District to engage in negotiations to resolve litigation and implement Rule 6-5 such that compliance occurs by the originally adopted timeline specified in the Rule.
Type of action	Regulatory (Air District) Implementation
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Advisory Council Particulate Matter Reduction Strategy Report

Action #	FR 5.1
Partners in action implementation	Chevron; Air District Engineering, Air District Legal
Key stakeholders to engage in action implementation	Community
Potential obstacles	Rule 6-5 amendments adopted in 2021 are currently under litigation. The outcome of the litigation is unclear at this time as the litigation is ongoing. Depending on the outcome of the litigation there may be impacts associated with the implementation of the rule. Obstacles are speculative in nature at this stage, as the details regarding the progress of the litigation cannot be provided as that may have an impact on the outcome of the litigation.
Action initiation timeframe	Near =<2 years
Action intervention point	Emissions
Action impact timeframe	Mid=2-4 years
Measure/metric of action implementation	Direct emission reductions
Can any emission/exposure reduction be estimated	Yes, to be determined later

Action #	FR 5.2
Action name/brief description	<p>Finalize PM_{2.5} Local Risk Methodology for rule development and accountability</p> <p>Air District will:</p> <ul style="list-style-type: none"> • Complete the white paper, "Modeling Health Risks from Local Sources of Fine Particulate Matter (PM_{2.5})," which documents a proposed risk methodology in detail (also referred to as the "PM_{2.5} Local Risk Methodology"). • Present white paper findings to CSC by the end of January 2024. <p>CSC will:</p> <ul style="list-style-type: none"> • Write and vote on a recommendation letter on the PM_{2.5} Local Risk Methodology and the importance of accounting for long-term health impacts from PM_{2.5} exposure in Air District work, including permitting and rule development, to be presented during Air District's public comment period <p>Cross-reference: Public Health Strategy 6</p>
Type of action	Further research
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Advisory Council Particulate Matter Reduction Strategy Report

Action #	FR 5.2
Partners in action implementation	-
Key stakeholders to engage in action implementation	Community, technical experts, advisory council
Potential obstacles	The Advisory Council will have many new members and potentially new topics after June 2023. However, the Advisory Council may be able to form an ad hoc for this topic to provide continuity.
Action initiation timeframe	Near =<2 years
Action intervention point	-
Action impact timeframe	Near =<2 years
Measure/metric of action implementation	Was the white paper finalized (yes/no)
Can any emission/exposure reduction be estimated	-

Action #	FR 5.3
Action name/brief description	<p>Develop and implement health-based rules for PM, upon finalizing a methodology to account for health risk from PM. Evaluate with respect to fuel refining sources, non-fuel refining sources, and other significant sources. Initiate by the end of 2025.</p> <p>Air District will:</p> <ul style="list-style-type: none"> ● Collaborate with CSC on the following processes: <ul style="list-style-type: none"> ○ rule development ○ amendment concepts ○ draft language ○ proposed language ○ proposed timelines ○ stakeholder engagement ● Evaluate mechanisms for incorporating health-based metrics from PM_{2.5} exposure into regulatory requirements <ul style="list-style-type: none"> ○ e.g., utilizing the PM_{2.5} Local Risk Methodology ● Amend the following rules or create a new rule to reduce PM health risk <ul style="list-style-type: none"> ○ Permitting Rules, including Rule 2-1 & Rule 2-5 ○ Rule 11-18 ● Cross-reference Public Health Strategy 6, which covers efforts to quantify the health risk from PM to integrate CAPs such as PM into health-based rules <p>CSC will:</p> <ul style="list-style-type: none"> ● Write and vote on a recommendation letter on any new and amended rules to be presented during Air District’s public comment period

Action #	FR 5.3
	Cross-references: FR 5.2 to finalize PM _{2.5} Local Risk Methodology
Type of action	Regulatory (Air District)
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Advisory Council Particulate Matter Reduction Strategy Report; PM _{2.5} Local Risk Methodology
Partners in action implementation	Advisory Council
Key stakeholders to engage in action implementation	Community, technical experts, advisory council
Potential obstacles	May require extensive work. It may have impacts on a wide variety of sources required to obtain air quality permits.
Action initiation timeframe	Med: 2-4 years; Long > 4 years
Action intervention point	-
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	Was a regulation drafted? (yes/no) Was a regulation proposed and adopted? (yes/no)
Can any emission/exposure reduction be estimated	Too speculative

Action #	FR 5.4
Action name/brief description	Include work to improve quantification of PM and VOC emissions from cooling towers in Fuel Refining Strategy 3 Action 13 Air District will: <ul style="list-style-type: none"> • Improve quantification of PM and VOC emissions from cooling towers, as part of Fuel Refining Strategy 3 Action 13: Improve refinery fence-line and community air monitoring programs • Adjust exposure modeling for Chevron based on findings, within 3-6 months of producing adjusted emission estimates Cross-reference: FR 3.14: Improve source emissions monitoring and reporting for sources at the Chevron Refinery and fuel refining-related facilities
Type of action	Further research
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	-
Partners in action implementation	-
Key stakeholders to engage in	CSC

Action #	FR 5.4
action implementation	
Potential obstacles	Resources; technical constraints
Action initiation timeframe	Near=<2 years Near=<2 years
Action intervention point	n/a
Action impact timeframe	Near=<2 years; Mid=2-4 years
Measure/metric of action implementation	Were improvements made to PM quantification for cooling towers? (yes/no) Were improvements made to VOC quantification for cooling towers? (yes/no)
Can any emission/exposure reduction be estimated	-

Action #	FR 5.5
Action name/brief description	Initiate rule development for NO _x emissions from combustion sources at petroleum refineries by the end of 2024 Air District will: <ul style="list-style-type: none"> • Collaborate with CSC on the following processes: <ul style="list-style-type: none"> ○ rule development concepts ○ draft language ○ proposed language ○ expedited timelines ○ stakeholder engagement • Evaluate regulatory requirements from South Coast AQMD's BARCT Rule 1109 for combustion sources at petroleum refineries • Evaluate the most expeditious implementation timeframes feasible
Type of action	Further research; Regulatory (Air District)
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	SCAQMD Rule 1109
Partners in action implementation	CSC
Key stakeholders to engage in action implementation	CSC; Community; SCAQMD; regulated entities
Potential obstacles	There are a large number of individual sources, which can present challenges with respect to cost effectiveness determinations. Implementation timelines will need to be taken into account. South Coast has a staggered implementation timeline spanning up to 10 years, so timelines will be a factor in prioritization considerations. Further potential considerations include potential construction timelines, permitting processes, material availability, etc.

Action #	FR 5.5
Action initiation timeframe	Near =<2 years
Action intervention point	Emissions
Action impact timeframe	Mid=2-4 years; Long>4 years
Measure/metric of action implementation	Was a rule development effort initiated? (yes/no) Was an update given to the CSC? (yes/no)
Can any emission/exposure reduction be estimated	-

Action #	FR 5.6
Action name/brief description	<p>Initiate rule development to evaluate controls to reduce SO₂ emissions and secondary PM generated by Chevron and related industries in the PTCA area.</p> <p>Air District will:</p> <ul style="list-style-type: none"> ● Evaluate SO₂ Emissions and secondary PM formation from sources in the fuel refining sector and determine if additional SO₂ reduction is feasible. <ul style="list-style-type: none"> ○ e.g., FCCU, Sulfur Recovery Units, Sulfuric Acid Plant, Storage Tanks ● Report findings to CSC and stakeholders by TBD <ul style="list-style-type: none"> ○ CSC will determine next steps to pursue based on findings and make recommendations to the Air District to further protect health ● Evaluate rule development opportunities, including an updated review of BARCT <ul style="list-style-type: none"> ○ Collaborate with CSC on the following processes: <ul style="list-style-type: none"> ■ rule development concepts ■ draft language ■ proposed language ■ expedited timelines ■ stakeholder engagement ● Evaluate the most expeditious implementation timeframes feasible
Type of action	Further research; Regulatory
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	-
Partners in action implementation	-
Key stakeholders to engage in action implementation	CSC; community
Potential obstacles	Staffing resources, subject to prioritization of implementation

Action #	FR 5.6
Action initiation timeframe	Near =<2 years
Action intervention point	Emissions
Action impact timeframe	Mid=2-4 years; Long>4 years
Measure/metric of action implementation	Was rule development initiated? (yes/no) Was an update given to the CSC? (yes/no)
Can any emission/exposure reduction be estimated	-

Marine and Rail (M&R)

M&R Strategies

1. Reduce Cancer and Chronic Health Risk from Rail Operations and Facilities
2. Reduce Cancer and Chronic Health Risk from Ocean Going Vessels (OGVs)
3. Reduce Cancer and Chronic Health Risk from Commercial Harbor Craft (CHC)
4. Reduce Cancer and Chronic Health Risk from Cargo Handling Equipment
5. Reduce Cancer and Chronic Health Risk from Cumulative Impact Facilities and Operations

Detailed Action Descriptions

Strategy 1 – Reduce Cancer and Chronic Health Risk from Rail Operations and Facilities – Actions

Action #	M&R 1.1
Action name/brief description	<p>Regulate Emissions Reductions from Rail</p> <p>CARB:</p> <ul style="list-style-type: none"> ● Implement the In-Use Locomotive Regulation adopted in 2023. <p>Air District and/or the CSC:</p> <ul style="list-style-type: none"> ● Air District: Assign a staff member to track Rail-related regulations and report to CSC on any issues where community input or review could have an impact on outcomes. ● Air District and/or the CSC: Support implementation of CARB’s In-Use Regulation: <ul style="list-style-type: none"> ○ Review Technology Feasibility Reports and comment as needed ○ Review and comment on any other reports, as needed <ul style="list-style-type: none"> ■ For example, any PTCA-relevant submittals to CARB to utilize the Alternative Fleet Compliance Option or the Short-term Compliance Option⁷ ● Air District: Track EPA’s response process for ‘Petitions to Address

7

https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/locomotive22/15daynotice.pdf?utm_medium=email&utm_source=govdelivery

Action #	M&R 1.1
	<p>Harmful Emissions from Locomotives'</p> <ul style="list-style-type: none"> As needed, engage in the process and advocate for EPA and/or CARB to establish stricter requirements for new locomotives and more stringent re-manufacturing requirements (e.g., Tier 5).
Type of action	Regulatory
Lead action implementor	CARB and EPA, with support from Air District and the CSC.
Related existing Program, Policy, or Initiative	CARB In-Use Locomotive Regulation. EPA Response to Petitions to Address Harmful Emissions from Locomotives.
Partners in action implementation	Air District, the CSC, CARB, and the EPA. Also regulated entities subject to the regulations/requirements.
Key stakeholders to engage in action implementation	The CSC. Specific community groups/neighborhoods closest to and/or most impacted by rail emissions. Regulated entities.
Potential obstacles	<p>The main potential obstacle is ample staff capacity at Air District to track and comment on regulations. There are currently limited staff hours dedicated to tracking marine and rail regulations.</p> <p>Another potential obstacle is engaging the community for input, which is discussed in greater detail in the Education and Outreach Action below. Even with lines of communication established, there need to be resources provided to properly engage community (CSC members and other groups), such as stipends, as well as staff resources to inform and educate the community as needed.</p>
Action initiation timeframe	Near=<2 years
Action intervention point	Emissions
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	Direct emission reductions (#)
Can any emission/exposure reduction be estimated	<p>Yes, later.</p> <p>CARB will estimate a 5th year (and possibly 10th year) target for the emissions reductions from implementing this regulation. CARB will then report on implementation and emissions benefits in their annual reporting. This is too speculative for EPA action.</p>

Action #	M&R 1.2
Action name/brief description	<p>Enforce Emissions Reductions for CARB In-Use Locomotive Regulation</p> <p>CARB:</p> <ul style="list-style-type: none"> CARB: Create annual summaries of local compliance (specific to the PTCA area) with CARB Marine and Rail Regulations* in effect, including publishing analysis of:

Action #	M&R 1.2
	<p><i>*Regulations including In-Use Locomotive Regulation; At Berth Regulation; CHC Regulation; CHE Regulation</i></p> <ul style="list-style-type: none"> ○ Data on local (PTCA) enforcement actions (including penalties), presented in terms that are usable and easily understood by community, pulling from resources including EDVS: https://ww2.arb.ca.gov/enforcement-2021-case-settlements and compliance: https://webmaps.arb.ca.gov/edvs/ ○ Any implementation issues that come up (e.g., technology not available on anticipated timeline, supply chain issues) ○ Align with the annual report in Action 1.5 below. <p>Air District and CSC:</p> <ul style="list-style-type: none"> ● Disseminate and review CARB compliance reports (through the project website or otherwise) <ul style="list-style-type: none"> ○ Make reports publicly available by posting to PTCA website ○ Identify areas in need of improvement and share with CARB ● Gather and share community input on local enforcement needs. ● Advocate for additional enforcement sweeps in the PTCA area. ● Advocate for legislature to maximize efficacy of use of penalties for violations. ● Advocate to CARB that they prioritize the Marine and Rail hubs with the highest cumulative impacts and exposure to communities <ul style="list-style-type: none"> ○ Define these hubs in partnership with Air District, CARB, and the Community, and share these with the PTCA area. ○ See Cumulative Impact Facilities and Operations Strategy
Type of action	Enforcement
Lead action implementor	CARB
Related existing Program, Policy, or Initiative	CARB Enforcement Program
Partners in action implementation	CARB, Air District, and the CSC
Key stakeholders to engage in action implementation	CARB, Air District, the CSC, and the public
Potential obstacles	Capacity of CARB and Air District staff to collect and disseminate information, as well as conduct the enforcement itself.
Action initiation timeframe	Near=<2 years
Action intervention point	Emissions
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	Was the regulation enforced (yes/no)
Can any emission/exposure	-

Action #	M&R 1.2
reduction be estimated	

Action #	M&R 1.3
Action name/brief description	<p>Incentivize (“Find and Fund”) Emissions Reductions</p> <p>Air District:</p> <ul style="list-style-type: none"> ● Identify state, federal, and locally-funded incentive opportunities for early or extra emissions reductions (i.e., surplus, beyond regulations): <ul style="list-style-type: none"> ○ Maximize local benefits (in terms of emissions and/or exposure); ○ Identify beneficial project types e.g., prioritize transitioning switchers to zero emission ○ Explore higher funding levels for local projects; ○ Investigate potential for new funding sources; ○ See existing programs, policies, and initiatives for a list of relevant grants programs to refer to. ● Identify small business-focused grants opportunities (e.g., mom and pop fishing operations) and maximize funding available. ● Create easier funding opportunities <ul style="list-style-type: none"> ○ Evaluate streamlining mechanisms for Air District administered-grants; ○ increase opportunities for eligibility. ● Evaluate the potential to reduce emissions from sources via creation of an independent third-party Offset Program for Criteria Air Pollutants (CAPs), with third party verification similar to those for Greenhouse Gas Emissions (GHGs). <ul style="list-style-type: none"> ○ The Offset Program will need to demonstrate offset emissions are real, permanent, quantifiable, verifiable, enforceable, and additional to any reductions already required or likely to occur for other reasons. In addition, it will be preferable to select projects to fund with emissions offsets that benefit the local community, the city, county, or the Bay Area region—in that order. ○ The cost-effectiveness of the Offset Program will need to be carefully considered to determine if such a program is feasible and will produce the expected emission reductions. ○ If the Offset Program is deemed effective, feasible and likely to produce expected outcomes, identify local projects that could be implemented or supported via emissions offset funds (e.g., fund fleets in Richmond that need more funding to be feasible). ● Determine the oldest and/or dirtiest marine and rail sources and focus outreach of available incentives on the highest polluting marine and rail sources and increase opportunities for eligibility. <p>Air District staff and/or the CSC:</p> <ul style="list-style-type: none"> ● Air District staff work with the CSC on disbursement of any remediation funds paid by OGV terminals/operators. <p>CARB:</p> <ul style="list-style-type: none"> ● Update funding guidelines promptly after adopting new regulations
Type of action	Incentives

Action #	M&R 1.3
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	<p><u>Local and State Funding:</u> Air District incentives webpages:</p> <ul style="list-style-type: none"> Marine vessels and equipment: https://www.baaqmd.gov/funding-and-incentives/businesses-and-fleets/marine-vessels-and-equipment Locomotives: https://www.baaqmd.gov/funding-and-incentives/businesses-and-fleets/locomotive <p>Information on State programs:</p> <ul style="list-style-type: none"> Carl Moyer: https://ww2.arb.ca.gov/our-work/programs/carl-moyer-memorial-air-quality-standards-attainment-program Proposition 1B: https://ww2.arb.ca.gov/our-work/programs/proposition-1b-goods-movement-emission-reduction-program Volkswagen Environmental Mitigation Trust for California: https://ww2.arb.ca.gov/our-work/programs/volkswagen-environmental-mitigation-trust-california Community Air Protection Incentive Program (state): https://ww2.arb.ca.gov/our-work/programs/community-air-protection-incentives At Berth Remediation Fund: via implementation of the At Berth Regulation <p><u>Federal Funding:</u> EPA:</p> <ul style="list-style-type: none"> EPA Environmental Justice Grants: https://www.epa.gov/environmentaljustice/environmental-justice-grants-funding-and-technical-assistance EPA Greenhouse Gas Reduction Fund from the Inflation Reduction Act (specifically for Ports): https://www.epa.gov/inflation-reduction-act/greenhouse-gas-reduction-fund EPA Diesel Emissions Reduction Act (DERA): https://www.epa.gov/dera/national <p>US DOT:</p> <ul style="list-style-type: none"> https://www.transportation.gov/bipartisan-infrastructure-law/key-notices-funding-opportunity Maritime Administration: https://www.maritime.dot.gov/how-apply-fy23-pidp-grant-webcast
Partners in action implementation	CARB, CSC, City of Richmond, EPA
Key stakeholders to engage in action implementation	Marine and Rail equipment owner-operators, Operators of Marine and Rail hubs, Community
Potential obstacles	Timelines, cost, interest from owner operators, state of zero emission technology and operator perception. Regulatory deadlines reduce opportunities for surplus emissions.
Action initiation timeframe	Near=<2 years; Mid=2-4 years
Action intervention point	Emissions

Action #	M&R 1.3
Action impact timeframe	Long > 4 years (4-10 years)
Measure/metric of action implementation	Direct emission reductions (#)
Can any emission/exposure reduction be estimated	Yes, later. Based on projects funded.

Action #	M&R 1.4
Action name/brief description	<p>Conduct Further Study</p> <p>Air District:</p> <ul style="list-style-type: none"> ● Track: <ul style="list-style-type: none"> ○ Any new programs and/or regulations related to marine and rail at the state and federal levels, and identify the need for any additional strategies or actions; ○ The development of Zero Emission (ZE) freight locomotives; ○ The Capital Corridor/Link 21 plans for electrification of the San Jose to Sacramento passenger service. ● Investigate feasibility and approach for a Bay Area Indirect Source (Magnet Source) Rule <ul style="list-style-type: none"> ○ See M&R Action 5.1 ○ See Mobile Action 1.4 ● Data/Research: Work with the CSC to determine data and research projects for the PTCA, including the following potential projects. <ul style="list-style-type: none"> ○ Partner with CCHS Department, and local health clinics, to better understand lung cancer incidence and other health impacts related to marine and rail operations; ○ Research strategies to address concerns about soil and water contamination from vessels (and partner with DTSC and/or the AG, as appropriate); ○ Conduct a research project, with help from Air District AIM and/or M&M Divisions, and/or CARB, to determine data on current vessel speeds and the potential benefits from reducing the speeds from 15 knots to 12 or 10 knots (the two current target speeds for the coastal VSR programs): <ul style="list-style-type: none"> i. Using this data, explore a voluntary vessel speed reduction program to reduce emissions, in cooperation with the Bar Pilots, the US Coast Guard and the Harbor Safety Committee; ii. Related to Action 2.6 below. ○ Look into the potential for Rail "slow zones" similar to the Rail slow zone in Emeryville, CA. ● Study the feasibility of a ZE or near-ZE rail zone in the PTCA area, e.g.: <ul style="list-style-type: none"> ○ Helper ZE locomotives or hybrid engines at BNSF, UP, Richmond Pacific and/or passenger rail; ○ BNSF: Potential ZE locomotives and/or charger in Richmond, for diesel locomotives that operate between the Port of Oakland and Port of Richmond.

Action #	M&R 1.4
	<p>CARB and Air District:</p> <ul style="list-style-type: none"> ● Gather additional information on local operations of marine and rail equipment, to increase detail in understanding of emissions and exposure impacts in the PTCA community. <ul style="list-style-type: none"> ○ Including an evaluation of emissions from recreational boats and the impact they have on public health <p>OEHHA and Air District:</p> <ul style="list-style-type: none"> ● Align with OEHHA statewide goal to assess cumulative impacts <ul style="list-style-type: none"> ○ OEHHA, in coordination with CARB and Air District and local public health agencies (such as the CCC Health Department): Continue work on community health concerns related to cumulative impacts: <ul style="list-style-type: none"> i. OEHHA: advance OEHHA’s ongoing scientific risk assessments in order to better understand and estimate cumulative air quality exposures experienced by communities, specifically with respect to those experienced in the PTCA area; ii. Air District: discuss with OEHHA their needs for air pollution data that would support OEHHA’s work.
Type of action	Further research
Lead action implementor	Air District, OEHHA, CARB
Related existing Program, Policy, or Initiative	South Coast AQMD Indirect Source Rules
Partners in action implementation	CARB, OEHHA, local marine and rail operators, Contra Costa County Health Services Department, South Coast AQMD, DTSC, the AG office, Bar Pilots, the US Coast Guard, the Harbor Safety Committee
Key stakeholders to engage in action implementation	Local marine and rail operators, Contra Costa County Health Services Department, community members living near marine and rail operations
Potential obstacles	Potential difficulty coordinating with local marine and rail operators. This could be overcome by working with local jurisdictions, or other partners, who already have relationships established with these operators. Capacity could be an issue for organizing community working groups, but included in the plan are recommendations for more staff support at Air District and CARB for plan implementation. Identifying roles and responsibilities to accomplish this work, including a champion/lead. for the work, and appropriate staff support, is a potential obstacle as well.
Action initiation timeframe	Near=<2 years
Action intervention point	Emissions, exposure, and health effects
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	New studies produced by 2034? (#)

Action #	M&R 1.4
Can any emission/exposure reduction be estimated	-

Action #	M&R 1.5
Action name/brief description	<p>Conduct Education and Outreach Efforts</p> <p>Air District/CARB:</p> <ul style="list-style-type: none"> ● Air District and CARB: Conduct outreach to marine and rail operators about opportunities to align their business plans with the PTCA CERP Strategies, Goals and Targets: <ul style="list-style-type: none"> ○ Bring operators to the table as a stakeholder, foster an open dialogue to explore any plans or willingness to upgrade equipment and decrease emissions and/or exposure; ○ Bring consumers to the table too; show consumer demand for industry to switch to zero emission technology and/or the cleanest equipment available; ○ Also see the Cumulative Impact Facilities and Operations Strategy; ● Air District and CARB: Work with community to get the word out about health impacts from Marine and Rail sources and mitigation opportunities <ul style="list-style-type: none"> ○ Provide clear emissions, exposure and health risk data regarding the percentage of total pollution impact from marine and rail activities in our AB617 communities. (E.g., How do they compare to major industrial stationary sources and other mobile sources; what percentage of our total pollution problem in AB617 communities do they represent by source) ○ Summarize marine and rail health impacts to provide as a community resource ○ Explore community partnerships for outreach <ul style="list-style-type: none"> ● e.g., community podcasts ● CARB: Related to M&R 1.2, produce annual report (written document) that includes a 'state of marine and rail' for PTCA area: local implementation of In-Use Locomotive regulations, equipment, financial mechanisms (such as the In Use Rail spending account), and compliance and enforcement summaries produced as part of M&R 1.2. <ul style="list-style-type: none"> ○ Air District: Identify community members concerned about M&R issues, who want to provide input at key points in time and/or be notified about opportunities for input; ○ Air District: Create working groups where CARB can come to talk about M&R regulations, and review the annual report, so the CSC can get a deep understanding of the regulation, and receive the informational resources needed to support identification of gaps from community perspective; ○ Air District: For additional outreach to this end, consider a mailer, using CARB's infographics produced for annual summaries (both an initial mailer for education, and follow-up mailers for updates).

Action #	M&R 1.5
	<ul style="list-style-type: none"> • Also See Cross-Cutting Strategies
Type of action	Education/Outreach
Lead action implementor	Air District, CARB
Related existing Program, Policy, or Initiative	Any existing Air District communications strategies involving AB617 communities; Richmond Health Risk Assessment (CARB, 2007-2008)
Partners in action implementation	Community
Key stakeholders to engage in action implementation	The CSC, Community, Industry
Potential obstacles	<p>Recommendations for additional staff to help with capacity are included in this plan.</p> <p>With respect to regulatory input (for the Regulate Emissions Reductions strategies in M&R), there may be an obstacle with respect to properly engaging communities beyond the CSC. Identifying the most impacted groups/communities is a necessary task for engagement. Establishing lines of communication with impacted groups to engage them may also be an obstacle to be overcome.</p> <p>With respect to leadership on education materials and outreach efforts, Air District can look at M&R issues at the local scale for the PTCA area.</p>
Action initiation timeframe	Near=<2 years; initiate education and outreach as quickly as possible
Action intervention point	Health effects
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	Outreach events held per year (#)
Can any emission/exposure reduction be estimated	-

Strategy 2 – Reduce Cancer and Chronic Health Risk from Ocean Going Vessel Operations – Actions

Action #	M&R 2.1
Action name/brief description	<p>Regulate Emissions Reductions for OGVs At Berth via CARB’s At Berth Regulation</p> <p>CARB:</p> <ul style="list-style-type: none"> • Continue assessing technology to control at-berth emissions from bulk and general cargo vessels • By 2030, develop new amendments to the At Berth Regulation to control emissions from bulk and general cargo vessels as warranted by improvements in feasible control technology, or require alternative

Action #	M&R 2.1
	<p>compliance that achieves equivalent emissions reductions in lieu of at berth controls (aligned with WOCAP Strategy #60)</p> <ul style="list-style-type: none"> ● As part of CARB review of all Innovative Concept Plans submitted for the PTCA area, consult with Air District staff to ensure projects included under the Plans are achieving real (early and/or extra) emissions reductions equivalent to the levels required to be achieved <ul style="list-style-type: none"> ○ Air District: Aid CARB by providing expert review for any projects involving sources regulated by the Air District (e.g., the FCCU at Chevron, included as part of the Chevron Richmond Long Wharf Innovative Concept Application⁸) <p>Air District staff and/or the CSC:</p> <ul style="list-style-type: none"> ● Support implementation of CARB's At Berth Regulation <ul style="list-style-type: none"> ○ Air District staff, with the help of Steering Committee/community members, review Interim Evaluation Report and comment as needed ○ Air District staff, with the help of Steering Committee/community members, review and comment on any other reports related to At Berth regulations, including: <ul style="list-style-type: none"> ■ Any updates to Port or Terminal Plans (e.g., updates to the Chevron Long Wharf Plan and Innovative Concept Plan) ■ Any assessments of At Berth control technologies, particularly for bulk vessels.
Type of action	Regulatory
Lead action implementor	CARB, with support from Air District and the CSC.
Related existing Program, Policy, or Initiative	CARB At Berth Regulation.
Partners in action implementation	Air District, the CSC, and CARB. Also regulated entities subject to the regulations/requirements.
Key stakeholders to engage in action implementation	The CSC. Specific community groups/neighborhoods closest to and/or most impacted by OGV emissions.
Potential obstacles	Technical and physical limitations for bulk vessel terminals in the PTCA area can make implementing cleaner technologies (shore power or capture and control) challenging or infeasible; that would not, however, prevent complying via an alternative compliance path offered in the regulation or via various flexibilities built into the regulation
Action initiation timeframe	Near=<2 years
Action intervention point	Emissions
Action impact timeframe	Long > 4 years

⁸ <https://ww2.arb.ca.gov/sites/default/files/2022-05/Chevron%20Innovative%20Concept%20Application.pdf>

Action #	M&R 2.1
Measure/metric of action implementation	Direct emission reductions (#)
Can any emission/exposure reduction be estimated	Yes, later.
Action #	M&R 2.2
Reference to Other M&R Action	Enforce Emissions Reductions for OGVs See M&R 1.2
Action #	M&R 2.3
Reference to Other M&R Action	Incentivize ("Find and Fund") Emissions Reductions See M&R 1.3
Action #	M&R 2.4
Reference to Other M&R Action	Conduct Further Study See M&R 1.4
Action #	M&R 2.5
Reference to Other M&R Action	Conduct Education and Outreach Efforts See M&R 1.5
Action #	M&R 2.6
Action name/brief description	Regulate Emissions Reductions for OGVs In Transit CARB: <ul style="list-style-type: none"> ● Develop a regulation to control emissions from Ocean-going Vessels while in transit, at anchor, and maneuvering <ul style="list-style-type: none"> ○ Prioritize public health benefits that can be achieved by addressing the portion of transit that produces emissions that result in local exposure and public health impacts ○ e.g., address pollution from OGVs traveling past the PTCA community to and from San Pablo Bay, the Carquinez Strait and beyond ● Cross-reference M&R Action 1.4 Air District staff and/or the CSC: <ul style="list-style-type: none"> ● Track regulatory development by CARB and provide feedback and/or comment as needed <ul style="list-style-type: none"> ● Air District staff, with the help of Steering Committee/community members, review any updates released by CARB with respect to developing an In Transit regulation ● As needed, Air District staff, with the help of Steering Committee/community members, review and comment on any reports or materials released for comment
Type of action	Regulatory
Lead action implementor	CARB

Action #	M&R 2.6
Related existing Program, Policy, or Initiative	CARB At Berth Regulation
Partners in action implementation	CARB, Air District, and the CSC
Key stakeholders to engage in action implementation	The CSC; Regulated Entities
Potential obstacles	<p>Resource limitations may present an obstacle with respect to resources available at CARB and at the Air District. CARB may be delayed in developing a regulation if there are not enough resources and/or there are competing priorities for staff time, etc. The Air District may have limited resources to engage in the regulatory development process.</p> <p>Further, technical and/or conceptual obstacles might be an issue for CARB with respect to developing a regulatory mechanism to limit emissions from OGVs. However, CARB will undergo a process to identify and evaluate any of these obstacles, as part of its regulatory development process.</p>
Action initiation timeframe	Near=<2 years; Mid=2-4 years
Action intervention point	Emissions
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	Was a regulation adopted (yes/no)
Can any emission/exposure reduction be estimated	-

Strategy 3 – Reduce Cancer and Chronic Health Risk from Commercial Harbor Craft – Actions

Action #	M&R 3.1
Action name/brief description	<p>Regulate Emissions Reductions from Commercial Harbor Craft (CHC)</p> <p>CARB:</p> <ul style="list-style-type: none"> ● As identified in recently adopted CHC Amendments, CARB will conduct a Technology and Implementation Review every two years beginning in 2024 <ul style="list-style-type: none"> ○ Track advancement in zero - emission technology and report on implementation progress of Tier 4 and diesel particulate filter (DPF) technology in the marine sector <p>Air District:</p> <ul style="list-style-type: none"> ● Support implementation of CARB’s CHC Regulation: <ul style="list-style-type: none"> ○ Air District staff, with the help of Steering Committee/community members, review Technology and

Action #	M&R 3.1
	<p>Implementation Reviews that are released and provide feedback as needed</p> <ul style="list-style-type: none"> ○ Air District staff, with the help of Steering Committee/community members; review and comment on any other reports, as needed
Type of action	Regulatory
Lead action implementor	CARB, with support from Air District and the CSC.
Related existing Program, Policy, or Initiative	CARB Commercial Harbor Craft Regulation.
Partners in action implementation	Air District, the CSC, and CARB. Also regulated entities subject to the regulations/requirements.
Key stakeholders to engage in action implementation	The CSC. Specific community groups/neighborhoods closest to and/or most impacted by commercial harbor craft activity.
Potential obstacles	<p>The main potential obstacle is ample staff capacity at Air District to track and comment on regulations. Though, there is a current staff dedicated to tracking Marine and Rail regulations.</p> <p>Another potential obstacle is engaging the community for input, which is discussed in greater detail in the Education and Outreach Action below. Even with lines of communication established, there need to be resources provided to properly engage community (CSC members and other groups), such as stipends, as well as staff resources to inform and educate the community as needed.</p>
Action initiation timeframe	Near=<2 years
Action intervention point	Emissions
Action impact timeframe	<i>Long > 4 years</i>
Measure/metric of action implementation	Direct emission reductions (#)
Can any emission/exposure reduction be estimated	Yes, later.

Action #	M&R 3.2
Reference to Other M&R Action	Enforce Emissions Reductions for CHC See M&R 1.2

Action #	M&R 3.3
Reference to Other M&R Action	Incentivize (“Find and Fund”) Emissions Reductions See M&R 1.3

Action #	M&R 3.4
Reference to Other M&R Action	Conduct Further Study See M&R 1.4

Action #	M&R 3.5
Reference to Other M&R Action	Conduct Education and Outreach Efforts See M&R 1.5

Strategy 4 – Reduce Cancer and Chronic Health Risk from Cargo Handling Equipment – Actions

Action #	M&R 4.1
Action name/brief description	Regulate Emissions Reductions from Cargo Handling Equipment CARB: <ul style="list-style-type: none"> Regulate Emissions Reductions via proposal and adoption of Amendments to CARB’s Mobile Cargo Handling Equipment Regulation, by 2025 Air District and/or CSC: <ul style="list-style-type: none"> Air District and/or CSC: Participate in process for developing the regulation, to help ensure PTCA community needs are incorporated <ul style="list-style-type: none"> Review amendments throughout development process and comment as needed Air District staff, with the help of CSC members, review and comment on any other reports, as needed
Type of action	Regulatory
Lead action implementor	CARB and EPA, with support from Air District and the CSC.
Related existing Program, Policy, or Initiative	CARB In-Use Locomotive Regulation. EPA Response to Petitions to Address Harmful Emissions from Locomotives.
Partners in action implementation	Air District, the CSC, CARB, and the EPA. Also regulated entities subject to the regulations/requirements.
Key stakeholders to engage in action implementation	The CSC. Specific community groups/neighborhoods closest to and/or most impacted by rail emissions.
Potential obstacles	CARB currently plans on adoption of the Cargo Handling Equipment Amendment by 2025. There could be a potential obstacle in the timeline for implementation of this Amendment, but since this Amendment is already planned by CARB, that risk seems minimal at this time.
Action initiation timeframe	Near=<2 years
Action intervention point	Emissions
Action impact timeframe	Long > 4 years

Action #	M&R 4.1
Measure/metric of action implementation	Direct emission reductions (#)
Can any emission/exposure reduction be estimated	Yes, later.

Action #	M&R 4.2
Reference to Other M&R Action	Enforce Emissions Reductions for CHE See M&R 1.2

Action #	M&R 4.3
Reference to Other M&R Action	Incentivize ("Find and Fund") Emissions Reductions See M&R 1.3

Action #	M&R 4.4
Reference to Other M&R Action	Conduct Further Study See M&R 1.4

Action #	M&R 4.5
Reference to Other M&R Action	Conduct Education and Outreach Efforts See M&R 1.5

Strategy 5 – Reduce Cancer and Chronic Health Risk from Cumulative Impact Facilities and Operations – Actions

Action #	M&R 5.1
Action name/brief description	<p>Regulate Emissions Reductions from Cumulative Impact Facilities and Operations</p> <ul style="list-style-type: none"> • Implement Rule 11-18 at any Marine and Rail facilities subject to the rule, including <ul style="list-style-type: none"> ○ BNSF Railway Company ○ Cross-reference: C&I 4.2 - Levin Terminal: Implement Rule 11-18 and Conduct Gap Analysis ○ Cross-reference: Fuel Refining 1.2 - Implement Rule 11-18 at Chevron (which covers Chevron Long Wharf operations) • Investigate feasibility and approach for a Bay Area Indirect Source (Magnet Source) Rule (cross-cutting with Truck-attracting Businesses Action included in Mobile) <ul style="list-style-type: none"> ○ See Mobile Action 1.4 • Continue to track South Coast AQMD's Indirect Source Regulations and various local ordinances, looking for opportunities to develop Bay Area specific models and regulations, and report on this outcome to the CSC.
Type of action	Regulatory
Lead action implementor	Air District

Action #	M&R 5.1
Related existing Program, Policy, or Initiative	South Coast AQMD's Indirect Source Regulations (multiple, by industry)
Partners in action implementation	CARB; Legislature; Local government; Industry
Key stakeholders to engage in action implementation	CARB; Legislature; Local government; Industry; Community
Potential obstacles	Political support and/or authority
Action initiation timeframe	Near=<2 years
Action intervention point	Emissions
Action impact timeframe	Mid=2-4 years; Long > 4 years
Measure/metric of action implementation	Has Air District investigated the feasibility and approach for a Bay Area Indirect Source Rule? (yes/no) Has a Bay Area Indirect Source Rule been passed? (yes/no) Has Rule 11-18 been implemented at any marine and rail facilities listed above? (indicate implementation milestone reached)
Can any emission/exposure reduction be estimated	Not at this time. Speculative, unless a Rule is developed and passed (at which point emissions reductions could be forecasted). This wouldn't be estimable until years down the line.
Action #	M&R 5.2
Reference to Other M&R Action	Enforce Emissions Reductions See M&R 1.2 for defining what hubs need enforcement prioritized
Action #	M&R 5.3
Reference to Other M&R Action	Incentivize ("Find and Fund") Emissions Reductions See M&R 1.3 for opportunities to explore the feasibility and availability of incentives as a mechanism for change
Action #	M&R 5.4
Reference to Other M&R Action	Conduct Further Study See M&R 1.4
Action #	M&R 5.5
Reference to Other M&R Action	Conduct Education and Outreach Efforts See M&R 1.5
Action #	M&R 5.6
Action name/brief description	Identify opportunities to reduce emissions from on-site mobile and stationary equipment at railyards and ports Air District + CSC:

Action #	M&R 5.6
	<ul style="list-style-type: none"> ● Evaluate potential for stronger Cargo Handling Equipment requirements specific to facilities with significant cumulative impacts; Research and develop recommendations as needed. <ul style="list-style-type: none"> ○ Weigh in on development of CARB's Cargo Handling Equipment amendments (also see CHE Strategy, Regulate Emissions Reductions). ● Identify opportunities to upgrade to the cleanest stationary sources at these sites (e.g., switching to cleaner backup power).
Type of action	Further research
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	CARB's CHE Regulation; South Coast ISR Program
Partners in action implementation	CSC, CARB, Operators/Facilities
Key stakeholders to engage in action implementation	CSC, CARB
Potential obstacles	Delays in CARB's work on their Cargo Handling Equipment amendments; Air District staff capacity to conduct evaluation; Willingness of industry and facilities to partner and reduce cumulative impacts.
Action initiation timeframe	Near=<2 years
Action intervention point	Emissions
Action impact timeframe	Mid=2-4 years; Long > 4 years
Measure/metric of action implementation	Did Air District evaluate the potential for stronger CHE requirements, and were those amendments incorporated into the regulation? (yes/no)
Can any emission/exposure reduction be estimated	-

Public Health

Public Health (H) Strategies

1. Increase Health Resilience and Improve Social Determinants of Health
2. Reduce Air Pollution at Home
3. Promote Healthy Food Access
4. Promote Resilience Centers
5. Pollution & Public Health Education, Outreach, Accountability, and Health Data Tracking
6. More complete health risk data and HRAs, including pollutant interactions

Detailed Action Descriptions

Strategy 1 – Increase Health Resilience and Improve Social Determinants of Health – Actions

Action #	H 1.1
<p>Action name/brief description</p>	<p>Promote and advocate for a guaranteed income demonstration for PTCA residents</p> <p>Guaranteed Income (GI) is a regular cash payment made to members of a community with no requirements. This is not meant to replace existing benefit programs but to be in addition to these programs. Various GI pilots across the USA have different qualifying criteria and target populations (income, student status, the unhoused, mothers, foster youth aging out of the foster system, etc.). Financial security is one of the most impactful social determinants of health. Income determines where a person lives and their access to opportunities such as schools, jobs, healthy food, and medical care. For children and adults, financial security can reduce stress, anxiety, depression, and suicide. Poverty and income volatility are linked to poor health outcomes. Therefore, guaranteed income programs are now considered effective public health interventions that address poverty's role as a social determinant of health. This action can address poverty in the CERP Community by promoting efforts to create a GI program in Contra Costa County.</p> <p>There was a scoping working group researching community interest in a GI program in Contra Costa County. The group recently completed the research phase and was composed of non-profit organizations, the Contra Costa Health Services (CCHS), Contra Costa EHSD, Family, Child, Maternal Health (FMCH), and Community Financial Resources (CFR) - a nonprofit economic justice organization based in the Bay Area. CFR was the lead organization and funded the scoping effort. The research/scoping entailed community engagement and workshops to define what GI means in the community, to help identify future potential target populations and obtain community buy-in. No target population has been identified yet. A report with the findings and recommendations from the research/scoping will be released in October of 2023 by CFR. The coming planning year will lead to a blueprint/report, and then the next phase of the project will be handed to a "holding organization."</p> <p>There is no guarantee that a GI pilot will include people from the PTCA area. CCHS and other county governance bodies cannot target or exclude a particular geography. However, when a target population is identified for a future GI pilot, PTCA residents will likely be included because there are many populations in the PTCA area that would benefit from GI.</p> <p>No funding source for a future GI program has been identified, but funds from the American Rescue Plan Act (ARPA), which provides COVID-19 Pandemic Response & Relief, are being considered. Another potential source is Measure X funding from Contra Costa County. Small pilots are already happening using ARPA funds in Contra Costa County that are helping to inform this effort.</p>

Action #	H 1.1
	<p>Community Financial Resources (CFR) and the to-be-identified “holding organization” group:</p> <ul style="list-style-type: none"> This action asks that CFR and the yet-to-be-identified “holding organization” keep working to support the GI pilot where possible. This pilot will likely be at the county level and provide guaranteed income payments to identified populations, hopefully including those in the PTCA community. <p>CCHS:</p> <ul style="list-style-type: none"> CCHS can support the promotion of the findings of the report, which can be used to advocate for this specific intervention. The report is due to be released in October of 2023 from the organization Community Financial Resources. <p>CSC and Air District:</p> <ul style="list-style-type: none"> The CSC should support this action wherever possible. Air District staff should track this effort and Prioritize GI program participants for Air District programs like BAHHI that do home retrofits and weatherization. Advocate for PTCA residents to be included in any GI pilots. <p>Background: Current GI efforts in the PTCA area:</p> <ul style="list-style-type: none"> The City of Richmond has designated money for GI and previously conducted a feasibility study. Richmond Rapid Response is doing community processes in Richmond with two pilots. Ryse Youth Center will do a GI program for young people. First Five Contra Costa is doing a feasibility study for employee pay for ECE childcare workers. Doing the study with UC Berkeley and will then put together an advisory board for a pilot.
Type of action	Education/Outreach; Other: Advocacy
Lead action implementor	CCHS, Community Financial Resources (CFR), Community members or representatives need to be involved to inform the working group.
Related existing Program, Policy, or Initiative	There is no GI program in the PTCA area. There is one in Oakland, California, as of 2023, that showed positive results. A two-year GI program was also completed in Stockton, California, starting in 2019 and ending in 2021. The Stockton GI program, called SEED (Stockton Economic Empowerment Demonstration), resulted in an increase in full-time employment for participants as well as increased housing security and mental health.
Partners in action implementation	CSC
Key stakeholders to engage in action implementation	PTCA area members and CSC members can help advocate for GI

Action #	H 1.1
Potential obstacles	<p>There are a few GI-type initiatives being discussed in Contra Costa County, but they may not include the entire PTCA area in the western part of the County.</p> <p>This GI effort will need to create waivers from Employment and Human Services (EHSD), the County's social services agency, so recipients can continue to receive their benefits from other programs.</p>
Action initiation timeframe	Depends on program development Near=<2 years; Mid=2-4 years; Long > 4 years
Action intervention point	Addressing social determinants of health & underlying pre-exposure vulnerabilities
Action impact timeframe	Depends on program development Near=<2 years; Mid=2-4 years; Long > 4 years
Measure/metric of action implementation	See Strategy Metric(s)
Can any emission/exposure reduction be estimated	-

Action #	H 1.2
Action name/brief description	<p>Support State reparations efforts as they relate to Black residents in the PTCA area and in Contra Costa County</p> <p>The connection between racial discrimination and air pollution burden has been well documented. This action asks for local jurisdictions to communicate and coordinate to prepare to implement State reparations recommendations for their residents, especially the ones who have endured historical discrimination <i>and</i> current disproportionate air pollution burdens.</p> <p>The City of Richmond, the City of San Pablo, and Contra Costa County:</p> <ul style="list-style-type: none"> • This action recommends that the City of Richmond, the City of San Pablo, and Contra Costa County set up a collective reparations working group to discuss how recommendations can be operationalized. Working together could spread the resources and time required for this effort. Smaller jurisdictions like San Pablo would not have the capacity to take action alone. • Contra Costa County's Office of Racial Equity and Social Justice (ORESJ) would be a likely candidate to partner on this action.
Type of action	Regulatory; Other: Political Action
Lead action implementor	The CSC
Related existing Program, Policy, or Initiative	<p>The State of California Taskforce has issued a final report that is now available as of July 2023.</p> <p>Other government bodies have reparations commissions that investigate the feasibility of reparations programs that provide cash payments, debt forgiveness, free healthcare, interest-free loans, etc.</p>

Action #	H 1.2
	<p>Precedence:</p> <ul style="list-style-type: none"> • San Francisco, CA, has an African American Reparations Advisory Committee. • The State of California established a state reparations task force in 2020 and released its first report in 2022. A final report will be issued in 2023. • St. Paul, Minnesota’s reparations effort includes a reparations committee that will take effect on February 13, 2023. <p>All of the aforementioned efforts detail how these governments perpetuated institutional racism in connection to slavery and/or state-sanctioned discrimination. Discrimination can be defined as political disenfranchisement, disproportionate environmental burden, systematic incarceration, and unjust treatment in the criminal justice system, and exclusion in labor, housing, healthcare, education, and arts and culture.</p>
Partners in action implementation	Community members or representatives need to be involved to inform the working group.
Key stakeholders to engage in action implementation	Local PTCA jurisdictions (cities and county).
Potential obstacles	<p>Reparations can be polemic; however, they are crucial to further racial equity and dismantling racialized environmental injustices.</p> <p>The City of San Francisco’s reparations advisory committee set forth more than eleven reparation recommendations, one of which includes a \$5M payment to residents and former residents who meet a number of criteria to prove they’ve lived in the City of San Francisco during a certain period of time. This amount of money can potentially be far more than the City’s annual budget and has raised questions about feasibility. Financial reparations amounts should consider payment feasibility and can be informed by the State-wide effort happening in 2023.</p>
Action initiation timeframe	Near=<3
Action intervention point	Addressing social determinants of health & underlying pre-exposure vulnerabilities
Action impact timeframe	Near=<3
Measure/metric of action implementation	Was a working group formed? (yes/no?)
Can any emission/exposure reduction be estimated	-

Action #	H 1.3
Action name/brief description	<p>Ask CCHS to expand CalAIM programming for MediCal-eligible in the PTCA area and in Contra Costa County</p> <p>In the PTCA area, Black residents have the worst health outcomes for the majority of air pollution-related diseases and health outcomes (see the Community Description Chapter). Therefore, CCHS is asked to expand case management and services by expanding the CalAIM programs they offer.* CalAIM programs are offered to MediCal-eligible individuals and families, many of which are Black families. This could utilize the "Whole Person Care" approach to help eliminate health disparities among Black residents in the PTCA area and throughout the County.</p> <p>CSC:</p> <ul style="list-style-type: none"> • Advocate that CCHS expand participation to all CalAIM services instead of only select CalAIM programs. <p>CCHS:</p> <ul style="list-style-type: none"> • Identify which CalAIM programs to include in the expansion pilot. • CalAIM programs may have prescriptive selection criteria from the State, which means CCHS may not be able to target based on race, but other state programs may allow for this. Further investigation is needed. • Background: • Recently, more State health programs have been moving into CalAIM, so there will be more expansion in CalAIM programming in the coming years. • Asthma Programming: the county is signed up for CalAIM for asthma, which is based on referrals from providers. <p>A list of CCHS's offered CalAIM programs can be found here: https://cchealth.org/healthplan/pdf/provider/CS-Criteria.pdf</p>
Type of action	Further research
Lead action implementor	CCHS
Related existing Program, Policy, or Initiative	CalAIM
Partners in action implementation	Community members and the CSC
Key stakeholders to engage in action implementation	Stakeholders should include nonprofits that serve Black residents, Black residents themselves, the medical staff that treats Black residents, and the public health staff that implements CalAIM.
Potential obstacles	Some CCHS programs, like the Black Infant Health (BIH), cannot be expanded due to funding restrictions from the State. BIH is expanding in very specific ways dictated by the State of California.
Action initiation timeframe	Depends on CCHS's capacity Near=<2 years; Mid=2-4 years; Long > 4 years
Action intervention point	Addressing social determinants of health & underlying pre-exposure vulnerabilities

Action #	H 1.3
Action impact timeframe	Depends on CCHS's capacity Near=<2 years; Mid=2-4 years; Long > 4 years
Measure/metric of action implementation	See Strategy Metric(s) above Were case management and targeted services expanded through CalAIM to MediCal-eligible families to reach additional BIPOC families or individuals? Did enrollment of and services provided to Black participants increase?
Can any emission/exposure reduction be estimated	-

Action #	H 1.4
Action name/brief description	<p>Build relationships with the West Contra Costa Unified School District (WCCUSD) to help bolster their asthma management programming</p> <p>In addition to children's in-home medical care, West Contra Costa Unified School District (WCCUSD) is an important ally in asthma management. For children under 17, the PTCA area has a high prevalence of asthma burden, including its comorbidities, such as frequent emergency department visits (see Figure 27 in the Community Description chapter), missed school attendance, and resultant caregiver work absences. Secondary prevention to improve longer-term asthma management can reduce asthma exacerbations. Most diagnosed children with asthma are school age. More resources and staffing support for WCCUSD's individual schools to monitor asthma enables children with asthma to stay in school and keep their caregivers at work at the same time.</p> <p>WCCUSD:</p> <ul style="list-style-type: none"> • Work to implement asthma best practices listed below in the "Related existing Program, Policy, or Initiative" section. <p>CSC & CCHS:</p> <ul style="list-style-type: none"> • Work with WCCUSD to implement asthma management best practices (see below in "Related existing Program, Policy, or Initiative") to prevent asthma attacks, reduce/eliminate asthma triggers, and maintain up-to-date Asthma Action Plans on file for students. • Find funding to help the WCC school district with grant applications for asthma programming, resources, or educational opportunities.
Type of action	Education/Outreach; Other: Programmatic
Lead action implementor	WCCUSD, specifically any health and wellness advisory council composed of teachers, parents, administrators, and the district nurse(s).
Related existing Program, Policy, or Initiative	<p>Best practices and resources for WCCUSD</p> <ul style="list-style-type: none"> • The Environmental Protection Agency's Indoor Air Quality (IAQ) Tools for Schools Action Kit is a great resource and a voluntary program for improving air quality. The IAQ Tools are straightforward policies to improve air quality in classrooms in general and specifically for

Action #	H 1.4
	<p>asthma. "IAQ Tools for Schools Action Kit shows schools how to carry out a practical plan to improve indoor air problems at little or no cost using straightforward activities and in-house staff. The Action Kit provides best practices, industry guidelines, sample policies, and a sample IAQ management plan."</p> <ul style="list-style-type: none"> • The Regional Asthma Management and Prevention (RAMP) is an organization with useful resources. One is its Air Cleaners for Asthma Programs, which provides guidance on what air filters/purifiers are appropriate for asthma. Another is its Asthma Environmental Intervention Guide, which supports school staff in implementing practices to reduce exposure to environmental asthma triggers. • California School Board Association has model policies for school boards to adopt on school asthma management. • The Environmental Law Institute came out with a report called Ventilation in Schools: A Review of State Policy Strategies. This report "discusses key policy strategies for states to consider and describes how current laws and regulations address school ventilation requirements for general operations [...]. The report also describes selected state policies providing financial and technical assistance for school ventilation."
Partners in action implementation	CSC, WCCUSD schools and district staff, Air District, CCHS
Key stakeholders to engage in action implementation	WCCUSD students WCCUSD families
Potential obstacles	Some of the policies recommended here for WCCUSD facilities and classrooms could be time and resource intensive to implement.
Action initiation timeframe	=<2 years
Action intervention point	Addressing social determinants of health & underlying pre-exposure vulnerabilities
Action impact timeframe	3-6 years
Measure/metric of action implementation	See above - "Strategy Metric(s)"
Can any emission/exposure reduction be estimated	-

Strategy 2 – Reduce Air Pollution at Home – Actions

Action #	H 2.1
Action name/brief description	<p>Support better access to home retrofits programs in the PTCA area</p> <p>This Action seeks to increase the participation of low-income PTCA area households in available home retrofit programs. Home retrofits, including weatherization and air filtration installation, make housing units safer by</p>

Action #	H 2.1
	<p>sealing against external air pollution, filtering indoor air, and therefore reducing asthma triggers. Retrofits also increase energy efficiency by reducing operational costs, particularly in older buildings.</p> <p>Air District, working with the cities of Richmond and San Pablo, the County, the CSC, the community, and other advocates, to lead an effort to:</p> <ul style="list-style-type: none"> • Identify existing home retrofit programs available to residents in the PTCA (see “Related existing Program, Policy, or Initiative”) • Identify and make recommendations to close program gaps that make it difficult for low-income households to participate in available home retrofit programs • Support existing programs, for example by providing resources to conduct outreach programs to low-income PTCA area households <p>Note: Collective action will likely be the most effective approach. For example, the City of San Pablo has been trying to figure out how certain retrofit programs offered by the county can better serve their community (such as the weatherization program) because it is a part of their Housing Element Policy. However, it has been extremely difficult for them to figure out how these programs are implemented and how San Pablo can capitalize on their services.</p>
Type of action	Regulatory; Incentives
Lead action implementor	Air District, Contra Costa County Health Services (CCHS)
Related existing Program, Policy, or Initiative	<p>Retrofit programs that seek to protect health and/or reduce energy costs that already exist and that this Action seeks to support include:</p> <ul style="list-style-type: none"> • Air District’s Bay Area Healthy Homes Initiative (BAHHI) seeks to improve health outcomes for Contra Costa and Alameda County residents living in the areas most impacted by air pollution from vehicular emissions. Program components include asthma education, in-home asthma trigger assessments, energy efficiency assessments, home retrofits, and indoor air monitoring. • The Regional Asthma Management Program’s (RAMP) mission is to reduce the burden of asthma with both prevention and management programs. For example, this work includes working to support stable and healthy housing and to improve enforcement tools available to hold landlords accountable for maintaining safe and healthy housing, with a focus on addressing slumlords and repeat code violators. • California Healthy Housing Coalition (CHHC), formed in 2010, CHHC is a multi-sector coalition that works to improve unhealthy housing conditions, including indoor air. • Alameda County Public Health Department’s Asthma Start program provides in-home case management services for families of children with asthma. The program provides home assessment and remediation services that expand upon existing asthma home visit efforts. Services also include education about asthma, home inspections to identify causes of asthma attacks, collaboration with schools, assistance with housing, health insurance, and working with landlords on behalf of clients.

Action #	H 2.1
	<ul style="list-style-type: none"> California First Program offers PACE (Property Assessed Clean Energy) loans to homeowners to fund home energy upgrades, including improvements to heating and cooling systems (HVAC) and cooling. Loan amounts are tied to the available equity in the home and the homeowner's ability to pay back the loan. The California Department of Community Services & Development's Low Income Home Energy Assistance Program (LIHEAP) provides federally funded assistance to reduce the costs associated with home energy bills, energy crises, weatherization, and minor energy-related home repairs. The LIHEAP Low-Income Weatherization Program (LIWP) provides free energy efficiency upgrades to low-income households to lower their monthly utility bills while also improving the health and safety of the household's occupants. In Contra Costa County, LIHEAP targets people with asthma and can serve approximately 400 households a year. California Public Utilities Commission/PG&E Energy Savings Assistance (ESA) program also provides home energy audits and can provide financial support for weatherization.
Partners in action implementation	Contra Costa County Health Services, Air District, City governments (Richmond and San Pablo), California State Department of Community Services and Development, California Public Utilities Commission/PG&E Energy Savings Assistance (ESA) program, Bay Area Regional Energy Network (BayREN), and Marin Clean Energy (MCE).
Key stakeholders to engage in action implementation	Include neighborhood councils, Landlord Associations, Contra Costa Public Health Department, Compliance and Regulations Departments from local jurisdictions, BayREN, and MCE
Potential obstacles	Various programs for homeowners and renters exist, as documented above. Navigating and qualifying for these programs may be difficult, however. Renters fear building updates will lead to displacement and higher rents. Also, building retrofits that require inspections may identify unpermitted building changes that threaten renters' housing stability.
Action initiation timeframe	Mid=2-4 years
Action intervention point	Exposure and/or dosage
Action impact timeframe	> 4 years
Measure/metric of action implementation	Was the Action implemented (yes/no?)
Can any emission/exposure reduction be estimated	-
Action #	H 2.2
Action name/brief description	Support transition to electric appliances for PTCA residents

Action #	H 2.2
	<p>By incentivizing the switch from natural gas to electric appliances, this action seeks to reduce both emissions and exposure to emissions.</p> <p>Air District, working with local jurisdictions, the CSC, the community, and other advocates, to lead an effort to:</p> <ul style="list-style-type: none"> • Identify existing incentive programs available to residents in the CERP. • Identify and make recommendations to close program gaps that make it difficult for low-income households to switch to electric appliances. For example, work with Marin Community Energy (MCE), which serves the PTCA area, to expand MCE’s existing energy equity programs. • Provide data that shows the health, energy, economic, and other benefits of switching electric appliances to local jurisdictions (cities of Richmond and San Pablo and Contra Costa County). • Make recommendations to local land-use authorities regarding regulatory changes, such as adopting reach building codes that require more rental properties to include electric appliances. • Track State level legal challenges to these types of ordinances and initiatives. <p>The City of San Pablo is working on adopting an all-electric regulation for new residential within the building code, but the State of California has challenged the proposed ordinance update.</p>
Type of action	Further research; Incentives
Lead action implementor	Air District, cities of Richmond and San Pablo, and Contra Costa County
Related existing Program, Policy, or Initiative	<p>Air District will require zero-NO_x water and space heating upon appliance burnout starting in 2027 and 2029, respectively. California plans to phase out gas appliances and water heaters starting in 2030. In advance of these regulatory changes, various incentive programs are available now to assist homeowners and building owners with the switch to electric appliances, such as through the following programs:</p> <ul style="list-style-type: none"> • Internal Revenue Service (IRS) Residential Energy Efficiency Tax Credit: a tax credit for energy audits and select energy efficiency and weatherization measures. • Inflation Reduction Act (IRA): High-Efficiency Electric Home Rebate Program (HEEHRA): point-of-sale rebates through qualified electricians for electrification measures. • Marin Clean Energy (MCE) serves the PTCA area and has energy equity programs and a community power coalition. MCE works with the Green and Healthy Homes Initiative as well as other partners. • BayREN provides rebates for energy efficiency and fuel-switching projects. Many of these rebates are “stackable” and can be combined with state or federal rebates or tax credits. <p>For more information and existing programs to improve energy efficiency, including case studies for individual properties, see Bay Ren https://www.bayren.org/</p>
Partners in action implementation	Richmond City Council, San Pablo City Council, Contra Costa County, the CSC, community members
Key stakeholders to engage in	Neighborhood Councils, Landlords Association(s), Contra Costa Public Health Department, MCE, BayREN

Action #	H 2.2
action implementation	
Potential obstacles	<p>Various incentives (rebates and tax credits) exist to help homeowners and multi-unit housing owners make clean-energy upgrades. However, these programs may not include the deep discounts that low-income homeowners may need to participate.</p> <p>The upfront financial cost for housing/building renovations may include additional infrastructure costs for older buildings that are not anticipated, such as updating the electrical panel, removing gas appliance infrastructure, or other infrastructure to bring buildings up to code.</p> <p>Various cities around the State are adopting or trying to adopt required all-electric regulations for new residential, but the State of California is challenging these proposed ordinance updates.</p>
Action initiation timeframe	Mid=2-4 years
Action intervention point	Exposure and/or dosage
Action impact timeframe	Mid=2-4 years
Measure/metric of action implementation	Was the Action implemented (yes/no?)
Can any emission/exposure reduction be estimated	-

Action #	H 2.3
Action name/brief description	<p>Assess whether rental standards can require indoor air filtration and cooling in the PTCA CERP Community</p> <p>Air District will summarize research that supports policy and best practices recommendations for local jurisdictions to protect residents in rental housing from air pollution and heat events. Contra Costa County and the cities of Richmond and San Pablo will work to implement the findings. This action may include the following activities.</p> <p>Air District, working with local jurisdictions, the CSC, the community, and other advocates to lead an effort to:</p> <ul style="list-style-type: none"> • Identify policy and programming gaps that leave rental households vulnerable to indoor air pollution and heat events. • Identify data that supports the health, energy, economic, and other benefits of air filtration and cooling. • Make recommendations to jurisdictions regarding upgrading code requirements for rental properties to include air filtration and cooling requirements. • Identify any existing funding assistance for PTCA area members. <p>The County and the cities of Richmond and San Pablo to work with Air District, the CSC, the community, and other advocates to find ways to implement</p>

Action #	H 2.3
	measures that work to protect residents in rental housing from indoor air pollution and heat events. This may take the form of reach codes or other regulatory or incentive-based measures in both existing and new rental housing.
Type of action	Further research; Regulatory
Lead action implementor	Air District, Cities of Richmond and San Pablo, and County of Contra Costa
Related existing Program, Policy, or Initiative	For information and existing programs to improve energy efficiency, see BayREN https://www.bayren.org/ , including case studies for individual properties. California Building codes: https://www.dgs.ca.gov/BSC/Codes . UCLA Luskin Center for Innovation Policy Brief "Protecting Californians with Heat-Resilient Homes: https://innovation.luskin.ucla.edu/wp-content/uploads/2022/07/Protecting-Californians-with-Heat-Resilient-Homes.pdf .
Partners in action implementation	The CSC, people who live in the PTCA community, experts in indoor air quality and rental housing
Key stakeholders to engage in action implementation	CSC, community members, health and housing advocates
Potential obstacles	Gathering the community and political support to make changes at the local government level to require updates to existing or new rental housing is difficult and time-consuming. Identifying methods to pay for updates to indoor air filtration and cooling that do not include passing all costs on to renters is also difficult. Renters fear building updates due to fear of displacement and higher rents. Also, building retrofits that require inspections may identify unpermitted building changes that threaten renters' housing stability. These factors present obstacles to protecting renters from air pollution while indoors and from heat events.
Action initiation timeframe	Mid=2-4 years
Action intervention point	Exposure and/or dosage
Action impact timeframe	Mid=2-4 years
Measure/metric of action implementation	Was the Action implemented (yes/no?)
Can any emission/exposure reduction be estimated	-

Action #	H 2.4
Action name/brief description	Assess and address gaps in the programming that protects the unhoused from air pollution in the PTCA area Individuals experiencing homelessness are often unsheltered and reside near mobile sources of pollution, such as under freeways and on the shoulders of

Action #	H 2.4
	<p>railways, and near stationary sources of air pollution, such as industrial sites that are removed from residential neighborhoods. Therefore, the unhoused are the population most exposed to air pollution in the PTCA community. Programs and services addressing homelessness also help to address racial and social inequities because unhoused persons in Contra Costa County and the City of Richmond are disproportionately Black, Indigenous, undocumented immigrants, people with disabilities, and people with criminal histories.</p> <p>Acknowledging that sustainable permanent and subsidized housing is the end goal, this action seeks to understand service gaps in existing programs to protect the unhoused from air pollution and other comorbidities. This action could include the following efforts:</p> <p>Contra Costa Public Health Services' Health, Housing & Homeless (H3) Services, Richmond, and San Pablo could participate in efforts to:</p> <ul style="list-style-type: none"> • Increase interim, transitional, and affordable housing capacity with infrastructure designed to provide air filtration, cooling, warming, and resource/service navigation assistance. • The State's Homekey program addresses homelessness by increasing the supply of permanent affordable housing across. Homekey provides local public entities with large capital grants to "purchase existing buildings and convert them into housing for people experiencing or at risk of homelessness." • Partner with existing community-based organizations to transform their community congregation sites into Resilience Hubs that are accessible to the unhoused. See action #4.1. • Improve community education and assistance by providing training on air quality issues and health impacts with Coordinated Outreach Referral, Engagement (CORE) outreach workers. Share resources (like N95 masks) and air alert notifications about the need to be indoors. The Contra Costa County Office of Emergency Services and Environmental Health would also be key to implementing this recommendation. • Increase the utilization of clean air centers and resilience hubs, and other indoor community facilities by providing storage lockers for property (to allow unhoused individuals to secure their possessions), pet care, and pet accommodations. <p>SOS Richmond can:</p> <ul style="list-style-type: none"> • Deploy rapid temporary interim housing transitional villages with 50+ beds that are run by unhoused staff (empowerment-based approach) to respond to an air quality emergency like a flaring or wildfires. • Provide pop-up encampment services such as water delivery, sanitation, and hygiene (WASH) responses for trash removal, toilets, showers, laundry, drinking water, and other amenities to keep encampments safe. outreach to the unhoused, and job training for unhoused people. • Facilitate outreach to the unhoused, and create job opportunities.

Action #	H 2.4
	<p>Air District:</p> <ul style="list-style-type: none"> • Work with Contra Costa Public Health Department’s H3 staff to develop guidance for local jurisdictions and CBOs that help protect unhoused communities from air pollution, especially during Spare the Air days, heat waves, wildfires, and flaring episodes. Developing this guidance in partnership with unhoused individuals, service providers, activists, CBOs, and academics. • Provide supplies and information to service providers to distribute to unhoused communities, such as N95 masks, information about air quality alerts, and clean air centers. • Work with local jurisdictions, the CSC, community members, and other agencies to establish resilience hubs/clean air centers as needed in the PTCA community. • Advocate and support the development of more affordable/subsidized transitional housing for the unhoused that includes air filtration.
Type of action	Further research
Lead action implementor	CCHS Health: Housing & Homeless (H3) Services, SOS Richmond, Air District, Office of Emergency Services and Environmental Health
Related existing Program, Policy, or Initiative	<p>Through CARB’s AB 836 Clean Air Center program, Contra Costa’s Health, Housing & Homeless (H3) Services has requested 12 portable air filtration systems for use in shelters across the County. Through the same grant, the Pinole Library was approved for HVAC retrofit, completion expected by the end of 2023; the City of Richmond requested 10 air filtration units, and the City of El Cerrito requested 21 filtration units.</p> <p>During the last wildfire event, the H3 CORE team did street-level outreach to encampments and other unhoused persons, providing survival supplies like N95 masks, transportation, and other support services. Healthcare for the Homeless is a partner within Contra Costa Health’s Public Health division, and this team provided backpack medicine, masks, and other related health services.</p> <p>Also see CARB’s AB 836 Wildfire Clean Air Center program, San Joaquin Valley Air Pollution Control District Clean Air Centers Pilot Program</p>
Partners in action implementation	CARB, Richmond Homeless Task Force
Key stakeholders to engage in action implementation	CSC, community members, advocates for the unhoused, West Contra Costa’s unhoused population and households
Potential obstacles	The patchwork of services, and gaps in services for the unhoused is well documented. California’s housing affordability crisis is decades in the making, reflecting 20th-century public policies that created housing shortages and institutionalized racism. These factors present obstacles to protecting this vulnerable population from air pollution that far exceed the scope of this Action and the PTCA Plan
Action initiation timeframe	Mid=2-4 years
Action intervention point	Exposure and/or dosage

Action #	H 2.4
Action impact timeframe	Mid=2-4 years
Measure/metric of action implementation	Was the Action implemented (yes/no?)
Can any emission/exposure reduction be estimated	-

Action #	H 2.5
Action name/brief description	<p>Reduce Exposure to Wood Burning</p> <p>Residential wood fires generate 7.6% of the PM_{2.5} emissions from criteria pollutants and 8.5% of the formaldehyde emissions in the PTCA community.</p> <p>This action seeks to reduce exposure to wood burning through these steps:</p> <ul style="list-style-type: none"> • Offer incentives to replace wood-burning fireplaces or wood-burning fireplace inserts with electric heat pumps. • Evaluate opportunities to improve Air District's Open Burning Regulation (Reg. 5) and/or Air District's Wood Burning Devices Regulation (Rule 6-3). Initiate by the end of 2024. <p>Air District has experience administering incentive programs to replace existing wood-burning heating equipment with cleaner-burning equipment. Air District's Strategic Incentives Division will be administering an incentive program called the Clean Heating Efficiently with Electric Technology Program, or CleanHEET Program. CleanHEET will provide up to \$2 million throughout the Bay Area for the changeout of freestanding wood stoves or wood-burning fireplace inserts with electric heat pumps. A future incentive program will benefit from CSC and other community outreach efforts and partnerships to encourage participation within the CERP.</p> <p>In addition to the incentive program, this action includes a step to reduce wood-burning emissions and exposure by evaluating approaches to strengthen Air District Reg 5 and Reg 6-3. This aligns with the WOCAP Further Study Measure Strategies for addressing wood smoke impacts (WOCAP FSM #1 and #5). Regulation 5 generally prohibits open burning but allows for exemptions such as agricultural burning, disposal of hazardous materials, fire training, and range, forest, and wildlife management. Regulation 6-3 makes it illegal to use any wood-burning devices when a Spare the Air Alert is in effect. Reg 6-3 also bans excessive smoke, and the burning of garbage, plastics, and other toxic materials.</p>
Type of action	Incentives; Regulatory
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	<ul style="list-style-type: none"> • Air District's past experience with related incentive programs includes the Wood Smoke Reduction Incentive Program (WSRIP). The WSRIP funded the replacement of existing fireplaces and wood-burning stoves with natural gas- or propane-fueled heating stove or fireplace

Action #	H 2.5
	<p>inserts, decommissioning of an existing wood-burning stove or fireplace and installing an electric heat pump system, or decommissioning of an existing wood-burning stove or fireplace without installing a replacement heating device.</p> <ul style="list-style-type: none"> • CARB's Woodsmoke Reduction Program • Community Air Protection Incentives - Chapter 6: Stationary Source and Community-Identified Projects within the CAP Guidelines (including wood-burning related projects from communities in Calaveras County, El Dorado County, and San Joaquin Valley APCD)⁹ • Action 2.5's evaluation of amendments to Reg. 5 and Reg. 6-3 to reduce wood burning emissions and exposure aligns with the West Oakland Community Action Plan (WOCAP) Strategy FSM #5 to investigate the feasibility of amending Regulation 5 and/or Rule 6-3 to prohibit recreational fires, and also have some overlap with FSM #1.
Partners in action implementation	Local jurisdictions, the CSC, community members, CARB
Key stakeholders to engage in action implementation	Neighborhood Councils, Landlords Association(s)
Potential obstacles	For many of these wood-burning sources, the purpose is largely aesthetic. People like looking at fires. So many people may not be interested in a heat pump replacement without greater motivation such as from incentives or education and outreach on the health impacts of woodsmoke.
Action initiation timeframe	Near=<2 years
Action intervention point	Exposure and/or dosage
Action impact timeframe	Mid=2-4 years; Long > 4 years
Measure/metric of action implementation	Was the Action implemented (yes/no?) Number of wood-burning heating equipment units replaced with heat pumps through incentive programs.
Can any emission/exposure reduction be estimated	-

Action #	H 2.6
Action name/brief description	<p>Create incentives for electric lawn and gardening equipment</p> <p>This action seeks to create incentive programs that will provide funds for residents and other entities to purchase zero-emission lawn and gardening equipment. Air District's Strategic Incentives Division would administer this incentive program.</p>

⁹ <https://ww2.arb.ca.gov/our-work/programs/community-air-protection-incentives/stationary-source-and-community-identified>

Action #	H 2.6
	<p>Air District has run similar programs in the past; see the “Related existing Program, Policy, or Initiative” section below for more details.</p> <p>As described below, Air District and other air quality agencies in California have experience with lawn and gardening replacement programs that Air District can draw from. In addition, an incentive program for electric lawn and gardening equipment is viable through the Carl Moyer Program and the Community Air Protection Incentives. This action will benefit from CSC and other community outreach efforts and partnerships to encourage participation within the PTCA area.</p>
Type of action	Incentives
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	<p>The San Joaquin Valley Air Pollution Control District (SJVAPCD) has already created a CARB Community Identified Project plan for electric home lawn and gardening equipment and Air District’s Strategic Incentives Division can replicate this incentives program.</p> <p>Beginning July 18, 2023: CARB, in partnership with CALSTART, will offer voucher incentive funding to small businesses and sole proprietors to upgrade professional landscaping equipment to zero-emission alternatives through the California Off-Road Equipment (CORE) Program.</p> <p>Air District currently offers a program that can fund large commercial lawn mowers with over 25 horsepower evaluated through the Carl Moyer Program. However, most projects do not qualify due to the low operational usage of the mower.</p> <p>Air District offered a public sector lawn and garden equipment exchange program between 2015 and 2018. Air District awarded nearly one million in funding to public agencies, such as schools, city public works, and parks departments in Contra Costa and Alameda counties, to replace older operable lawn and garden equipment with new battery-powered zero-emission electric equipment.</p> <p>Air District offered a residential lawn and garden equipment exchange program in 2014. The Lawn Mower Exchange Program offered Bay Area residents a \$145 rebate on the purchase of new cordless zero-emission electric lawn mowers in exchange for turning in their operable gasoline-powered lawn mowers for scrapping.</p>
Partners in action implementation	Air District, CARB, and the CSC
Key stakeholders to engage in action implementation	Air District, CARB, the CSC, Neighborhood Councils, Landlords Association(s), Homeowners, and the public
Potential obstacles	Some funding has limitations (such as the Carl Moyer Program described in the “Related existing Program, Policy, or Initiative” section) that make it difficult for applicants to apply for and/or qualify for funding.
Action initiation timeframe	Near=<2 years
Action intervention point	Exposure and/or dosage

Action #	H 2.6
Action impact timeframe	Mid=2-4 years
Measure/metric of action implementation	Was the action implemented? (yes/no) Number of residential replacements or purchases of new electric lawn and garden equipment through Air District incentive programs.
Can any emission/exposure reduction be estimated	-

Strategy 3 – Promote Healthy Food Access – Actions

Action #	H 3.1
Action name/brief description	<p>Expand CCHS programming to increase healthy food in retail settings in West Contra Costa County</p> <p>CCHS is developing a program in the eastern part of Contra Costa County to provide refrigerating/freezer purchasing and maintenance grants to small “corner stores.” This program will help corner stores sell fresh foods that require refrigeration. This program aims to support a local procurement opportunity to economically support farmers, and other produce growers in the community.</p> <p>However, CCHS does not intend to expand to West Contra Costa County now or for the next two years. Their program’s second phase will explore the possibility of expansion to West Contra Costa County, where the PTCA community is. Expanding West Contra Costa County will hinge on securing additional program funding. One potential funding source is The Healthy Refrigeration Grant Program from the California Department of Food and Agriculture Office of Farm to Fork. The goal of this program is to fund “[...]energy efficient refrigeration units in corner stores, small businesses, and food donation programs in low-income or low-access areas throughout the state [...].”</p>
Type of action	Other: Programmatic
Lead action implementor	CCHS
Related existing Program, Policy, or Initiative	<p>CCHS is currently working on a pilot outside of the PTCA area. The pilot involves six retailers in the Bay Point community in Eastern Contra Costa County. The pilot plans to hold store tours, food demonstrations, and cooking classes.</p> <p>A model for the CCHS program is the Saba Grocers Initiative.</p>
Partners in action implementation	Local retailers
Key stakeholders to engage in action implementation	<p>Neighborhood groups and community members</p> <p>Neighborhood retail business owners</p>
Potential obstacles	Securing funding for an expanded program in West Contra Costa could be challenging.

Action #	H 3.1
	If retail store owners are from other countries with diverse primary spoken languages, programming must be culturally and linguistically relevant.
Action initiation timeframe	Mid-term <4 years
Action intervention point	Health effects
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	See above - "Strategy Metric(s)" <ul style="list-style-type: none"> A measure of impact: How many more retail stores provide fresh produce within the CERP Community since the action was implemented?
Can any emission/exposure reduction be estimated	-

Action #	H 3.2
Action name/brief description	<p>Ask EHSD to Study the current state of CalFresh - California state's Supplemental Nutrition Assistance Program (SNAP) - enrollment within the CERP Community and identify solutions to current barriers to enrollment</p> <p>In this action the CSC will encourage the Employment & Human Services Department (EHSD) to study ways to improve CalFresh and SNAP access county-wide since EHSD is responsible for signing people up for these programs. The resulting study results and information will then be used to improve access in the PTCA area.</p> <p>EHSD can address food insecurity by educating the public, promoting Electronic Benefits Transfer (EBT), and hopefully increasing the enrollment rate for CalFresh and SNAP within the county and the PTCA community. A study can explore the current barriers to enrollment, for example, the inadequate number of stores accepting EBT and strategies for increased CalFresh enrollment in the PTCA area.</p> <ul style="list-style-type: none"> What percent of eligible residents within the PTCA area are enrolled in CalFresh? Assess the number of EBT-accepting locales in the CERP Community. Determine what percent of food retail stores accept CalFresh, if that number can be increased, and if feasible, to diversify the types of stores accepting CalFresh. For example, if applicable, expand from grocers to restaurants. Identify the current barriers to CalFresh enrollment and identify strategies to tackle those barriers. Identify Community-Based Organizations (CBOs) in the CERP Community to partner with to increase CalFresh participation. Find funding for increased ongoing outreach to assist in community education about CalFresh benefits and programming to support the enrollment process.
Type of action	Further research

Action #	H 3.2
Lead action implementor	Employment and Human Services Division (EHSD), Contra Costa County Health Services (CCHS) Social Services Department
Related existing Program, Policy, or Initiative	U.S. Department of Agriculture's SNAP (CalFresh in California)
Partners in action implementation	City of San Pablo and Richmond Urban Tilth or other CBO
Key stakeholders to engage in action implementation	Community-based groups/organizations working with residents experiencing food insecurity CCHS - Contra Costa County Health Services Public Health Departments for the Cities of Richmond and San Pablo
Potential obstacles	Existing CalFresh education work and goals are tied to funding, primarily from the California Department of Public Health (CDPH). This action should investigate if other funding sources are needed to support additional CCHS programming to do outreach and education or other activities that will increase enrollment.
Action initiation timeframe	Near=<2 years;
Action intervention point	Addressing social determinants of health & underlying pre-exposure vulnerabilities
Action impact timeframe	Mid=2-4 years
Measure/metric of action implementation	See above - "Strategy Metric(s)"
Can any emission/exposure reduction be estimated	-

Action #	H 3.3
Action name/brief description	<p>Obtain funding to increase the number of healthy food retail businesses in the PTCA community</p> <p>This action asks that local jurisdictions develop incentives for new businesses that provide healthy foods, specifically grocery stores, in predominantly BIPOC and low-income neighborhoods of the PTCA area. Many census tracts in the PTCA area have a population with low food access -- defined as living more than one-half mile from the nearest supermarket, supercenter, or large grocery store -- <i>and</i> limited transportation options -- further decreasing their ability to reach a grocery store.</p> <p>We ask that local jurisdictions:</p> <ul style="list-style-type: none"> • Advocate for and research funding streams to create affordable and culturally relevant local food sources such as farmers' markets that take CalFRESH or EBT, community-supported agriculture (CSA), new supermarkets, supercenters, or large grocery stores. • Provide incentives for food retailers to open businesses in the PTCA area.

Action #	H 3.3
	<ul style="list-style-type: none"> • Use tax credits and exemptions to encourage the development of grocery stores and improvements at existing stores. <ul style="list-style-type: none"> ▪ “For example, Prince George’s County, Maryland, offers a property tax credit for up to 10 years for grocery store development and improvement in designated food deserts. To qualify as a “grocery store” for the credit, at least 20% of a store’s gross receipts must be derived from selling fresh produce, meats, and dairy products. The credit applies to offset 75% of any property tax increase resulting from an increase in assessed property value due to the expansion, renovation, or new construction of a grocery store, or reuse of vacant commercial space for a grocery store.” • Exempting grocery stores and other retail food businesses from licensing and/or permitting fees
Type of action	Incentives
Lead action implementor	Local jurisdictions in PTCA community (City of Richmond, City of San Pablo, and Contra Costa County)
Related existing Program, Policy, or Initiative	New York City has a program called “Food Retail Expansion to Support Health (FRESH)” that provides zoning and financial incentives for the establishment and retention of food retail stores.
Partners in action implementation	Contra Costa County Board of Supervisors City Councils of San Pablo and Richmond San Pablo Economic Development Corporation (SPEDC) Richmond Economic Development Commission
Key stakeholders to engage in action implementation	Neighborhood councils CBOs Residents
Potential obstacles	<p>Food retail businesses are often portrayed as unprofitable. However, there are models of economic feasibility for food retail.</p> <p>Limited sites for new food retail businesses may be an issue.</p> <p>Social determinants of health also play a role. As noted in a 2016 article in Progressive Planning, “While a new store will increase geographic proximity, it does nothing to address the structural drivers of food insecurity, like poverty, low wages, food pricing, segregated land-uses, and inadequate and inequitable transportation options.” One study we found argued that more food retail and food access does not always increase healthy food consumption.</p> <p>A complementary solution (see the next Action - H2.4) could be zoning and permitting initiatives.</p>
Action initiation timeframe	Near =< 2 years
Action intervention point	Addressing social determinants of health & underlying pre-exposure vulnerabilities
Action impact timeframe	Long > 4 years

Action #	H 3.3
Measure/metric of action implementation	See above - "Strategy Metric(s)"
Can any emission/exposure reduction be estimated	-

Action #	H 3.4
Action name/brief description	<p>Develop a Healthy Food Retail Model Ordinance for potential adoption by local jurisdictions in the PTCA area</p> <p>For this strategy, we define unhealthy foods as including highly-processed items such as fast foods - A type of food that is quickly made and of low nutritional value - and snack foods, which tend to be lacking nutrients (vitamins, minerals, and antioxidants) and high in empty calories due to the content of refined flours, sodium, and sugar.</p> <p>We ask that local jurisdictions and CCHS adopt a Healthy Food Retail Ordinance for potential adoption by local jurisdictions in the PTCA area.</p> <p>An ordinance could include the following:</p> <ul style="list-style-type: none"> • Consider increasing or protecting zoning that allows urban agriculture in the PTCA community. Starting on page 70, the State Office of Planning and Research's Model Environmental Justice Policies for General Plans report provides information on supporting local food production from California general plans that have been formally adopted by cities and counties. • Limit unhealthy food at check-outs and offer healthy food at check-out, especially in areas with low food access and high food insecurity. • Require that new corner stores applying for business permits/licenses have a certain percentage of selling space for staple foods and fresh produce.
Type of action	Regulatory
Lead action implementor	CCHS and local jurisdictions in PTCA community (City of Richmond, City of San Pablo, and Contra Costa County)
Related existing Program, Policy, or Initiative	CCHS is studying the possibility of proposing an ordinance that would require healthier options at checkout (for example, fewer high-sugar items. This ordinance would include stores in unincorporated areas in Contra Costa County above a specific size. CCHS is researching Oakland, Berkeley, and Richmond's efforts in this area. CCHS plans to go to the Family and Human Services Committee of the Board of Supervisors to request permission to pursue this ordinance in 2023. This ordinance could become a model for other jurisdictions in the PTCA area and throughout the County.
Partners in action implementation	CCHS, and potentially CBOs and Others
Key stakeholders to engage in action implementation	Neighborhood groups; Neighborhood retail business owners; CBOs

Action #	H 3.4
Potential obstacles	Zoning changes need political support and might only be possible with a community champion or a current program that supports it. A note on using business permitting requirements to set minimum standards for offerings in retail settings - this only addresses new retail and may have a low level of compliance among retailers if not coupled with an enforcement program.
Action initiation timeframe	Mid <= 4 years
Action intervention point	Addressing social determinants of health & underlying pre-exposure vulnerabilities
Action impact timeframe	Mid <= 4 years
Measure/metric of action implementation	See above - "Strategy Metric(s)"
Can any emission/exposure reduction be estimated	-

Strategy 4 – Promote Resilience Centers – Actions

Action #	H 4.1
Action name/brief description	<p>Advocate for funding for resilience centers</p> <p>While Air District has a Clean Air Centers program, the PTCA area would be best served by the more expansive services of Resilience Centers. Resilience Centers are, "neighborhood centers that can be designed to coordinate culturally sensitive, multilingual services to best meet the needs of diverse groups of community members." These centers can provide a safe place for temporary shelter and relief during days of extreme heat or operate as centers for distributing necessities such as food and multilingual information during and after disasters such as wildfires or prolonged electrical outages. Year-round, they can offer space and programming for community-building efforts that increase resilience when emergencies occur, can address health disparities that disasters may highlight, and can build social cohesion. Resilience centers are usually established through collaborations between municipal authorities and non-profit entities and usually operate within dependable, community-operated establishments such as a place of worship, community hall, and youth or senior center.</p> <p>There is funding available for Resilience Centers. California Senate Bill 155 (2021) specified that \$75 million in the 2023–2024 fiscal year is available for neighborhood-level Resilience Centers through the Strategic Growth Council’s Community Resilience Centers (CRC) Program.</p> <p>Contra Costa County and the Cities of Richmond and San Pablo:</p> <ul style="list-style-type: none"> • This action asks local jurisdictions to apply for funding and partner with local community-based organizations to develop Resilience Centers. • As of 2023, there is a Resilience Center/Hub at RYSE Commons, a youth community center in Richmond, California. RYSE plans to install solar and battery infrastructure at its center. If grid power goes out,

Action #	H 4.1
	<p>people will be able to charge their communication and medical devices and refrigerate medicines or food. Other neighborhoods in the PTCA area would benefit from Resilience Centers as well.</p> <ul style="list-style-type: none"> • Assess how resilience centers can be made accessible for the unhoused. Increase the utilization of resilience hubs by unhoused people by providing storage lockers for possessions, pet care, pet accommodations to allow unhoused individuals to shelter with their pets, and parking spaces. • Sustainably fund 24/7 staffing not limited to maintenance and resource navigation at the Resilience Hubs and Clean Air centers. Provide employment programs not limited to employment opportunities for the unhoused within the above facilities. <p>CCHS:</p> <ul style="list-style-type: none"> • CCHS can play a supportive role regarding health-related services but would not lead this effort.
Type of action	Incentives; Other: Advocacy
Lead action implementor	PTCA CSC, Contra Costa County, local Community-Based Organizations, and the Cities of Richmond and San Pablo
Related existing Program, Policy, or Initiative	Air District’s Clean Air Centers Pilot provides grants for the provision and installation of industrial-grade portable air filters.
Partners in action implementation	Contra Costa Health Services - Public Health Department Contra Costa Health Services - Health, Housing, and Homeless Services (H3) Contra Costa Office of Emergency Management)
Key stakeholders to engage in action implementation	Neighborhood Councils Contra Costa Public Health Department West Contra Costa Unified School District Sheriffs’ Office re: Emergency Response mandate Community organizations
Potential obstacles	<p>It is the experience of some CCHS staff that non-school based clean air center locations are underutilized. This is because community members may prefer to remain in their own homes during an extreme air event. Care must be taken to understand this trend and ensure that Resilience Centers are not similarly underutilized. Many homeless residents have expressed a preference for hotel vouchers.</p> <p>Many funding sources do not provide operational funds. For example, the Air District Clean Air Centers program Grant received by Contra Costa County did not come with money to staff clean air centers or provide additional services, like food in an emergency. Centers must be staffed over weekends and holidays, which could be expensive and unsustainable depending on funding terms. Additionally, the Air District Clean Air Centers Program is a pilot, and unless there is demand and CARB provides further funding, there will not be future funding under AB 836.</p>
Action initiation timeframe	Near=<2 years
Action intervention point	Exposure and/or dosage
Action impact timeframe	Near=<2 years and Mid=2-4 years

Action #	H 4.1
Measure/metric of action implementation	See above - "Strategy Metric(s)"
Can any emission/exposure reduction be estimated	-

Action #	H 4.2
Action name/brief description	<p>Ensure resources for high-efficiency air filtration unit distribution and installation programs and support for partnerships to benefit vulnerable populations and places</p> <p>Multiple Air District initiatives in the Clean Air Filtration Program provide air filtration technology, including stand-alone air filters or HVAC system updates for facilities within the PTCA area. However, a list of eligible facilities serving sensitive receptors and vulnerable populations and places, such as health centers, senior centers, schools, and facilities for the unhoused in the PTCA community, is needed to identify and proactively approach missing potential recipients. Assistance with grant applications should be offered from Air District if the eligible organization does not have the capacity to apply. The Air District Clean Air Filtration Program focuses on public social assets within the community where the most vulnerable subpopulations congregate, e.g., all schools, libraries, senior and youth centers, and shelters for the unhoused. These are not private residences but public or municipal facilities.</p> <p>However, if the CSC wishes to reach residential households, there is precedence for such programs. Other AB 617 communities in California developed residential air filter distribution programs using funding from CARB's Community Air Protection Incentives program. San Joaquin Valley has one such program called the Clean Air Rooms Program.</p> <p>Another funding source may be a potential result of the Community Benefits Policy (CBP), which is described in Action 3.9 under the Fuel Refining Strategies section. This action suggests that Air District fines provide funds to health-promoting initiatives in the PTCA area.</p>
Type of action	Incentives
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Air District's Clean Air Filtration Program, CARB's Community Air Protection Incentives (potential funding source)
Partners in action implementation	Clean Air Filtration Program grantees and collaborators - community-based organizations, etc.
Key stakeholders to engage in action implementation	Municipal staff, school districts, and community-based organizations that run libraries, senior and youth centers, run schools, and shelters for the unhoused, etc.
Potential obstacles	Outreach to potential grantees can be done, but this does not guarantee that the organization will desire or have the capacity to participate.

Action #	H 4.2
Action initiation timeframe	Near=<2 years
Action intervention point	Exposure and/or dosage
Action impact timeframe	Mid=2-4 years
Measure/metric of action implementation	See above - "Strategy Metric(s)"
Can any emission/exposure reduction be estimated	-

Strategy 5 – Pollution & Public Health Education, Outreach, Accountability, and Health Data Tracking – Actions

Action #	H 5.1
Action name/brief description	<p>Work with Contra Costa Health Services to create a dashboard for health data and air pollution education materials with particular emphasis on AB 617 communities</p> <p>CCHS has committed to creating a dashboard website for health data and information for the entire county. This action asks CCHS to include in that website dashboard digestible information on air pollution, including educational information, pollution-related public health outcomes, air pollution improvement goals, PTCA implementation reporting, and links to active PTCA webpages. This dashboard would also be a natural place to include links to the air alert system, including information on alert sign-up and feedback mechanisms to promote its use.</p> <p>This dashboard can potentially increase community engagement with air pollution issues, outcomes, and opportunities to become involved in solutions. All county residents should be able to see, in one place, which communities have the greatest pollution burdens and most significant health problems. This dashboard will have to ensure that correlation and causation are not confused when looking at health outcomes and air pollution sources. Note that Rodeo and Martinez have refineries and suffer similar health impacts to people as we experience in Richmond, North Richmond, and San Pablo, so a dashboard will benefit all County residents.</p> <p>CCHS is already planning to build a dashboard for all health issues and information affecting Contra Costa County. Their dashboard will include many factors that affect people's health, like the Social Determinants of Health, gun violence, and other environmental factors beyond air pollution.</p> <p>CCHS:</p> <ul style="list-style-type: none"> • Work with Air District to create a dashboard website that includes simplified and accessible educational information on air pollution; and related health metrics, goals, initiatives, and achievements.

Action #	H 5.1
	<p>Air District and CCHS:</p> <ul style="list-style-type: none"> • CCHS and Air District will engage in implementation discussions for this action to coordinate content hosted, releases, and timelines. It is suggested that there be one annual release with added functionality and primary information updates, as well as more frequent advertisement of events, etc. • In terms of content for the dashboard, CCHS will provide health data products. Air District will provide air pollution information and educational products, as needed, to be shared with CCHS for posting and dissemination. Where possible, use existing materials about air pollution and its health impacts.
Type of action	Education/Outreach
Lead action implementor	Contra Costa Health Services
Related existing Program, Policy, or Initiative	None. Although there is no current CCHS dashboard, there are existing websites that can serve as good examples for certain elements of the dashboard. One is called California Health Maps and is hosted by the GreenInfo Network. This site is an interactive mapping health tool that "allows users to interactively map health data for California at different geographic levels: census tract aggregation zones, medical service study areas (MSSAs), census-designated places, congressional districts, state senate districts, state assembly districts, and counties. You can map cancer incidence for 12 of the most common invasive cancer sites and filter by sex and race/ethnicity." Importantly, this tool shows data by race.
Partners in action implementation	Air District
Key stakeholders to engage in action implementation	Desired outcome is both a phone app version and a full-screen (laptop/desktop) version. Stakeholders are a small set of people representative of the community, including young and older users, high school graduates, and college graduates who can help with user experience testing.
Potential obstacles	Funding, design quality, user experience testing. To start, use current information and add more annually as appropriate. It might take significant time and resources to get to an optimally integrated public-facing system.
Action initiation timeframe	Near=<2 years
Action intervention point	N/A
Action impact timeframe	Near=<2 years
Measure/metric of action implementation	See above - "Strategy Metric(s)"
Can any emission/exposure reduction be estimated	-

Action #	H 5.2
Action name/brief description	<p>Work with health workers to deliver educational information on air pollution health impacts and mitigation opportunities</p> <p>Depending on if CCHS has funding, this action asks that it educate health workers so they can deliver information to their patients and clients on air pollution's health impacts, and mitigation opportunities. This will likely involve working with other service providers through partnerships with community-based organizations and case management programs.</p> <p>Air District:</p> <ul style="list-style-type: none"> • Prepare information packages and messaging guidance for health workers. Provide a briefing for health workers on the information. <p>CCHS:</p> <ul style="list-style-type: none"> • CCHS disseminates the information packages Air District creates to health workers, such as workers in WIC offices, Promotoras*, or staff at CalAIM offices, to amplify air quality and health-related messages and information through direct interactions with community members, social media, and Health Officer appearances in local media. This should be done through case management programs and partnerships and interconnection to other services with community-based organizations. Health workers connect clients to various services and resources. We ask that they offer, for example, information about home retrofitting, flare alerts system, resilience hubs, and general information about the health dangers of poor air quality. • CCHS can also amplify air quality and health-related messages and information through social media and Health Officer appearances in local media. <p>*Promotoras are community members trained as public health educators in Latino/a/x communities.</p>
Type of action	Education/Outreach
Lead action implementor	CCHS and Air District
Related existing Program, Policy, or Initiative	This can add to current County and non-profit programming.
Partners in action implementation	CCHS and CBOs
Key stakeholders to engage in action implementation	Air District and CCHS
Potential obstacles	In the plan's implementation phase, the scope of work, and cost estimate will need to be defined. This is not currently part of a health department program but could be if there is funding for it.
Action initiation timeframe	Near=<2 years (depends on funding)
Action intervention point	Exposure & Dosage

Action #	H 5.2
Action impact timeframe	Mid=2-4 years (depends on funding)
Measure/metric of action implementation	See above - "Strategy Metric(s)"
Can any emission/exposure reduction be estimated	-

Action #	H 5.3
Action name/brief description	<p>Implement the findings of the CARB-funded study to improve their clients' tracking in AB 617 Communities</p> <p>In consultation with other AB 617 communities, this CARB-funded research project will "[...] develop a set of health indicators and a process for tracking health conditions related to air pollution exposures for AB 617 communities and other heavily burdened areas. While CARB currently assesses projected health benefits of air pollution control rules, regulations, and programs, there is not a system in place to track actual health conditions linked to air pollution emissions and exposures in a community." This project was awarded money in the funding year 2021-2022 and is anticipated to be completed in 24 months from the start date. The research team is composed of various professors and researchers. More information can be found in this presentation: https://ww2.arb.ca.gov/sites/default/files/2022-08/21RD005%20Kick-off%20PI_Final_English.pdf</p> <p>CCHS and Air District:</p> <ul style="list-style-type: none"> As applicable to the work of CCHS and Air District, adopt the study's findings and track health metrics and outcomes in the PTCA area that are related to, but not necessarily caused by, air pollution exposures. <p>CARB:</p> <ul style="list-style-type: none"> If questions arise about the research outcomes, CCHS and Air District will ask CARB to connect them to the researchers for consultations.
Type of action	Further research
Lead action implementor	CCHS and Air District
Related existing Program, Policy, or Initiative	None
Partners in action implementation	CARB
Key stakeholders to engage in action implementation	Other parties that might be able to use the study's findings are WCCUSD, clinics, CCHS, others TBD
Potential obstacles	The State will have to fund any improvements in health tracking data. Neither our school district nor our municipalities have the resources to implement a new program

Action #	H 5.3
Action initiation timeframe	Near=<2 years
Action intervention point	N/A
Action impact timeframe	Mid=2-4 years;
Measure/metric of action implementation	Were study results adopted by CCHS, Air District, and other relevant parties?
Can any emission/exposure reduction be estimated	-

Strategy 6 – More complete health risk data and HRAs, including pollutant interactions – Actions

Action #	H 6.1
Action name/brief description	<p>Advocate for expanded basic research on the health impacts of PM_{2.5} exposure and add basic research on NO_x, SO_x, and the most damaging Toxic Air Contaminants (TACs)</p> <p>This action asks for advocacy to expand basic research on air pollutants' health impacts. Currently, the health risks of pollutants are assessed individually, and the research in the last twenty years has not adequately determined cumulative health impacts. We define cumulative impacts here as the combined and incremental effects of exposure to multiple pollutants. We define health risk factors here as pollutant exposures that increase the likelihood of a person developing a disease or health condition.</p> <p>Recent research has focused on PM_{2.5} impacts rather than the mix of pollutants people are exposed to. Further, these recent studies are alarming as they find associations between PM_{2.5} and a wide range of chronic health conditions, including cognitive development in children.</p> <p>There is a need to expand basic research on the health impacts of PM_{2.5} exposure and add basic research on NO_x, SO_x, and TACs with the greatest health impacts in various combinations. CAPs with clear health impacts such as PM_{2.5}, NO_x, and SO_x have no official health risk factors per ton. TACs generally have risk factors for cancer and chronic health as well as for acute exposure, but not all TACs have complete sets. As an example, three important health-damaging TACs that are common in our community (acrolein, xylene & toluene) have no cancer health risks even though they are strongly associated with breast cancer. Many TACs have health risk factors that have not been formally reviewed or changed for over 50 years. This research will improve our TAC health risk factors for both cancer and chronic health. Studies should also investigate the cumulative impacts of the CAPs to help create health risk factors.</p> <p>These studies will give a better understanding of the risks of real-world</p>

Action #	H 6.1
	<p>conditions in highly polluted communities and could result in changes to the way that HRAs are conducted in AB 617 communities. Additionally, wildfires are more common now and can generate very high loads of additional PM₁₀ and PM_{2.5} and NO_x and VOCs. Analyses should investigate communities that have both a high baseline of pollution and additional weeks of wildfire smoke multiple times per year.</p> <p>This action could leverage the US EPA HERA Research Program Outputs, including research funding for cumulative impacts and mixtures.² The Health Effects Institute (HEI) also funds studies of the health effects of air pollution, and multipollutant mixtures are on their research agenda.³</p> <p>CARB:</p> <ul style="list-style-type: none"> • CARB will notify Air District and the CSC when there are open calls for suggesting new research topics and can help the CSC with understanding the research concept solicitation process. • CARB will provide updates, as requested by the CSC, on future research projects that address cumulative impacts or are specific to the Path to Clean Air communities. • Note that CARB’s proposed triennial Strategic Research Plan for fiscal years 2021-2024 has research listed in the pipeline for cumulative impacts on page 4. <p>CSC and Air District:</p> <ul style="list-style-type: none"> • When CARB puts out their annual call for research topics, Air District supports the CSC to submit a proposal for a research topic by commenting on the CARB Research Program at: https://ww2.arb.ca.gov/our-work/programs/research-planning. The proposal will suggest new research topic(s) mentioned in this action.
Type of action	Further research
Lead action implementor	Air District and CSC
Related existing Program, Policy, or Initiative	The US EPA and HEI fund these studies. CARB also funds similar research. See also the related but different research project: Improved Assessment and Tracking of Health Impacts for California Communities Most Burdened by Pollution. This program is about better tracking chronic health conditions in communities.
Partners in action implementation	US EPA, Air District, OEHHA, CARB, CSC
Key stakeholders to engage in action implementation	This is a technical project that must be performed by regulatory entities (e.g., US EPA, Cal EPA) and research institutions. However, community stakeholders should be engaged in decision-making and be kept abreast of developments.
Potential obstacles	This is a long-term strategy for tracking the latest science on health risks and impacts of multiple pollutants.
Action initiation timeframe	Unknown
Action intervention point	N/A
Action impact timeframe	Unknown

Action #	H 6.1
Measure/metric of action implementation	Was funding increased significantly Was research broadened to include studies of the most damaging TACs and NO _x and SO _x ? Was research broadened to include a wide range of chronic health impacts
Can any emission/exposure reduction be estimated	-

Action #	H 6.2
Action name/brief description	<p>Develop policies for addressing cumulative health risks from Criteria Air Pollutants (CAPs) and Toxic Air Contaminants (TACs), which may include refinements or updates to health risk analysis.</p> <p>This action seeks to better understand cumulative exposures from CAPs and TACs because there is no current methodology for understanding their cumulative impacts. This action encourages the development of new policies that consider cumulative impacts in land use and environmental permitting, enforcement, and prioritization of new and strengthened regulations.</p> <p>This action addresses two specific technical problems. First, how to quantify CAP health impacts, and second, how to talk about situations where we have health impacts from TACs and CAPs that use different measuring systems. Studying the potential interactions (action 6.1) and spikes in pollution will also further the science behind measuring health impacts from CAPs (especially PM, NO_x, and VOCs). This work can create a more comprehensive and accurate understanding of health risks and can inform the prioritization of emission reduction strategies.</p> <p>OEHHA and/or other researchers:</p> <ul style="list-style-type: none"> Investigate the potential for integrating health risks associated with CAPs and TACs, including baseline pollution and spikes caused by operational problems and wildfires. This may involve creating better quality and more comprehensive health risk factors, guidelines, and support materials for HRAs. The goal is to improve the understanding and measurement of health risks associated with air pollution, particularly by exploring potential negative interactions between different pollutants and considering the impacts of wildfires. <p>CARB:</p> <ul style="list-style-type: none"> CARB will host a Bay Area-specific capacity-building workshop on the topic of health risk assessment methodology. The session can discuss mechanisms to improve methodologies/guidelines. CARB will solicit feedback/comments on a proposed agenda for the meeting with the PTCA CSC prior to announcing the meeting. <p>Air District:</p> <ul style="list-style-type: none"> The Air District's proposed PM Methodology for measuring health impacts from PM_{2.5} may serve as a template for work with NO_x and SO_x in particular. VOCs are a special category, as many are TACs that have health risk factors already.

Action #	H 6.2
	<ul style="list-style-type: none"> • If new research is produced that gives health impact functions for cumulative community-level CAPs and TACs, and EPA updates the BenMAP model or creates something similar, then Air District could develop a methodology and include updated health risks in their CEQA guidelines for CEQA EIR analysis. • The goal is to be able to produce assessments that integrate the impacts of stationary source pollution with marine and rail, mobile, and wildfire pollution for health-damaging TACs and CAPs. • For more information, see the summary under "Potential obstacles."
Type of action	Further research
Lead action implementor	OEHHA/CARB
Related existing Program, Policy, or Initiative	The Air District proposed methodology for modeling health risks from local sources of PM _{2.5} may be an important step in addressing this action.
Partners in action implementation	OEHHA/CARB/Air District
Key stakeholders to engage in action implementation	This is a technical project that must be performed by research institutions and professionals. However, community stakeholders should be engaged in decision-making and be kept abreast of developments.
Potential obstacles	<p>There are a number of technical obstacles/challenges applicable to this action. Many of them are long-standing open problems. A good introduction and overview can be found in the US EPA's 2023 Framework for Cumulative Risk Assessment (https://www.epa.gov/risk/framework-cumulative-risk-assessment).</p> <p>Air District's next Advisory Council will be convening to discuss "cumulative impacts" more broadly, extending to include not only multiple pollutant exposures but also non-chemical stressors like poverty and racism. One of the goals will likely be to develop new policies that consider cumulative impacts in land use and environmental permitting, enforcement, and prioritization of new and strengthened regulations. A challenge and opportunity for this action (and strategy) will be to synchronize with that upcoming policy-oriented work.</p>
Action initiation timeframe	Unknown
Action intervention point	N/A
Action impact timeframe	Mid=2-7 years
Measure/metric of action implementation	See above - "Strategy Metric(s)"
Can any emission/exposure reduction be estimated	-

<p>Action #</p>	<p>H 6.3</p>
<p>Action name/brief description</p>	<p>Improve Health Risk Assessments (HRAs) completeness, quality, and ease of use in permitting decisions</p> <p>This action aims to enhance the completeness, quality, and ease of use of HRAs in permitting decisions. HRAs are done as part of Environmental Impact Reports (EIRs) and are important documents with diverse uses. HRAs provide both a baseline and a projected assessment of a project’s environmental impact. However, HRA calculations and emissions profiles are cumbersome, complex and can be simplified to improve ease of use for the layperson. In the PTCA area, a summary of total toxicity-weighted emissions may be used to prioritize and select a group of air toxics that impact the community. Air District screening tools can be shared and the PTCA area can provide feedback on additional tools, as well as opportunities to increase awareness and ease of access to such tools.</p> <p>This action encourages CARB to investigate the feasibility and, if actionable, design a simple spreadsheet screening tool that would quickly and roughly calculate the impact of a project on the top pollutants that impact public health. This action also encourages Air District to continue producing and updating existing screening tools and modeling guidance in collaboration with CARB as warranted.</p> <p>Such a screening tool would benefit from the integration of CAP, and TAC impacts to ensure comprehensive emissions reporting and health impacts and address potential under-reporting issues such as those caused by flaring and other difficult-to-forecast irregular operational emissions. This screening tool’s calculations can inform permitting decisions by clarifying the public health impacts and the required mitigations early in the process. The time saved from using a screening tool could help local governments and community stakeholders engage more meaningfully in discussions about project approvals or denials.</p> <p>CARB:</p> <ul style="list-style-type: none"> • Since improving HRAs should be done state-wide (not only in the Bay Area) this action asks CARB to create the aforementioned spreadsheet screening tool(s). This is a major ease-of-use improvement to everyday CEQA practices and would benefit the entire State. <p>Air District:</p> <ul style="list-style-type: none"> • Maintain up-to-date CEQA HRA guidance and screening tools to improve HRA ease of use - they provide assistance in determining if there is a likely cumulative health risk impact due to existing and known stationary and mobile sources. The current HRA guidance, updated in 2022, can be found in Appendix E of Air District’s CEQA guidelines. This appendix provides guidance for conducting individual projects and cumulative cancer risk and hazards analysis as part of their environmental review. • To help local governments develop screening tools to help them determine when modeling is necessary and when it is not necessary or helpful to support CEQA determinations for permitting and land use

Action #	H 6.3
	<p>decisions. The modeling analysis for HRAs can be time-consuming and needs to be reviewed. This requires analysis and justification to demonstrate that the measures, when applied, reduce the risks.</p> <ul style="list-style-type: none"> Note: any HRA guidance Air District creates, or shares will be regional, and the stakeholders would be broader than the PTCA area.
Type of action	Regulatory
Lead action implementor	CARB
Related existing Program, Policy, or Initiative	<p>The Air District has published an environmental justice chapter in its 2022 California Environmental Quality Act, or CEQA, Air Quality Guidelines. This chapter provides context for how to apply CEQA analysis, including HRAs, with an environmental justice lens and is the first of its kind to be published in California. CEQA is a state law that generally requires government agencies to inform decision-makers and the public about the potential environmental impacts of residential, commercial, industrial, and other projects and to reduce those environmental impacts to the extent feasible. The environmental justice chapter in our 2022 CEQA Guidelines recognizes the policy imperative to help address long-standing and emerging inequities in the siting, design, and development of potential sources of pollution. Apart from mitigating the impacts of pollution, this guidance will promote meaningful participation of community members in all phases of the environmental and land use decision-making process.</p>
Partners in action implementation	<p>Local CEQA practitioners and land use lead agencies, local decision-makers, Air District, and community members.</p> <p>This is a technical project that must be performed by professionals. However, community stakeholders should be engaged in decision-making and be kept abreast of developments.</p>
Key stakeholders to engage in action implementation	Planning Directors, Planning Commissioners, City Councils, EIR Consultants, and Air District staff
Potential obstacles	<p>Obtaining complete and current emissions for all sources (proposed project, existing and future land uses) for use in HRAs is not always straightforward. Additionally, the findings from HRAs are not always easily understood by planners, developers, the public, and, importantly, decision-makers and elected officials. This is particularly challenging when the impact of a proposed project needs to be considered in light of existing air pollution burdens.</p> <p>Air District has guidance for CEQA lead agencies on how to conduct HRAs. (https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa-guidelines-2022/appendix-e-recommended-methods-for-screening-and-modeling-local-risks-and-hazards_final-pdf.pdf?la=en). Additional support may be needed on how lead agencies can better summarize and visualize findings with the appropriate context and caveats to inform decision-making.</p> <p>A spreadsheet tool(s) may not be easily created or supported even though it can be of high value.</p>

Action #	H 6.3
Action initiation timeframe	Near=<2 years
Action intervention point	N/A
Action impact timeframe	Unknown
Measure/metric of action implementation	Use by PTCA jurisdictions' Planning Departments and by Air District for all governments in their jurisdiction. See above - "Strategy Metric(s)"
Can any emission/exposure reduction be estimated	-

Vehicles and Trucks, Streets and Freeways, Logistics and Warehouses ("Mobile")

Mobile Strategies

1. Truck-Attracting Businesses
2. Prioritize Air Quality Benefits of Traffic Calming and Other Safety Improvements on Local Streets and Freeways
3. Multi-Jurisdictional Truck Management Plan
4. Equitable Street Sweeping
5. Supporting Transition to Clean Fleets
6. Public Transit, Bike, and Pedestrian Infrastructure

Detailed Action Descriptions

Strategy 1 – Truck-Attracting Businesses – Actions

Action #	Mobile 1.1
Action name/brief description	<p>Model and Map Freight Activity: Model and map daily freight trip activity for commercial and industrialized businesses in the PTCA area.</p> <p>Businesses that attract and produce, via deliveries and shipments, many truck trips per day are known as "magnet sources" of air pollution. The strategy aims to model daily freight trip generation (FTG) for commercial and industrial businesses to inform land use and transportation planning to reduce emissions and exposure.</p> <p>The FTG estimates are computed from 2-digit NAICS codes and the number of employees per business. FTG model details are available online. Using FTG modeling, we can estimate daily trips per business and map trips by census tract, census block, land use zone, and industry sector. PTCA Plan FTG findings will help us develop data-driven transportation and land use management strategies that can reduce air pollution emissions and exposure from freight activity, especially for residents adjacent to industrial and commercial areas.</p>
Type of action	Further research

Action #	Mobile 1.1
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Air District Local Government Support Program, WOCAP, East Oakland CERP in development, CARB's Advanced Clean Fleets Regulation, Richmond Parkway Transportation Plan
Partners in action implementation	City of Richmond, Contra Costa County, Caltrans
Key stakeholders to engage in action implementation	PTCA community members
Potential obstacles	None predicted
Action initiation timeframe	Near=<2 years
Action intervention point	Exposure
Action impact timeframe	Near=<2 years
Measure/metric of action implementation	Estimate of the emissions/exposure from existing freight
Can any emission/exposure reduction be estimated	Yes, later

Action #	Mobile 1.2
Action name/brief description	<p>Model Policy/Ordinance for Low to Zero Emission Operations: Develop and disseminate a model policy/ordinance for reviewing and approving truck-attracting businesses, incorporating all current best practices to achieve low to zero emission operations.¹⁰ See the Land Use Strategy for more information on potential policy directions.</p> <p>Air District:</p> <ul style="list-style-type: none"> • Analyze existing best practices for limiting air quality impacts from truck-attracting businesses (e.g., Richmond Model Ordinance for Warehouses) • Refer developers to Air District incentives staff. • Work with the land-use agency and advocate for the land-use permit to include zero-emission trucks <p>Air District / Local Government:</p>

¹⁰ Low/zero emission operations are defined to include both on and off-road mobile sources that can and should be electrified to achieve low/zero emissions at a facility. This can include trucks, delivery vehicles, construction vehicles, forklifts, and TRUs.

Action #	Mobile 1.2
	<ul style="list-style-type: none"> • Complete a pilot project and collect information with lessons learned • Draft a model policy/ordinance incorporating all feasible best practices, in partnership with PTCA community local government • Finalize, publish, and disseminate model ordinance
Type of action	Regulatory; Further research
Lead action implementor	Air District (in coordination with CARB and local government)
Related existing Program, Policy, or Initiative	Richmond Model Ordinance for Warehouses, Contra Costa County General Plan Update, Fontana Ordinances, PTCA Plan Land Use Strategy, San Diego CERPs - Barrio Logan, Port of San Diego, Contra Costa County Electric Vehicle (EV) Readiness Blueprint https://ccta.net/projects/contra-costa-electric-vehicle-ev-readiness-blueprint/
Partners in action implementation	City of Richmond, City of San Pablo, Contra Costa County; North Richmond Municipal Advisory Council; CSC, community
Key stakeholders to engage in action implementation	Contra Costa County Department of Conservation and Development, North Richmond Municipal Advisory Council, CARB, CALGreen, US Green Building Council, California Business Properties Association, California Industry Association, California Building Standard Commission, Auto Manufacturers
Potential obstacles	Local jurisdictions may not support this approach because electrification requirements may be viewed as unfriendly to development; Air District resource constraints (e.g., staff time to develop model policy)
Action initiation timeframe	Near <2 years
Action intervention point	Emissions
Action impact timeframe	Near<2 years
Measure/metric of action implementation	Was a model policy/ordinance developed? (y/n) Was a model policy/ordinance adopted by a local jurisdiction? (y/n)
Can any emission/exposure reduction be estimated	-

Action #	Mobile 1.3
Action name/brief description	Truck-attracting Businesses: In coordination with CARB, local, and regional agencies, review policies and assess opportunities to require and/or encourage truck-attracting businesses to incorporate zero emission operations. This would include electrifying loading docks, trucks, TRUs, and incorporating EV capable/ready infrastructure for all vehicle classes visiting the facility. See the Plan Land Use Strategy for more information on potential policy directions.

Action #	Mobile 1.3
	<p>Local government:</p> <ul style="list-style-type: none"> • Review policies and assess opportunities to require businesses with delivery fleets and/or heavy-duty truck traffic to electrify loading docks and heavy-duty truck parking spaces. <ul style="list-style-type: none"> ◦ For example, by requiring EV electrical infrastructure at the permitting stage of new and/or upgrading of existing commercial buildings the transition to EV fleets will be accelerated. The action intervention point will be when building permits are issued that require EV electrification infrastructure. • Identify opportunities to complement upcoming state requirements for electrification by requiring the electrification of infrastructure and/or fleets in advance of CARB regulations. <p>Air District:</p> <ul style="list-style-type: none"> • Provide incentives and technical assistance for implementation
Type of action	Regulatory; Further research
Lead action implementor	Air District to coordinate with local jurisdictions.
Related existing Program, Policy, or Initiative	CARB's Advanced Clean Truck Regulation; Advanced Clean Fleets Regulation; CARB Funding for Municipal Green Zones, Air District Incentive Programs, Contra Costa County Warehouse Best Practices
Partners in action implementation	CARB, City of San Pablo, City of Richmond, Contra Costa County
Key stakeholders to engage in action implementation	Contra Costa County Department of Conservation and Development, North Richmond Municipal Advisory Council, Contra Costa County, City of Richmond, City of San Pablo, CARB, CALGreen, US Green Building Council, California Business Properties Association, California Industry Association, California Building Standard Commission, Auto Manufacturers
Potential obstacles	Local jurisdictions may elect to adopt current California Building Code regulations which may or may not require installation of sufficient ZEV electrification infrastructure; Air District will need to provide incentives and regulations to ensure there is adequate support for truck-attracting businesses to modernize their vehicles and facilities; Local politics may prevent adoption of policies and EV electrification requirements; development community may object to the costs of electrical upgrade building permits; developers may object to installing EV electrification infrastructure given that prospective tenants' needs are not yet determined, or existing tenants' needs may not require the level of improvements required by the jurisdiction; installation of EV electrification infrastructure may be a cost burden to developers and tenants, though local, state and federal programs may be available to provide grant funding for such activities; limitation of PG&E to quickly deploy resources to add load capacity where power will be needed
Action initiation timeframe	Near <2 years
Action intervention point	Emissions

Action #	Mobile 1.3
Action impact timeframe	Near <2 years
Measure/metric of action implementation	Was a policy review completed and opportunities identified for stricter emission requirements? (y/n)
Can any emission/exposure reduction be estimated	Yes, later. Emission reduction amounts will be based on several variables which limit predictability such as: future development of vacant land, redevelopment of existing properties, upgrades/expansion of existing businesses, commercial availability of Class 8 ZEVs, and jurisdictional adoption of ZEV electrification infrastructure requirements.

Action #	Mobile 1.4
Action name/brief description	Magnet Source Rule: Air District will study feasibility and approach for a Bay Area Indirect Source (Magnet Source) Rule Air District: <ul style="list-style-type: none"> Continue to track South Coast AQMD's Indirect Source Regulations and various local ordinances, looking for opportunities to develop Bay Area specific models and regulations Cross-reference: This action is referenced in M&R Action 1.4
Type of action	Regulatory; Further research
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	SCAQMD Indirect Source Regulations
Partners in action implementation	Community; CSC
Key stakeholders to engage in action implementation	Community; CSC; industry; SCAQMD; CARB, local jurisdictions
Potential obstacles	Lack of political support for a magnet source rule
Action initiation timeframe	Near <2 years
Action intervention point	Emissions
Action impact timeframe	Long >4 years
Measure/metric of action implementation	Has Air District investigated the feasibility and approach for a Bay Area Indirect Source Rule? (yes/no) Has a Bay Area Indirect Source Rule been passed? (yes/no)
Can any emission/exposure	-

Action #	Mobile 1.4
reduction be estimated	

Strategy 2 – Prioritize Air Quality Benefits of Traffic Calming and Other Safety Improvements on Local Streets and Freeways - Actions

Action #	Mobile 2.1
Action name/brief description	<p>Criteria for Traffic, Safety, and Air Quality Projects: Develop and propose criteria for safety improvements and air quality projects. Criteria would be used to identify traffic and/or safety-related projects with air quality co-benefits</p> <ul style="list-style-type: none"> • Air District develop criteria that could be used to evaluate air quality impacts associated with traffic, safety, and infrastructure projects, such as traffic emissions, air pollution, and location of sensitive receptors. • Work with partners to propose criteria to prioritize projects with air quality co-benefits.
Type of action	Further research; Education/Outreach
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Air District Local Government Support Program, Richmond Local Road Safety Plan (LRSP), County Vision Zero Plan, Richmond Parkway Transportation Plan
Partners in action implementation	Local jurisdictional staff, CMA/County Transportation Authority, Contra Costa County Health Department, State, MTC, public works departments
Key stakeholders to engage in action implementation	Stakeholders who live, work, and play in the identified communities.
Potential obstacles	Data availability, limitations, and maintenance.
Action initiation timeframe	Mid=2-4 years
Action intervention point	emissions
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	Have criteria linking safety improvements, inefficient transportation infrastructure, and air quality projects been developed? (Yes/No - provide details in narrative update)
Can any emission/exposure reduction be estimated	-

Action #	Mobile 2.2
Action name/brief description	Identify Areas at Intersection of Safety and Air Quality: Use data to identify areas with high air pollution exposure, unmaintained transportation infrastructure, and areas in need of increased road safety to prioritize traffic calming projects. This could include bike lanes and road diets.
Type of action	Further research
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Air District Local Government Support Program, Richmond Local Road Safety Plan (LRSP), County Vision Zero Plan, Richmond Parkway Transportation Plan
Partners in action implementation	Local jurisdictions, MTC, state, CMA/County Transportation Authority, Contra Costa County Health Department
Key stakeholders to engage in action implementation	Stakeholders who live, work, and play in the identified communities.
Potential obstacles	Data availability, limitations, and maintenance.
Action initiation timeframe	Mid=2-4 years
Action intervention point	emissions
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	Was a project proposed and implemented using data to identify areas with high air pollution exposure, inefficient transportation infrastructure, and in need of increased road safety, to prioritize traffic calming projects?
Can any emission/exposure reduction be estimated	-

Action #	Mobile 2.3
Action name/brief description	Funding: Seek public funding sources (e.g., state and federal grants) for road infrastructure improvements. Air District incentives staff will work with jurisdictions and CARB to create a list of incentive programs to assist with infrastructure programs that encourage EV readiness, traffic calming, pollutant reductions, and improved transportation infrastructure.
Type of action	Incentives
Lead action implementor	CCTA
Related existing Program, Policy or Initiative	Air District incentive programs, CARB incentive programs, federal, state, and regional transportation funding programs (i.e., Regional Measure 3, Safe Routes to Transit, Caltrans Sustainable Communities Grant)

Action #	Mobile 2.3
Partners in action implementation	Air District incentives staff, local jurisdictional staff, CMA/County Transportation Authority, Contra Costa County Health Department, state
Key stakeholders to engage in action implementation	Stakeholders who live, work, and play in the identified communities.
Potential obstacles	Data availability and ongoing data maintenance for updates
Action initiation timeframe	Mid=2-4 years
Action intervention point	emissions
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	List of funding sources and proposed dollar amount identified for traffic improvements
Can any emission/exposure reduction be estimated	-

Action	Mobile 2.4
Action name/brief description	Best Management Plans for Construction Projects: Encourage transportation construction projects employ best management practices that reduce emissions, such as use of low to zero emission equipment and dust control measures.
Type of action	Education/Outreach; Enforcement
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Air District Local Government Support Program, Air District incentives, CARB incentives Air District Regulation 6 Rule 6 Prohibition of Trackout: Air District Fugitive Dust Efforts, including Fugitive Dust White Paper (Cross-reference C&I Strategy 2)
Partners in action implementation	Local jurisdictional staff, CMA/County Transportation Authority, Contra Costa County Health Department, State
Key stakeholders to engage in action implementation	Stakeholders who live, work, and play in the identified communities.
Potential obstacles	Data availability, limitations, and maintenance.
Action initiation timeframe	Mid=2-4 years
Action intervention point	emissions

Action	Mobile 2.4
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	Have Air District Planning staff kept best management practices (BMPs) for construction current and disseminated to the public on a regular basis? (yes/no)
Can any emission/exposure reduction be estimated	Too speculative

Strategy 3 – Multi-Jurisdictional Truck Management Plan – Actions

Action # 1	Mobile 3.1
Action name/brief description	<p>Initial Truck Management Plan (TMP) Assessment: Prepare an initial feasibility assessment and needs analysis for the TMP. This will include input from communities impacted by truck parking, truck movement and safety, truck signs and communication, current truck routes, and truck route enforcement.</p> <p>Air District:</p> <ul style="list-style-type: none"> • Research and determine scopes of studies like the West Oakland Truck Management Plan • Complete an assessment to determine feasibility of developing a TMP for the PTCA area • Develop a needs analysis to identify what problems the TMP should address <ul style="list-style-type: none"> ○ engage community and prioritize public input to identify priorities • Determine next steps for potentially developing a TMP based on results of feasibility and needs assessment <ul style="list-style-type: none"> ○ See Mobile 3.2
Type of action	Further research; Education/Outreach
Lead action implementor	WCCTAC, Air District, Contra Costa County
Related existing Program, Policy, or Initiative	West Oakland Truck Management Plan; Northern Alameda County Truck Access Management Plan; Seattle Freight Master Plan; 2021 LA County Goods Movement Strategic Plan ; Portland 2040 Freight Plan
Partners in action implementation	Local jurisdictions, neighborhood councils near truck-attracting businesses, business community, goods services, truck operators, delivery services, and any other industry impacted by truck routes, MTC, transportation advocates, WCCTAC, Caltrans, City of Richmond, City of San Pablo
Key stakeholders to engage in action implementation	Local jurisdictions, neighborhood councils near truck-attracting businesses, business community, goods services, truck operators, delivery services, and any other industry impacted by truck routes

Action # 1	Mobile 3.1
Potential obstacles	Truck management plans are complex processes and will require significant resources from the local jurisdictions. Without political will, it will be difficult to start the process.
Action initiation timeframe	Near=<2 years
Action intervention point	Emissions
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	Was an initial feasibility assessment commissioned for a TMP? <ul style="list-style-type: none"> • Yes - list findings. • No - discuss next steps
Can any emission/exposure reduction be estimated	-

Action # 2	Mobile 3.2
Action name/brief description	Create a Truck Management Plan: After completion of the initial assessment, create a robust, community-informed TMP, alongside WCCTAC, that considers: establishing new truck-prohibited streets and new truck routes across jurisdictions; assesses an off-hours deliveries program to reduce overall truck congestion; designates urban freight parking and time zones, and establishes clean last-mile delivery options; enhances citywide truck signage for wayfinding; and educates business owners and residents about the air quality and health benefits of routing and parking laws.
Type of action	Incentives; Further research; Education/Outreach; Regulatory; Enforcement
Lead action implementor	WCCTAC, Air District
Related existing Program, Policy, or Initiative	West Oakland Truck Management Plan ; Northern Alameda County Truck Access Management Plan; Seattle Freight Master Plan ; Oakland Zero Emissions Vehicle Action Plan ; 2021 LA County Goods Movement Strategic Plan ; Portland 2040 Freight Plan
Partners in action implementation	Local jurisdictions, neighborhood councils near truck-attracting businesses, business community, goods services, truck operators, delivery services, and any other industry impacted by truck routes, Caltrans
Key stakeholders to engage in action implementation	Local jurisdictions, neighborhood councils near truck-attracting businesses, business community, goods services, truck operators, delivery services, and any other industry impacted by truck routes
Potential obstacles	Truck management plans are complex processes and will require significant resources from the local jurisdictions. If there is no strong desire and political will, it may be tough to start a process. The hopeful convener of this project,

Action # 2	Mobile 3.2
	WCCTAC, too, has a lot on their agenda, but there may be interest in taking this on in future years. Further, starting the process will be easier than completing and implementing. Buy-in and shared responsibility from several parties will be needed for the long-haul.
Action initiation timeframe	Long > 4 years
Action intervention point	Emissions
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	Has a process for a TMP been created with WCCTAC? (yes/no) <ul style="list-style-type: none"> • Yes - discuss progress, next steps, and outcomes • No - discuss next steps
Can any emission/exposure reduction be estimated	Yes, later

Strategy 4 – Equitable Street Sweeping – Actions

Action #	Mobile 4.1
Action name/brief description	Street Sweeping Study. Work with local jurisdictions and Air District staff on a study to identify which PTCA areas would benefit most from street sweeping initiatives, while ensuring equitable outcomes for communities that have historically suffered from divestment. Air District/ Local Government: <ul style="list-style-type: none"> • Based on the Plan technical assessment findings for road dust, community experience, and proximity to road dust sources, study and propose neighborhoods that will benefit from enhanced street sweeping. Estimate the expected reduction in road dust from enhanced street sweeping. • As identified by the City of Oakland Progressive Parking Initiative, low income communities of color have suffered from disproportionate parking policing. Air District and local governments need to recognize this history and take into consideration the potential negative impacts from enhanced street sweeping programs. Consider ways that parking ticket fees, if part of the program, could be reinvested in the affected neighborhoods. • Create a prioritized list of neighborhoods that would benefit from enhanced street sweeping.
Type of action	Further research; Education/Outreach
Lead action implementor	Air District, Contra Costa County
Related existing Program, Policy, or Initiative	City of Oakland Progressive Parking Initiative WOCAP Strategy #59

Action #	Mobile 4.1
	West Oakland Environmental Indicators Project (WOEIP) Supplemental Environmental Program (SEP) Grant funded study on Street Sweeping Effectiveness and Road Dust (study at conceptual stage in 2023)
Partners in action implementation	City of Richmond, City of San Pablo, Contra Costa County Transportation Authority, WCCTAC
Key stakeholders to engage in action implementation	Low-income, communities of color; transit-dependent communities of color; vehicle owners; parking and enforcing jurisdictions; staff; city council members of local jurisdictions
Potential obstacles	<p>Local jurisdictions responsible for street sweeping juggle competing interests and budget constraints. Before making recommendations to local jurisdictions on how to revamp street sweeping programs to better protect communities from excess road dust, Air District should collaborate with partners and stakeholders to create a white paper that addresses the following topics:</p> <ul style="list-style-type: none"> • A summary of available monitoring data on the impact of road dust in the Plan communities and potential changes in exposure due to increased street sweeping • The benefits and costs of increased street sweeping in Plan communities, including fiscal considerations and impacts of changes in parking fine collections, if any • Which neighborhoods within the Plan are most likely to benefit from increased street sweeping • How to encourage residents to frequently move their cars so that street sweeping can occur • Discussion of negative unintended consequences, and ways to mitigate adverse impacts on vulnerable communities • Uncertainties about the impact or emissions of road dust may remain after existing information and data is evaluated, which might make specific outcomes from various policy choices less clear
Action initiation timeframe	Near, <2 years
Action intervention point	Emissions, ambient concentration, exposure, dosage
Action impact timeframe	Mid=2-4 years
Measure/metric of action implementation	<p>Have local jurisdictions and Air District completed a study or white paper on equitable street sweeping?</p> <ul style="list-style-type: none"> • Yes - discuss progress, next steps, and outcomes • No - discuss next steps
Can any emission/exposure reduction be estimated	-

Action #	Mobile 4.2
Action name/brief description	<p>Implement Enhanced Street Sweeping. With support from the CSC and Air District, local governments implement enhanced street sweeping programs in the Plan neighborhoods that will benefit most.</p> <p>Air District and Local Government:</p> <ul style="list-style-type: none"> • Based on the outcomes of Mobile 4.1, identify and dedicate funds to neighborhood equitable street sweeping. • Develop an outreach campaign for neighborhoods selected for equitable street sweeping. • Air District and CSC to work with the governing body to adopt a model ordinance like the WOCAP Street Sweeping initiative, dedicate funds, and take other actions as needed to implement equitable street sweeping.
Type of action	Incentives; Enforcement; Further research; Education/Outreach
Lead action implementor	City of Richmond, City of San Pablo, Contra Costa County
Related existing Program, Policy, or Initiative	City of Oakland Progressive Parking Initiative WOCAP Street Sweeping Strategy, along with accompanying technical assessment
Partners in action implementation	City of Richmond, City of San Pablo, Contra Costa County Transportation Authority, Air District
Key stakeholders to engage in action implementation	Low-income, communities of color; Transit-dependent communities of color; Vehicle owners; Parking and enforcing jurisdictions and staff; Neighborhood councils; City council members of local jurisdictions; WCCTAC
Potential obstacles	To implement equitable street sweeping, local jurisdictions will need to identify and dedicate funds, conduct outreach to affected neighborhoods, update parking restriction signage, and be prepared for increased parking ticketing, public complaints, and other potential negative outcomes. Due to the history of over-policing in disadvantaged communities, government agencies must be especially sensitive to community concerns regarding additional parking enforcement that may be needed to implement more frequent street sweeping. A program to reinvest parking violation fees into the affected communities may help to gather community support. A robust marketing campaign that emphasizes the health benefits to community members may also help alleviate obstacles. Further, cars that are over-parked could prevent street sweeping, which would in turn prevent the removal of road dust in the community.
Action initiation timeframe	Long > 4 years
Action intervention point	Exposure, dosage, health effects
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	Have equitable street sweeping programs been implemented? (yes/no)

Action #	Mobile 4.2
Can any emission/exposure reduction be estimated	Yes, later

Action #	Mobile 4.3
Action name/brief description	<p>Street Sweeping Program Feedback. After implementing equitable street sweeping, convene a working group to evaluate successes, challenges, and opportunities.</p> <p>Air District and local governments to:</p> <ul style="list-style-type: none"> • Document results of equitable street sweeping, including community feedback, air quality improvements, or any negative outcomes. • Identify if any neighborhoods selected for equitable street sweeping are not benefiting, no longer need the additional service, or have rejected the additional service • Re-distribute resources as needed to address any changes in neighborhood prioritization for enhanced street sweeping program • Develop and implement an outreach campaign to neighborhoods selected for equitable street sweeping • Implement equitable street sweeping in any newly prioritized neighborhoods.
Type of action	Further research; Education/Outreach; Enforcement
Lead action implementor	Air District, City of Richmond, City of San Pablo, Contra Costa County Transportation Authority
Related existing Program, Policy, or Initiative	City of Oakland Progressive Parking Initiative
Partners in action implementation	City of Richmond, City of San Pablo, Contra Costa County Transportation Authority
Key stakeholders to engage in action implementation	Low-income, communities of color; Transit-dependent communities of color; Vehicle owners; Parking and enforcing jurisdictions and staff; City council members of local jurisdictions; WCCTAC
Potential obstacles	See Mobile 4.2 potential obstacles
Action initiation timeframe	Long > 4 years
Action intervention point	Ambient concentration, exposure, dosage
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	If identified, has equitable street sweeping been implemented in any newly prioritized neighborhoods(yes/no)?
Can any emission/exposure	-

Action #	Mobile 4.3
reduction be estimated	

Strategy 5 – Supporting Transition to Clean Fleets – Actions

Action #	Mobile 5.1
Action name/brief description	Clean Fleet Enforcement. Investigate how municipal governments can coordinate with CARB on clean fleet enforcement.
Type of action	Further research; Enforcement
Lead action implementor	CARB
Related existing Program, Policy, or Initiative	CARB regulations and enforcement
Partners in action implementation	Air District, local governments, heavy-duty truck owners and operators
Key stakeholders to engage in action implementation	Stakeholders who live, work, and play in the identified communities.
Potential obstacles	Limited resources for enforcement
Action initiation timeframe	Short <2 years
Action intervention point	Emissions
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	CARB enforcement reporting
Can any emission/exposure reduction be estimated	-

Action #	Mobile 5.2
Action name/brief description	<p>Heavy-Duty Vehicle Support. Support heavy-duty vehicle transition to cleaner fleets through incentives, education, and outreach. Includes school buses.</p> <p>The Air District offers financial incentives to replace medium and heavy-duty on-road trucks, school buses, TRUs, and other off-road mobile equipment to the cleanest available technology, and to support alternative fueling infrastructure, including green hydrogen, and battery-charging.</p>

Action #	Mobile 5.2
Type of action	Incentives; Education/Outreach
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Air District and CARB incentive programs; California Energy Commission (CEC) and California Transportation Commission (CTC) incentive programs; Federal funding via Environmental Protection Agency (EPA); Dept. of Transportation (DOT); Inflation Reduction Act Programs
Partners in action implementation	School districts, heavy-duty vehicle owners and operators, business and landowners and operators
Key stakeholders to engage in action implementation	Stakeholders who live, work, and play in the identified communities.
Potential obstacles	limited incentive resources, potential grantees' ability to provide matching funds for incentives
Action initiation timeframe	2 – 5 years
Action intervention point	Emissions
Action impact timeframe	2-10 years
Measure/metric of action implementation	Incentive funds awarded and emission reduction estimates
Can any emission/exposure reduction be estimated	Yes, later based on projects funded

Action #	Mobile 5.3
Action name/brief description	<p>Light-Duty Vehicle Support. Support light-duty vehicle transition to cleaner fleets through incentives, education, and outreach</p> <p>As time and resources are available, support plans that allow transition of public and private light-duty fleets to ZEVs.</p> <p>Pending CARB approval in 2024, an incentive program managed by the Air District will pay Bay Area residents \$1,200 to turn in their operable, registered 1998 or older vehicle for scrapping. Consider evaluating options to modify the program to attract more participants.</p> <p>In addition, the Clean Cars for All Program through Air District replaces 2005 and older vehicles.</p>
Type of action	Incentives; Education/Outreach

Action #	Mobile 5.3
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	Air District and CARB incentive programs
Partners in action implementation	Light-duty vehicle owners and operators
Key stakeholders to engage in action implementation	Stakeholders who live, work, and play in the identified communities.
Potential obstacles	Limited incentive resources, potential grantees' ability access incentives that require them to contribute to the purchase price of new ZEVs
Action initiation timeframe	Near=<2 years
Action intervention point	Emissions
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	Incentive funds awarded and emission reduction estimates
Can any emission/exposure reduction be estimated	Yes

Strategy 6 – Public Transit, Bike, and Pedestrian Infrastructure – Actions

Action #	Mobile 6.1
Action name/brief description	<p>Zero Emission Bus Fleets by 2040. Complete transition to all-electric hybrid and/or hydrogen bus fleet on all routes within the PTCA area by 2040.</p> <p>Requirement for clean buses in the Plan. All transit agencies (WestCAT, AC Transit, Golden Gate Transit, Vine, SolTrans) deploy the cleanest available bus technology (hydrogen, electric, hybrid) on routes that travel through the Study Area where not already available. ZEV School Buses are a priority too. Air District could modify programs in support of this action.</p>
Type of action	Incentives
Lead action implementor	AC Transit, WestCAT, Vine, Sol Trans, Golden Gate Transit
Related existing Program, Policy, or Initiative	There are local examples of electrifying and greening buses across the state. This also aligns with goals to deploy cleaner school buses and phase out diesel. A requirement to run clean buses on specific routes is likely a new intervention.

Action #	Mobile 6.1
	<p>AC Transit Commits to All-Zero Emission Bus Fleet by 2040 https://www.actransit.org/zeb</p> <p>ZEB Rollout Plan AC Transit (updated) https://www.actransit.org/sites/default/files/2022-06/0162-22%20ZEB%20Transition%20Plan_052022_FNL.pdf</p> <p>SFMTA Commits to All-Electric Bus Fleet by 2035 https://www.sfmta.com/projects/battery-electric-bus-program</p> <p>Dept of Energy Electric School Bus Program https://www.energy.ca.gov/programs-and-topics/programs/school-bus-replacement-program</p> <p>Caltrans Sustainable Communities Grant https://dot.ca.gov/programs/transportation-planning/division-of-transportation-planning/regional-and-community-planning/sustainable-transportation-planning-grants</p> <p>TFCA County Program Manager Funds https://www.baaqmd.gov/?sc_itemid=67E238F0-8D56-4194-AB38-9DC6DC7B73DD</p> <p>CARB Clean Mobility Funding Program Grants CARB Clean Mobility Funding Opportunities - Institute for Local Government (ca-ilq.org)</p> <p>Innovative Clean Transit (ICT) Regulation https://ww2.arb.ca.gov/our-work/programs/innovative-clean-transit</p> <p>AC Transit Receives \$25.5 million Low-No Grant from Federal Transportation Administration (FTA) AC TRANSIT RECEIVES COVETED 2023 BUS AND LOW-AND NO-EMISSION GRANT AWARD Alameda-Contra Costa Transit District</p> <p>Zero-Emission Bus Implementation Guidebook for California Transit Agencies https://doi.org/10.7922/G2TD9VPM</p>
Partners in action implementation	Air District, Contra Costa Transportation Authority, Alameda County Transportation Commission,
Key stakeholders to engage in action implementation	Stakeholders to be engaged in the implementation of the action should include those that are most burdened, most likely to benefit, and who may be subject to unintended consequences People who are transit dependent, people who live on or close to existing routes that are serviced with older, polluting buses.
Potential obstacles	Transit agency funding - As identified in another action, several agencies are facing extreme financial burdens due to slow ridership recovery and depleting pandemic relief funding. A combination of short-term state

Action #	Mobile 6.1
	investment and a long term, more sustainable, funding mechanism will be essential to implementing this action. Lack of enforcement/oversight - Unclear if Air District, CARB, or another jurisdiction will have adequate resources and even the authority to regulate agencies that do not implement and continue to deploy buses that run less clean technology. Thankfully, more transit agencies now have equity goals that are aligning with cleaner bus fleets.
Action initiation timeframe	Mid=2-4 years
Action intervention point	Emissions
Action impact timeframe	Long > 5 years
Measure/metric of action implementation	# of new clean buses deployed in PTCA area
Can any emission/exposure reduction be estimated	-

Action #	Mobile 6.2
Action name/brief description	Bike and Scooter Share Stations. Advocate for affordable bike and scooter-share stations in the most impacted communities within the PTCA area. Comprehensive and Equitable Micro-mobility - Advocate for bike and scooter share systems that serve the most impacted areas of the PTCA area and enhance access to essential services and opportunities.
Type of action	Education/Outreach
Lead action implementor	City of Richmond
Related existing Program, Policy, or Initiative	Mobility Hubs at Affordable Housing Sites Pilot (MTC) Clean Mobility Options Voucher Program (CARB/CEC) Transformative Climate Communities (SGC)
Partners in action implementation	The bike and scooter share operators
Key stakeholders to engage in action implementation	Rich City Rides, Moving Forward, TransForm, Bike East Bay, CalBike, Richmond Community Foundation, Marin Community Energy, Bike shops and manufacturers, schools
Potential obstacles	The big challenge seems to involve a lack of capacity from the city of Richmond to operate a municipal bike share service. After Gotcha/BOLT bikes stopped providing services, there has been a discussion of bringing

Action #	Mobile 6.2
	<p>this work under the guidance of the City, but it is unclear where this conversation stands. Once the City identifies a path forward for this, they should engage other stakeholders to co-create a system that centers equitable outcomes and reaches people who suffer the worst exposure from vehicle emissions.</p> <p>The other challenge involves scooters. While the whole Plan would benefit greatly from a dockless, shared scooter system, the jurisdictions do not seem to prioritize working with scooter companies to bring real first/last mile solutions to their constituents. In San Pablo, for instance, transit lines are pretty diffuse, leaving scooters even more sparse and vulnerable along commercial corridors than other vehicle types.</p>
Action initiation timeframe	Near<2 years
Action intervention point	Emissions
Action impact timeframe	Mid=2-4 years
Measure/metric of action implementation	List of most impacted areas in Plan communities, and # of new bike and scooter-share stations added, if applicable
Can any emission/exposure reduction be estimated	-

Action #	Mobile 6.3
Action name/brief description	Expanding Micro-Transit. Expand micro-transit ¹¹ and advocate for a permanent program building on the existing Richmond Moves initiative .
Type of action	Incentives; Other: Advocacy
Lead action implementor	City of Richmond
Related existing Program, Policy, or Initiative	Los Angeles Metro Micro
Partners in action implementation	Richmond Moves (VIA) , California Climate Investments (CARB/California Energy Commission)
Key stakeholders to engage in action implementation	East Bay Transit Riders Union, Groups representing seniors, people living with disabilities
Potential obstacles	Further research is needed, but funding from the state and other sources may pose difficulties to expanding operations. Low ridership that may

¹¹ Microtransit is a form of on-demand transportation that utilizes minibus vehicles on highly flexible schedules and routes

Action #	Mobile 6.3
	undermine the viability of the service, need to be overcome with better community outreach and showcasing the benefits of shared first/last mile solutions to a broader set of residents.
Action initiation timeframe	Near=<2 years
Action intervention point	Emissions
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	Has a permanent micro-transit program been expanded in the PTCA area? <ul style="list-style-type: none"> • Yes - name of program and description • No - next steps for advocacy
Can any emission/exposure reduction be estimated	-

Action #	Mobile 6.4
Action name/brief description	Funding Transit Operations. Advocate for additional state funding for public transit operations
Type of action	Incentives; Further research
Lead action implementor	Governor's Office
Related existing Program, Policy, or Initiative	
Partners in action implementation	Survive and Thrive Coalition , Bay Area Legislative Caucus, Budget Committee Chairs
Key stakeholders to engage in action implementation	MTC, All local transit agencies, California Transit Association
Potential obstacles	Additional funding may not be available in a timely manner for new and/or improved public transit operations. Further, low ridership trends may further exacerbate the gap for transit funding
Action initiation timeframe	Near=<2 years
Action intervention point	Emissions
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	List of funding sources and approximate dollar amount available for public transit operations

Action #	Mobile 6.4
Can any emission/exposure reduction be estimated	-

Compliance and Enforcement (C&E)

C&E Strategy - Detailed Action Descriptions

Strategy 1 Actions

Action #	C&E 1.1
Action name/brief description	<p>Develop an outreach campaign to promote the Air District Air Quality Complaint Program and pilot an enforcement tip hotline for industry workers.</p> <p>Air District will develop an education and outreach campaign to inform the PTCA community about the Air District Complaints System. The campaign will target the PTCA area, and focus on:</p> <ul style="list-style-type: none"> • How it works: Air District protocols for responding to complaints, how quickly a response will be initiated, how the Air District responds, and what happens after hours • How to use: submitting complaints, types of complaints the Air District wants to hear about (e.g., odors, fugitive dust). • Why to use: the value of submitting complaints and the importance of reporting to identify air quality concerns of the community. Emphasize that <ul style="list-style-type: none"> ○ It is important to report complaints, as it can help protect the health of families and the community ○ Complaints are taken seriously by the Air District and are always followed up on ○ Complaints create an opportunity to exchange information between the public and the Air District • Air District will get feedback on the campaign from <ul style="list-style-type: none"> ○ CSC Community Engagement Subcommittee ○ Appropriate Air District staff: Community Engagement Office, Webteam, Communications Office, and Compliance and Enforcement Division • Mechanisms for increasing awareness may include <ul style="list-style-type: none"> ○ distribution of existing educational materials ○ flyers ○ social media messages ○ elements developed via the Website strategy ○ billboards <p>Additionally, Air District and CSC will evaluate community-identified improvements to the current Complaint System, including but not limited to:</p> <ul style="list-style-type: none"> • Issues identified via the implementation of the education and outreach campaign • Increased language accessibility for the website and phone systems

Action #	C&E 1.1
	<ul style="list-style-type: none"> o Evaluate (with Air District webteam and dispatch) a process for receiving written complaints in different languages and getting them translated from and to other languages. <p>Finally, the Compliance and Enforcement Division will explore creating an enforcement tip hotline for workers at regulated businesses and industries to anonymously report unlawful or concerning activities.</p> <ul style="list-style-type: none"> • Air District work with CSC to develop a pilot <ul style="list-style-type: none"> o Determine specific needs for collecting tips from workers o Create a plan to effectively promote the tip hotline to workers in industries with high levels of non-compliance or health and safety risk. o Assess success and utility of pilot program and determine whether it should be made permanent
Type of action	Education/Outreach
Lead action implementor	Air District's Community Engagement, Communications, Web Team and Compliance and Enforcement Divisions will lead development of outreach materials and evaluation of community members feedback on the complaint system.
	The CSC will be responsible for outreach to the community.
Related existing Program, Policy, or Initiative	Air District Complaints Program; existing Air District educational materials (e.g., YouTube instructional videos on the complaints system ^{12,13})
Partners in action implementation	The CSC may want to consult with other local organizations and Bay Area EJ advocates to get feedback on the complaint system process.
Key stakeholders to engage in action implementation	-
Potential obstacles	<p>With respect to education and outreach, it is important for C&E staff to be well trained so there is effective communication. This can help avoid potential frustration during the complaint response process. Making sure complainants fill out complete and detailed reports, and that there are clear expectations on what the follow up will look like are critical.</p> <p>As mentioned in the feasibility criteria, the proliferation of new complaints could put a strain on C&E field staff, which are already spread thin. There may be limits to what changes can be made to the complaint system because of budget and other resource constraints, as well as technical limitations of how the system works.</p>
Action initiation timeframe	Near=<2 years
Action intervention point	-

¹² <https://www.youtube.com/watch?v=QCzvEAZSOBY&list=PLk3WcTNIWgg2XNDUSYKZ-LEODWYRo5cEI>

¹³ https://www.youtube.com/watch?v=Q0GsCUK_29o&list=PLk3WcTNIWgg2XNDUSYKZ-LEODWYRo5cEI&index=2

Action #	C&E 1.1
Action impact timeframe	Near=<2 years
Measure/metric of action implementation	Number of flyers distributed, (or billboards, social media posts, etc.). Number of complaint system enhancements implemented.
Can any emission/exposure reduction be estimated	-

Action #	C&E 1.2
Action name/brief description	<p>The Air District will conduct targeted investigations of facilities of community concern</p> <p>The Air District will work with the CSC to establish a process to identify and list facilities of community concern. The list will be informed by:</p> <ul style="list-style-type: none"> • facility inspections • complaint systems • reports of unpermitted facilities • Community Air Pollution and Asset Mapping Project • Community Air Monitoring Project results • the facilities included in C&I Strategy 4: Large Industrial Facilities • information collected from the public by the CSC <p>The timeline will be discussed in the implementation process, as part of prioritization. Fuel refining facilities added to this list may have more specific actions to account for as well (Cross-reference: Fuel Refining Action 3.2)</p> <p>Resolve the issues at facilities on the community concern list by:</p> <ul style="list-style-type: none"> • Conducting targeted investigations • Developing additional targeted strategies <p>Air District and CSC will evaluate and update the “facilities of community concern list” annually</p>
Type of action	Enforcement
Lead action implementor	Air District (including Air District Compliance and Enforcement Division)
Related existing Program, Policy, or Initiative	N/A
Partners in action implementation	CSC
Key stakeholders to engage in action implementation	N/A
Potential obstacles	As mentioned in the Resource PTCA Plan Implementation strategy, this could put a strain on C&E field staff. This is in part because each facility and issue are different and the solutions to bringing facilities into compliance would need some tailoring, to develop the most direct pathway to resolving the root causes of the problems at these facilities

Action #	C&E 1.2
Action initiation timeframe	Near=<2 years
Action intervention point	-
Action impact timeframe	Mid=2-4 years
Measure/metric of action implementation	Number of inspection hours dedicated to "facilities of community concern list."
Can any emission/exposure reduction be estimated	-

Action #	C&E 1.3
Action name/brief description	<p>Update CSC regularly, with respect to compliance status of facilities identified as a result of community concerns or those with issues that impact health, safety, and quality of life.</p> <p>The Air District will provide a community-friendly update on Compliance and Enforcement activities in the PTCA area as part of required annual Plan reporting. This will include:</p> <ul style="list-style-type: none"> • A written report with <ul style="list-style-type: none"> ○ Data on Notices of Violation ○ YTD Complaints ○ Information on repeat patterns of non-compliance ○ Fuel refining sector data (as outlined in FR 3.4) ○ Data specific to facilities from the community concerns list (see C&E Action 1.2 and C&I Strategy 4: Large Industrial Facilities) • An in-person presentation to the CSC with <ul style="list-style-type: none"> ○ Progress updates on the "facilities of community concern list", including for facilities identified in C&I Strategy 4 Large Industrial Sources ○ Opportunities for the CSC to evaluate and update the list ○ Discussion of updating Plan strategy actions as needed <p>The Air District will promote the searchable tool on its website that provides data on Notices of Violation (e.g., an NOV query tool) and present it to the CSC Communication Subcommittee for feedback. This tool can be used to:</p> <ul style="list-style-type: none"> • Analyze current compliance and enforcement data from permitted facilities • Cross-reference: FR 3.4
Type of action	Enforcement
Lead action implementor	Air District's Compliance and Enforcement Division and Community Engagement Office
Related existing Program, Policy, or Initiative	NOV Web Tool: https://www.baaqmd.gov/rules-and-compliance/compliance-assistance/notices-of-violations/novs-issued

Action #	C&E 1.3
Partners in action implementation	CSC
Key stakeholders to engage in action implementation	-
Potential obstacles	Resources will have an impact on timeline
Action initiation timeframe	Near=<2 years
Action intervention point	-
Action impact timeframe	Mid=2-4 years
Measure/metric of action implementation	Was a written report produced (y/n) Was an in-person presentation given (y/n)
Can any emission/exposure reduction be estimated	-

Land Use (LU)

Land Use Strategy – Detailed Action Descriptions

Strategy 1 Actions

Action #	LU 1.1
Action name/brief description	<p>Support Envision CCC 2040 and Other General Plan and Zoning Updates when they align with the PTCA CERP and Promote Best Practices</p> <p>This action asks that the CSC and Air District track the writing and implementation of plans from local governments - the City of Richmond, the City of San Pablo, and Contra Costa County - that affect the PTCA community. Ensure that plans in these jurisdictions reflect and further the goals and values of the PTCA Plan whenever possible.</p> <p>Air District and/or CSC: Support the Envision Contra Costa County (Envision CCC) 2040 Plan, including any specific elements, goals, policies, and actions, as they align with the PTCA Plan. In addition, support additional efforts for General Plan Designation changes and zoning efforts, as they align with the PTCA Plan. Specifically, support the implementation of:</p> <ul style="list-style-type: none"> ● The conversion of the majority of land designated as Heavy-Industrial to Light-Industrial in North Richmond; ● The North Richmond Planned Unit District (P-1) zoning amendment (to update the original P-1 approved decades ago); ● The Goals, Policies, and Actions in the Health and Safety Element in Envision CCC 2040, including, but not limited to: <ul style="list-style-type: none"> ○ Goal HS-1: Air quality that supports community and environmental health,

Action #	LU 1.1
	<ul style="list-style-type: none"> ○ Goal HS-2: Healthy air quality for all communities so no community bears the disproportionate burden of environmental hazards and health risks, and ○ Goal HS-3: Communities that reduce existing and anticipated greenhouse gas (GHG) emissions ○ Policy HS-P1.7: Require new or expanded commercial and industrial projects exceeding 75,000 square feet of gross floor area, such as big-box stores, warehouses, distribution centers, and similar uses, to be near-zero-emissions operations, including the facilities themselves and the associated fleets. Require all necessary measures, as listed in this Element, to achieve near-zero emissions. ● The Goals, Policies, and Actions in the Stronger Communities Element in Envision CCC 2040, including, but not limited to: <ul style="list-style-type: none"> ○ Goal SC-1: Equitable distribution of social and economic resources among all communities in the County so that Impacted Communities are not disproportionately burdened by environmental pollution or other hazards, ○ Goal SC-2: Safe, welcoming neighborhoods that support physical activity and a healthy environment for all residents, ○ Goal SC-3: Convenient access to comprehensive, co-located health services so all residents can find the physical and behavioral health care services they need, ○ Goal SC-4: Support and expand small-scale food production and urban agriculture in the County’s urban areas, including growing, processing, and distributing fresh food, ○ Goal SC-5: Convenient access to fresh, healthy, and affordable food in Impacted Communities. <p>Large warehouses and logistics centers generate numerous truck trips (and therefore emissions), impacting neighboring residents. These businesses are considered an "indirect" or "magnet" source of air pollution because the truck going to and from the business produces the pollution, not the business itself. Air District has limited authority to regulate these indirect sources. In some cases, moratoriums may be necessary in order to pause development and investigate strategies to reduce the impact on local communities. Strategies include designing or redesigning truck routes, restricting the size of warehouses, or rezoning some neighborhoods. In North Richmond, there are many large warehouses near residential areas with primarily BIPOC and low-income residents. Air District and CSC should support the continued implementation of best practices from Contra Costa County, both within the County, and also promote the adoption of best practices in the Cities of Richmond and San Pablo. Specifically:</p> <ul style="list-style-type: none"> ● Where appropriate, consider moratoriums on large warehouses in areas where people live, work, and play. Consider transition timelines for zero-emission technology when implementing a moratorium; ● Support and track Contra Costa County’s temporary moratorium on warehouses in North Richmond, Ordinance No. 2021-43. <p>Contra Costa County, City of Richmond, City of San Pablo:</p>

Action #	LU 1.1
	<p>These jurisdictions should ensure that any updated or new plans, especially those with State required updates such as general plans, should align with the goals and strategies in the PTCA Plan and create land use patterns that promote transit-oriented and health-promoting development, and that locate communities land uses away from emission and sources of pollution exposure away from existing community land uses.</p> <p>Best practices could include adopting the transit-oriented communities policy that MTC passed in 2022. This maximizes opportunities for funding through One Bay Area Grant 3 (OBAG).¹⁴</p> <p>Plans could include but are not limited to:</p> <ul style="list-style-type: none"> ● Contra Costa County: Specific Plans: https://www.contracosta.ca.gov/4747/Specific-Plans ● City of San Pablo: General Plan 2030: https://www.sanpabloca.gov/867/General-Plan-2030 ● City of San Pablo: Climate Action Plan 2012: https://www.sanpabloca.gov/DocumentCenter/View/2438/San-Pablo---Climate-Action-Plan_final?bidId= ● City of San Pablo: Bicycle and Pedestrian Master Plan: https://www.sanpabloca.gov/1491/Bicycle-and-Pedestrian-Master-Plan ● City of Richmond: General Plan: https://www.ci.richmond.ca.us/2608/General-Plan-2030 ● San Pablo's Housing Element: https://www.sanpabloca.gov/DocumentCenter/View/4936/Complete-San-Pablo-Adopted-HE_4_6_15?bidId= ● Richmond's Housing Element: https://www.ci.richmond.ca.us/DocumentCenter/View/65522/Revised-Adopted-HEU_May2023?bidId= ● Contra Costa County Housing Element: https://www.contracosta.ca.gov/DocumentCenter/View/30916/Ch-6-Housing-Element?bidId= <p>This action relates to Mobile Action #1.2 and #1.4 to develop and disseminate a model policy/ordinance for reviewing and approving truck-attracting businesses, incorporating all current best practices to achieve low to zero-emission operations.</p>
Type of action	Regulatory; Other: Advocacy
Lead action implementor	CSC, Air District, Contra Costa County, City of Richmond, City of San Pablo
Related existing Program, Policy, or Initiative	<p>Envision Contra Costa County 2040: https://envisioncontracosta2040.org/</p> <p>San Pablo General Plan Section 7.6 Air Quality and Climate Change https://www.sanpabloca.gov/867/General-Plan-2030</p>

¹⁴ <https://mtc.ca.gov/funding/federal-funding/federal-highway-administration-grants/one-bay-area-grant-obag-3>

Action #	LU 1.1
	Richmond General Plan: Ch. 8 Energy and Climate Change Element, Ch. 11 Community Health & Wellness https://www.ci.richmond.ca.us/2608/General-Plan-2030
Partners in action implementation	Community members, Community Based Organizations (CBOs)
Key stakeholders to engage in action implementation	Community members within these jurisdictions that are impacted by land use patterns and/or zoning that locates communities near sources of pollution, and thus are the most burdened by these sources. Include community groups that specialize in engaging the community members and lead efforts towards developing healthier communities.
Potential obstacles	There could be pushback within the jurisdictions, due to lack of capacity and/or competing priorities, for example, if there is not a strong champion identified and/or if there is opposition from industry regarding land use changes.
Action initiation timeframe	Depends on each jurisdiction (cities & county may differ) Near=<2 years; Mid=2-4 years; Long > 4 years
Action intervention point	Exposure
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	See above - "Strategy Metric(s)"
Can any emission/exposure reduction be estimated	No

Action #	LU 1.2
Action name/brief description	<p>Community-Informed Amortization</p> <p>Develop a community-informed amortization approach and explore the use of zoning authority and incentives to relocate legal nonconforming polluting businesses away from residential areas in the PTCA area.</p> <p>Amortization, in this context, is a process by which public agencies use their zoning authority to enforce existing land use policies with respect to non-conforming uses. When new zoning or land use regulation is adopted, existing uses (businesses) may no longer comply, making them "non-conforming." Polluting or nuisance non-conforming uses can be required to conform to the current zoning regulations and requirements (or move operations) by the end of a certain period of time. This period is called an amortization period and is typically based on the useful life of the building, or the investment made in the non-conforming use. In some cases, such as ours in this CERP, amortization is done to protect public health.</p> <p>Before amortizing, agencies can offer incentives, such as small business loans and subsidies, to encourage polluting land uses to reduce pollution impacts or move away from residentially zoned areas. Discussions around</p>

Action #	LU 1.2
	<p>updating business practices to use cleaner technology, such as “best available control technology,” should also be explored. Types of businesses that can be considered for amortization include truck-attracting businesses, logistics centers and warehouses, truck and auto repair services, fuel refining facilities, and heavy manufacturing, among others.</p> <p>Many businesses in the CERP Community might be ideal candidates for removal based on their health impact but still conform with current land use. The effort can begin by focusing on existing non-conforming businesses established illegally - businesses that never received the necessary permits. It is much easier to get these illegal uses out. Then, legal non-conforming businesses can be addressed. These businesses received permits when zoning allowed such, but regulations have since changed.</p> <p>It is recommended that Air District assist with a study to identify which types of greener, non-polluting businesses can replace amortized ones. This type of study could hopefully estimate job loss (from amortized businesses) and job replacement (from incoming greener businesses) by industry type.</p> <p>Precedence:</p> <ol style="list-style-type: none"> 1. The WOCAP has amortization-like strategies (#4 - #6) on pages 6-21 that ask the City of Oakland and the Port of Oakland “to amend existing ordinances, resolutions, or administrative policies to accelerate the relocation of truck yards and truck repair, service, and fueling businesses in the PTCA area boundaries that do not conform with the current zoning designations. In addition, the City will seek to utilize incentives and subsidies to relocate businesses that do not conform with the zoning designations.”¹⁵ 2. In 2006 National City in California adopted an amortization ordinance (see additional factsheet). Two properties have so far been amortized through National City’s amortization program. 3. The Barrio Logan San Diego CERP includes an action (Action F1) on page 177 that states: “support for Westside Specific Plan (WSP) amortization strategy” and “National City to pursue the implementation of the amortization plan.” 4. Air District guidance document on “Non-Conforming Polluting-Use Transition Incentives” that summarizes the West Oakland strategies and the National City Example.
Type of action	Regulatory
Lead action implementor	City of Richmond, City of San Pablo, County of Contra Costa.
Related existing Program, Policy, or Initiative	The City of Richmond added Article 15.04.615 to the Richmond Municipal Code to reduce the release of pollutants into the environment from coal and petroleum coke storage and handling and reduce associated impacts to public health, safety, and welfare. This article phases out existing allowed land uses for these facilities by providing an amortization period to transition to other lawful uses and materials and protect public health while also allowing businesses time to transition. The City of Richmond could further

¹⁵<https://www.baaqmd.gov/~media/files/ab617-community-health/west-oakland/100219-files/final-plan-vol-1-100219-pdf.pdf?la=en>

Action #	LU 1.2
	<p>protect public health and the community by incentivizing additional polluting industries to relocate and using a similar amortization approach. To support these efforts, Air District can help provide guidance on where such industries should relocate to, so such uses do not simply move to other overburdened or impacted communities.</p> <p>Amortization is mentioned in the Contra Costa County and City of San Pablo codes, although not in reference to reducing exposure to air pollution. In Chapter 540-2 of the Contra Costa County Code on Mobile Home Space Rent, rent increases are amortized over the useful life of any rehabilitation or capital improvements. In a recent ordinance found in Section 17.62.300 of the San Pablo Code of Ordinances, there is an amortization schedule for transitioning nonconforming wireless facilities into compliance with the regulations outlined in the code. This ordinance can be used as a model but does not apply to all other polluting businesses.</p>
Partners in action implementation	Bay Area Air Quality Management District
Key stakeholders to engage in action implementation	Engage community members in areas adjacent to heavy industry and sources emitting high levels of emissions and the business community.
Potential obstacles	<p>While Amortization is intended to provide property owners with a reasonable amount of time to recover their investment in businesses that are non-conforming uses, business/property owners are not offered financial compensation. Therefore, businesses identified to be amortized may argue against and legally contest amortization, even though amortization is legally defensible under California State Law. Additionally, amortized businesses may employ community members in the PTCA area. Job impacts need to be considered. An investigation into which types of greener, non-polluting businesses can replace amortized ones in the CERP Community is recommended. This type of study could hopefully estimate job loss (from amortized businesses) and job replacement (from incoming greener businesses) by industry type.</p> <p>To preempt issues with amortization policies, two actions can be taken:</p> <ol style="list-style-type: none"> 1. Study the potential unintended consequences of amortization and identify relocation incentives for polluting industries. 2. Create a workgroup composed of relevant stakeholders, including adjacent residents (if applicable), to develop the criteria for amortization.
Action initiation timeframe	Depends on each jurisdiction (cities & county may differ) Near=<2 years; Mid=2-4 years; Long > 4 years
Action intervention point	Exposure
Action impact timeframe	Depends on each jurisdiction (cities & county may differ) Near=<2 years; Mid=2-4 years; Long > 4 years
Measure/metric of action implementation	See above - "Strategy Metric(s)"
Can any emission/exposure reduction be estimated	-

Action #	LU 1.3
Action name/brief description	<p>Overlay Zones</p> <p>Zoning overlays, also called overlay districts, can improve health outcomes and further environmental justice by preventing concentrations of polluting or harmful facilities and activities near historically disadvantaged communities and sensitive receptors. An overlay zone provides an additional layer of standards or requirements for all areas within the defined overlay boundary, regardless of the underlying base zoning district. For example, an industrial base zone called I-3 might also have a pollution overlay zone with requirements to protect sensitive receptors or a certain population. In this example, the base zone might allow the development of a warehouse according to the I-3 standards; however, the pollution overlay zone could prevent new development without first complying with specific site development standards that would mitigate pollution impacts (see the following action for more information on development standards).</p> <p>The American Planning Association’s Equity in Zoning Policy Guide states that “A key element of pursuing environmental justice is balancing strategies that prevent hazards from being created with those that mitigate the impacts of pollution or hazards already existing. An overlay zone can accomplish both by severely restricting the expansion of existing harmful industrial uses, requiring larger setbacks and more intensive buffers from residential uses, requiring environmental remediation, protection of existing trees, and/or requiring sound walls during redevelopment. These types of zoning districts should be developed in close collaboration with the surrounding communities so that concerns about health, the environment, and employment reflect the values of the community.” https://planning.org/publications/document/9264386/ .</p> <p>Air District suggests local governments create overlay zones to reduce and/or limit cumulative air pollution impacts. See below for examples of overlay zones policy templates.¹⁶</p> <ol style="list-style-type: none"> 1. Example Air Pollution Exposure Zone (APEZ) Policy to buffer freeway right-of-ways or high-trafficked corridors: https://www.baaqmd.gov/~media/files/planning-and-research/sb-1000/policy-initiatives/policy-1-stripped-pdf.pdf?a=en 2. Example Industrial-Residential Interface Zones (IRIZ): https://www.baaqmd.gov/~media/files/planning-and-research/sb-1000/policy-initiatives/policy-2-stripped-pdf.pdf?a=en
Type of action	Regulatory
Lead action implementor	City of Richmond, City of San Pablo, County of Contra Costa

¹⁶<https://www.baaqmd.gov/plans-and-climate/planning-for-environmental-justice-sb-1000/air-pollution-policy-initiatives>

Action #	LU 1.3
Related existing Program, Policy, or Initiative	<p>The City of San Pablo has already recently successfully updated their Air Quality Health Risk Overlay.¹⁷ An air quality health risk overlay district (D3) is required in Section 17.38.050 of the San Pablo Code of Ordinances to reduce impacts from toxic air emissions along the Interstate 80 corridor. The zone extends five hundred feet from Interstate 80 on both sides of the freeway and does not allow residential development, parks, other open spaces, schools, childcare facilities, senior centers, hospitals, or medical centers to be located in the district.</p> <p>General provisions for overlay district regulations in the City of Richmond are outlined in Article 15.04.301 of the Municipal Code; however, there are no specific mentions of overlay districts or zoning overlays to reduce air pollution exposure. Nor are zoning overlays and overlay districts mentioned in the Contra Costa County Municipal Code.</p>
Partners in action implementation	Bay Area Air Quality Management District
Key stakeholders to engage in action implementation	Engage community members in areas adjacent to sources emitting high emissions levels. Engage members of the local business community.
Potential obstacles	Creating air pollution-specific overlay zones will require updating the municipal code, which will require staff time and resources.
Action initiation timeframe	Depends on each jurisdiction (cities & county may differ) Near=<2 years; Mid=2-4 years; Long > 4 years
Action intervention point	Exposure
Action impact timeframe	Depends on each jurisdiction (cities & county may differ) Near=<2 years; Mid=2-4 years; Long > 4 years
Measure/metric of action implementation	See above - "Strategy Metric(s)"
Can any emission/exposure reduction be estimated	No

Action #	LU 1.4
Action name/brief description	<p>Site Development Standards and Conditions of Approval</p> <p>This action recommends that the County of Contra Costa and the cities of San Pablo and Richmond require site development standards and conditions of approval that protect against air pollution exposure and reduce emissions.</p> <ol style="list-style-type: none"> 1. Site development standards are standards set forth and regulated by local jurisdictions and} used by architects and builders. Site development standards address the physical layout and quality of the property, including buildings and other facilities, on which

¹⁷ Successful update to the City of San Pablo Air Quality Health Risk Overlay.
<https://www.codepublishing.com/CA/SanPablo/html/SanPablo17/SanPablo1738.html>
(17.38.050)

Action #	LU 1.4
	<p>permitted activities are conducted. These standards can protect against air pollution exposure by requiring that new developments and businesses implement pollution-reducing mitigations in the site and building design. Development standards can specify that builders and architects design buildings to reduce air pollution exposure by asking for setbacks, placing windows away from the freeway, requiring indoor filtration within 500 feet to 1,000 feet of a freeway, and establishing robust landscaping standards that require vegetative buffers around development.</p> <p>2. Conditions of approval, typically codified in a city’s or county’s zoning code, are usually a blend of policy, zoning, and building code requirements, which can require specific criteria to be met for the approval of new developments, buildings, and businesses. For example, Conditions of approval might require a proposed development to improve walkability, restrict truck parking and idling, and offer parking spaces for car-sharing programs, transit subsidies programs, and on-site bicycle and pedestrian facilities to reduce driving. However, many conditions are not codified and are specific to each project, as negotiated with the developer of a project.</p> <p>Air District offers a guidance document that lists potential conditions of approval and site development standards that can reduce air pollution.¹⁸ Examples include limiting idling on site, requiring Transportation Demand Management (TDM) strategies such as shared mobility and transit passes,¹⁹ limiting truck operation hours, requiring Zero Emission (ZE) infrastructure projects and all-electric building infrastructure, and requiring green infrastructure. Starting on page 92, the State Office of Planning and Research’s Model Environmental Justice Policies for General Plans report provides information on improving air quality from California general plans that have been formally adopted by cities and counties.²⁰ One example is the City of El Monte, which states in its Public Health and Safety Element: “As a condition for siting or expanding operations in El Monte, require air pollution emitters to evaluate and fully mitigate the impacts of their operations on schools, homes, medical facilities, child care centers, and other sensitive receptors.”</p> <p>In addition to the work mentioned above that Contra Costa County can do, the Air District and the CARB should evaluate updating their permitting and/or other rules (including the ATCM) to require more stringent health protections for new, relocated, and possibly existing sources of TAC emissions near schools, including further evaluation of the South Coast AQMD’s Rule 1401.1 found here: http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1401-1.pdf.</p> <ul style="list-style-type: none"> ● Cross-reference: Commercial & Industrial action (C&I 2.4) to Open Permitting Rules for Rule Development

¹⁸<https://www.baaqmd.gov/-/media/files/planning-and-research/sb-1000/policy-initiatives/policy-c-stripped-pdf.pdf?la=en>

¹⁹<https://learn.sharedusemobilitycenter.org/benefitcalculator/#/>

²⁰https://opr.ca.gov/docs/20200624-Model_EJ_Policies_for_General_Plans.pdf

Action #	LU 1.4
	<ul style="list-style-type: none"> • Cross-reference: Commercial & Industrial action (C&I 5.1) for Backup Generators (BUGs), which has additional detail specific to limits on BUGs when located near sensitive receptors. <p>This action also relates to Mobile Action 1.3, which asks that “in coordination with CARB, local, and regional agencies, review policies and assess opportunities to require and/or encourage truck-attracting businesses to incorporate zero-emission operations, including the electrification of loading docks, trucks, and TRUs and by incorporating electric vehicle (EV) capable/ready infrastructure for all vehicle classes visiting the facility.”</p>
Type of action	Regulatory
Lead action implementor	City of Richmond, City of San Pablo, County of Contra Costa
Related existing Program, Policy, or Initiative	<p>Articles 15.04.201 through 15.04.207 of the City of Richmond Municipal Code includes site development standards for different types of land use. Development standards for Commercial Districts and supplemental regulations for Industrial Districts include standards for truck docks, loading, and service areas so as not to be within a certain distance of a Residential District or visible from public streets. In addition, standards for ensuring pedestrian access and walkability are included in standards for Residential Districts, Mixed-Use Districts, and Commercial Districts.</p> <p>Development standards are established for different types of land use in the San Pablo Municipal Code; for example, Chapter 17.34 establishes development standards for Commercial and Industrial Districts. However, these standards do not address air pollution exposure. Similarly, development standards are established for different types of land use in the Contra Costa County Municipal Code but do not address air pollution exposure.</p>
Partners in action implementation	Bay Area Air Quality Management District
Key stakeholders to engage in action implementation	Engage community members in areas adjacent to sources emitting high levels of emissions. Engage members of the local business community.
Potential obstacles	Because site development standards can add significant costs to a new development or redevelopment project, they often specify what level of size or investment will trigger compliance with these standards. However, to mitigate air pollution, all developments near sources of pollution should include health-protective site development standards and conditions of approval. If the standards place an unfair burden on businesses adding a needed investment and/or employment in historically disadvantaged and vulnerable neighborhoods, assistance programs for applying businesses should be considered if possible.
Action initiation timeframe	Depends on each jurisdiction (cities & county may differ) Near=<2 years; Mid=2-4 years; Long > 4 years
Action intervention point	Exposure
Action impact timeframe	Depends on each jurisdiction (cities & county may differ) Near=<2 years; Mid=2-4 years; Long > 4 years

Action #	LU 1.4
Measure/metric of action implementation	See above - "Strategy Metric(s)"
Can any emission/exposure reduction be estimated	No

Action #	LU 1.5
Action name/brief description	<p>Zoning Regulations and Business Permitting</p> <p>This action recommends local governments update their land use regulations to prevent the siting of new polluting uses near sensitive uses and to require LUPs and CUPs to proactively protect health by managing the permits granted to polluting sources. Zoning and Conditional Use Permits can protect against air pollution exposure by prohibiting the siting of <i>new</i> polluting land uses/businesses adjacent to residential areas or sensitive populations.</p> <p>Land Use Permits, or LUPs for short, ensure that property owners who would like to develop or alter their property can do so within the requirements of the existing zoning code. This ensures that the property owner's interests and the interests of community members are both considered.</p> <p>Conditional Use Permits, or CUPs for short, require discretionary approval from a municipal government through a public hearing. Although sometimes planning directors can approve minor CUPs, such as in Oakland, CA. These types of permits allow a city or county to apply conditional uses and if approved, to make nonconforming uses comply with the current land use designation(s).</p> <p>Local government actions include:</p> <ol style="list-style-type: none"> 1. Update zoning regulations and LUPs and CUPs to prohibit or restrict the siting of <i>new</i> pollution-generating businesses <i>near residential areas and sensitive receptors (e.g., within 1,000 feet)</i>. End the practice of issuing CUPs for polluting and incompatible land uses like freight movement and industrial operations near where people live, work, and play. 2. Work with community members and Air District to identify and define categories of air pollution-generating uses specific to Richmond, San Pablo, and Contra Costa County. Pollution-generating businesses include, but are not limited to, freight, logistics, and other businesses that generate onsite pollution and attract mobile sources of pollution, such as truck deliveries and shipments. 3. Consider defining a new land use classification for pollution-generating businesses so that new businesses of this classification are not outright permitted in their proposed location. 4. Develop objective CUP criteria and performance standards related to truck-attracting businesses to ensure businesses adhere to the highest standards (see Oakland example).

Action #	LU 1.5
	5. Establish a program for proactive code enforcement to ensure businesses adhere to operating conditions, performance standards, or any other CUP criteria, including focused enforcement at “hot spots” (idling near warehouse clusters, fugitive dust near construction sites, etc.). Establish a joint enforcement task force with partner regulatory agencies (Air District, EPA, CARB, etc.).
Type of action	Regulatory
Lead action implementor	City of Richmond, City of San Pablo, County of Contra Costa
Related existing Program, Policy, or Initiative	<p>Article 15.04.806 of the Richmond Code of Ordinances establishes procedures and criteria for the approval, conditional approval or disapproval of Use Permits, including Conditional Use Permits. However, criteria for different types of permits could be updated to include language specifically targeted towards reducing land use developments that increase cumulative emissions. Chapter 6.43 on Industrial Safety establishes a requirement for a Conditional Use Permit for any stationary source that changes its process to include the use of a higher hazard category material than currently being used.</p> <p>Chapter 17.34 of the San Pablo Code of Ordinances establishes allowed uses in different types of zoning districts but could also establish stricter requirements for land uses that involve significant emissions.</p> <p>Division 84 of the Contra Costa County Municipal Code establishes uses requiring land use permits for specific land use districts. Chapter 84-63 specifically requires land use permits for development projects that could significantly and adversely affect public health, safety, and the environment.</p>
Partners in action implementation	Bay Area Air Quality Management District
Key stakeholders to engage in action implementation	Engage community members in areas adjacent to sources emitting high emissions levels. Engage members of the local business community.
Potential obstacles	Some businesses generate air pollution but also benefit the community, such as large grocery stores with many shipments from polluting trucks. The types of businesses included in permitting restrictions should be drafted with community members to avoid limiting land uses that support community well-being.
Action initiation timeframe	Depends on each jurisdiction (cities & county may differ) <i>Near=<2 years; Mid=2-4 years; Long > 4 years</i>
Action intervention point	Exposure
Action impact timeframe	Depends on each jurisdiction (cities & county may differ) <i>Near=<2 years; Mid=2-4 years; Long > 4 years</i>
Measure/metric of action implementation	See above - “Strategy Metric(s)”
Can any emission/exposure	No

Action #	LU 1.5
reduction be estimated	

Resource PTCA Plan Implementation

Resource (R) Strategy – Detailed Action Descriptions

Strategy 1 Actions

Action #	R 1.1
Action name/brief description	<p>Allocate Dedicated Staff Resources to CSC Early Priorities</p> <p>Based on information gathered during the development process of the PTCA Plan, the CSC strongly recommends an annual implementation plan that identifies priority actions and staff resource needs (co-developed with the CSC and the Air District) to do the following:</p> <ul style="list-style-type: none"> • Prioritize an increase in staff dedicated to Chevron inspections, enforcement activities, engineering, and incident response activities, including ensuring there are appropriate staff available for incident response at off hours • Prioritize staff needed to ensure the expeditious and effective implementation of Rule 11-18, in all relevant Divisions, including Engineering, AIM, Rule Development, M&M, C&E • Prioritize staff needed to ensure the expeditious and effective implementation of incentive programs including, new program development and implementation, direct outreach to all target audiences, track regulatory development by CARB and review and prepare comment letters to CARB in consultation with CSC, and report incentive program results. • Prioritize adequate staffing for internal and external communications to improve public education, transparency, and accessibility, in all relevant Divisions, including IT, Communications, Community Engagement, C&E, Legislative Office, Strategic Incentives, and Engineering (Cross-reference M&R, Website, FR, Public Health, etc.). Some priorities include but are not limited to: Website, news media, and PTCA AB617-focused app. • Ensure AIM, M&M, and Engineering are sufficiently staffed to continuously improve and analyze air quality and public health impacts in the PTCA area, provide accessible data to the public, and track emission and exposure reductions achieved by the PTCA Plan (Cross reference: Improved Emissions & Exposure Modeling and HRA Methodology Strategy) • Prioritize resources and staffing for actions to improve permitting, especially equity-based actions such as development of a program to apply a Title VI and Gov. Code section 11135 lens, including, but not limited to, a process for civil rights/disparate impact analyses
Type of action	Other
Lead action implementor	Air District

Action #	R 1.1
Related existing Program, Policy, or Initiative	N/A
Partners in action implementation	CSC
Key stakeholders to engage in action implementation	
Potential obstacles	Achieving consensus on specific early priorities; staff resource limitations that cannot be overcome through reallocation or re-prioritizing.
Action initiation timeframe	Near < 2 years
Action intervention point	Potentially all levels
Action impact timeframe	Near < 2 years
Measure/metric of action implementation	Resources dedicated to early CSC implementation priorities
Can any emission/exposure reduction be estimated	No

Action #	R 1.2
Action name/brief description	Co-develop and implement an annual Implementation Plan Air District staff will co-develop with the CSC an annual PTCA Implementation Plan that prioritizes strategies and actions for implementation each year. The PTCA Implementation Plan will identify specific and appropriate Air District staff resource needs, which will help inform Air District annual budget planning and staff resource allocations. Additionally, on an annual basis, the Air District will report PTCA Plan implementation successes and challenges to the Board of Directors, including describing if the level of allocated staff resources was sufficient or if there were shortfalls.
Type of action	Other
Lead action implementor	Air District
Related existing Program, Policy, or Initiative	N/A
Partners in action implementation	CSC
Key stakeholders to engage in action implementation	Other Lead action implementers, e.g., Richmond, San Pablo, Contra Costa County, CARB, etc.
Potential obstacles	Developing the implementation plan without taking resources away from plan adoption and early implementation; agreeing on annual priorities; coordination with other lead action implementers.

Action #	R 1.2
Action initiation timeframe	Near < 2 years
Action intervention point	Potentially all levels
Action impact timeframe	Near < 2 years
Measure/metric of action implementation	Annual Implementation Plan; Annual report to Board on successes and challenges.
Can any emission/exposure reduction be estimated	No

Action #	R 1.3
Action name/brief description	Engage with the Air District on Annual Budget Planning The CSC will engage with Air District staff and the Board of Directors on the annual budget planning process, and any mid-year budget adjustment process, to ensure the voices of the PTCA CSC and community are heard. This will include recommendations to address ongoing resource needs to fully implement the PTCA Plan, new or evolving issues in the PTCA area, and as appropriate, overall support needs for the AB617 program. CSC members can also consider participating in the Air District's Budget Advisory Group which serves to help inform the annual budget planning process.
Type of action	Other: Advocacy
Lead action implementor	CSC
Related existing Program, Policy, or Initiative	Annual Air District budget planning process
Partners in action implementation	Air District
Key stakeholders to engage in action implementation	Other CERP CSCs
Potential obstacles	Timing to complete annual implementation plan to inform annual budget planning process; ongoing engagement in annual budget planning process.
Action initiation timeframe	Near=<2 years
Action intervention point	Potentially all levels
Action impact timeframe	Near=<2 years
Measure/metric of action implementation	Inclusion of PTCA Plan implementation resource needs in annual budget recommendation to the Board
Can any emission/exposure	No

Action #	R 1.3
reduction be estimated	

Action #	R 1.4
Action name/brief description	Engage with Air District on Strategic Planning The CSC will engage with Air District staff and the Board of Directors on the development and implementation of the agency's Strategic Plan. The CSC will share PTCA implementation and PTCA community priorities and views to help inform the goals and objectives of the Strategic Plan, which is one of the agency's core planning documents that will direct how future resource commitments are prioritized and allocated.
Type of action	Other: Advocacy
Lead action implementor	CSC
Related existing Program, Policy, or Initiative	Air District Strategic Plan development
Partners in action implementation	Air District
Key stakeholders to engage in action implementation	Other CERP CSCs
Potential obstacles	Timing of PTCA Plan completion and initiation of implementation with agency Strategic Planning process; ongoing engagement with agency strategic plan implementation and future updates.
Action initiation timeframe	Near < 2 years
Action intervention point	Potentially all levels
Action impact timeframe	Near < 2 years
Measure/metric of action implementation	Inclusion of PTCA Plan implementation and community priorities in Strategic Plan
Can any emission/exposure reduction be estimated	No

Urban Greening (UG)

UG Strategy – Detailed Action Descriptions

Strategy 1 Actions

Action #	UG 1.1
Action name/brief description	Plant Street Trees and Vegetation in Priority Neighborhoods Working in collaboration with local government and community partners, Air District and CSC advocate for a municipal program for street tree and vegetation plantings. Plant native, drought tolerant, shade tree species and

Action #	UG 1.1
	<p>vegetation in a manner recommended by the City of Richmond Urban Greening Master Plan and City of San Pablo Landscaping Master Plan within the public right-of-way, facilities susceptible to urban heat island effects and high pollution emissions.</p> <p>Free and/or discounted street tree and vegetation plantings will be prioritized in neighborhoods throughout PTCA area that have:</p> <ul style="list-style-type: none"> ● Low tree canopy ● High risk of urban heat island effect ● Low ratio of green space to grey space ● Low-income, affordable housing development ● Black, Indigenous, People of Color (BIPOC) communities ● Low education levels ● High levels of non-English speaking ● Highest contribution of particulate matter impact from local sources (via Air District data) ● Sensitive receptors (i.e., housing, hospitals, schools, daycares)
Type of action	Further research; Education/Outreach; Incentives; Enforcement; Other (implementation)
Lead action implementor	City of Richmond, City of San Pablo, Contra Costa County
Related existing Program, Policy, or Initiative	<ul style="list-style-type: none"> ● Richmond Rising Transformative Climate Communities (TCC) Grant.²¹ A State-funded grant that will provide \$35 million to the City of Richmond for the next 5 years towards projects related to climate change. These include but are not limited to: urban greening and cooling of neighborhoods; complete streets and affordable active transportation options; renewable energy resilient homes; water absorption and reuse; and enhanced food security for improved health and wellbeing. ● Air District Policy Templates Policy A - Vegetative Buffers/Barriers²² Policy E - Freeway Greening Retrofits²³ Policy Recommendations for Freeway Corridors and Industrial Zones Adjacent to Residential and Sensitive Land Uses²⁴ ● Friend of Trees Partnership with City of Portland (Portland, Oregon)²⁵ Friends of Trees is a non-profit in the City of Portland, Oregon, that partners with the City of Portland to plant trees in neighborhoods prioritized by several factors, including dearth of green space, racial and income levels. Plantings come at no cost to residents in these neighborhoods.

²¹<https://richmondstandard.com/richmond/2022/10/28/richmond-gets-35m-state-grant-for-community-led-climate-projects/>

²² [Air District Policy A - Vegetative Buffers/Barriers](#)

²³<https://www.baaqmd.gov/-/media/files/planning-and-research/sb-1000/policy-initiatives/policy-e-stripped-pdf.pdf?la=en>

²⁴<https://www.baaqmd.gov/plans-and-climate/planning-for-environmental-justice-sb-1000/air-pollution-policy-initiatives>

²⁵ <https://friendsoftrees.org/>

Action #	UG 1.1
	<ul style="list-style-type: none"> ● CalFire Grants²⁶ Urban forestry grants used to conduct tree plantings in cities across the state of California. ● California Natural Resources Agency Grants²⁷ Urban forestry grants used to conduct tree plantings in cities across the state of California ● City of Richmond Green-Blue New Deal and Just Transition Plan (2021)²⁸ A plan adopted by the City of Richmond in July 2021 to catalyze at least 1000 new green-blue jobs for Richmond residents that build a just, equitable, resilient, and sustainable future. ● City of Richmond Urban Greening Master Plan (2017)²⁹ Serves as the master document to guide and coordinate future greening projects in Richmond. It includes a citywide tree inventory, urban forest best practices, and a list of approved street trees for the city. ● City of San Pablo Master Landscape Plan³⁰ Serves as a guideline for proper placement of trees and plants by location in the City of San Pablo. ● The San Joaquin Valley and Imperial County Air Pollution Control Districts Matched community-identified greening projects with CARB Community Air Protection Incentives. This model may serve as a template to support urban greening projects in the PTCA area. ● Imperial County Urban Greening Program³¹ The Imperial County CERP implemented an urban greening program, which can be referenced for further programming details and ideas for emissions reductions.
Partners in action implementation	Union Pacific, Caltrans, Neighborhood councils, Air District, Community-based organizations such as Groundwork Richmond, Urban Tilth
Key stakeholders to engage in action implementation	Neighborhood councils, housing providers, Air District, community-based organizations such as Groundwork Richmond, Richmond Trees and Richmond Seed Library; workforce development programs; local growers such as Annie’s Perennials and The Watershed Nursery
Potential obstacles	<p>Cities do not have adequate funding for a designated urban forestry team. The City of Richmond, for example, contracts this work out to Groundwork Richmond, a nonprofit that does not work in the City of San Pablo. There are a variety of grants available to apply to, such as CalFire grants and EDF’s Frontline Resources Institute. In addition, the City of Richmond has just been awarded the \$35 million Transformative Climate Communities (TCC) Grant for the next 5 years, which will allow for capacity building and green infrastructure implementation with the partnership of the State.</p> <p>Planting trees poses a few logistical issues. Water scarcity may pose an issue in years to come as droughts become more prevalent. Without dedicated</p>

²⁶ <https://www.fire.ca.gov/what-we-do/grants/urban-and-community-forestry-grants>

²⁷ <https://resources.ca.gov/grants/urban-greening>

²⁸ <https://www.ci.richmond.ca.us/4138/Green-Blue-New-Deal-and-Just-Transition>

²⁹ <https://www.ci.richmond.ca.us/2858/Urban-Greening-Plan#:~:text=The%20Urban%20Greening%20Plan%20will,street%20streets%20for%20the%20city>

³⁰ <https://www.sanpabloca.gov/2628/-Master-Landscape-Plan>

³¹ Imperial County Community Emissions Reduction Program: Urban Greening. https://c1b3e492-1448-4e62-b7f8-7aaf61550a90.filesusr.com/ugd/9806d9_7ae8e7dff0b94ba5b96001cb2aca30ad.pdf

Action #	UG 1.1
	<p>water sources, tree plantings will not be sustainable. It may be difficult to find sufficient locations to plant trees, especially within neighborhoods. There will need to be a lot of community engagement/public outreach to recruit residents who would be willing to have a street tree planted in front of their residence. Some residents may have concerns about impacts such as parking, sidewalk damage, property damage, tree impacts, tree appearance, and maintenance.</p> <p>A combination of successful grants that assist communities with climate change, long-term vision, and partnership for tree plantings will help ensure the success of this strategy.</p>
Action initiation timeframe	Near <= 2 years
Action intervention point	Ambient concentration, exposure, dosage
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	Has a tree and vegetation planting program been implemented throughout the PTCA area?
Can any emission/exposure reduction be estimated	Yes, later. Note that estimating emissions reductions will depend on appropriate information from the urban greening projects. See Imperial County Urban Greening Program for example methods.

Action #	UG 1.2
Action name/brief description	<p>Education and Funding Opportunities</p> <p>CSC, supported by Air District staff, educates elected officials around the permanent funding and use of green infrastructure in reducing health disparities and improving bike/ped infrastructure throughout the PTCA area.</p> <ul style="list-style-type: none"> • Create partnerships between local nurseries and the public to incentivize tree plantings • Provide community education on the benefits of planting trees and vegetation • Seek grants and programs that support tree plantings
Type of action	Further research; Education/Outreach
Lead action implementor	Air District, CSC members
Related existing Program, Policy, or Initiative	See Urban Greening 1.1
Partners in action implementation	Groundwork Richmond, Urban Tilth
Key stakeholders to engage in action implementation	Contra Costa County Public Health and Public Works Departments, local nurseries, including Annie's Perennials, Home Depot, Ace Hardware, etc., local school districts, other TCC groups such as Trust for Public Land and Rich City Rides' Park Cleanup program
Potential obstacles	Competing government priorities and limited resources mean there may be pushback from political forces that don't see the value of increasing the

Action #	UG 1.2
	urban canopy, the ecosystem services trees provide, or don't see urgency at this time. Also, grant funding often does not provide the longer-term funding needed for on-going maintenance of green infrastructure projects.
Action initiation timeframe	Long > 4-year
Action intervention point	Ambient concentration, exposure, dosage
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	Have there been grants received to support urban greening initiatives? List these and the dollar amount
Can any emission/exposure reduction be estimated	-

Action	UG 1.3
Action name/brief description	<p>Require New Development to Include Vegetative Buffers</p> <p>Local jurisdictions require conditions of approval for new development that encourage the planting of vegetated buffers around identified stationary sources of air pollution. Also, require prioritized tree plantings for future infrastructure plans, looking to categories listed in Urban Greening 1.1.</p> <ul style="list-style-type: none"> • Incentivize plantings around commercial, affordable, mixed-use, multi-family development, light and heavy industry, logistics center and other land uses likely to cause air pollution. • Provide enforcement to maintain landscaping on new development <p>See Land Use Strategy #1.4 "Site Development Standards and Conditions of Approval," for more information about conditions of approval that can reduce air pollution.</p>
Type of action	Regulatory; Enforcement; Further research
Lead action implementor	City of Richmond, City of San Pablo, Contra Costa County
Related existing Program, Policy, or Initiative	<ul style="list-style-type: none"> • See Urban Greening 1.1 and Land Use Strategies • LA County Green Zones Program³² <p>A framework of land use standards in LA County and unincorporated areas that seek to enhance public health and land use compatibility for communities that bear a disproportionate pollution burden.</p>
Partners in action implementation	Private developers
Key stakeholders to engage in action implementation	Neighborhood councils, housing providers, communities living near stationary sources
Potential obstacles	<ul style="list-style-type: none"> • New development may not be able to comply with site constraints for tree plantings if regulations are too stringent.

³² LA County Green Zones Program: <https://planning.lacounty.gov/long-range-planning/green-zones-program/>

Action	UG 1.3
	<ul style="list-style-type: none"> Enforcement agencies may not have the bandwidth to see regulations through. When planting trees or landscaping for public right-of-way, water scarcity will be a major concern in the PTCA area and will require water upgrades from EBMUD.
Action initiation timeframe	Long > 4 years
Action intervention point	Ambient concentration, exposure, dosage
Action impact timeframe	Long > 4 years
Measure/metric of action implementation	Have there been any changes to city regulations that promote urban greening for new development?
Can any emission/exposure reduction be estimated	-

Action #	UG 1.4
Action name/brief description	Green Workforce ³³ Development In collaboration with community groups hire and train community members for jobs in the green workforce, around tree planting and trail building. This would also include community education to better understand the importance of increasing neighborhood green infrastructure.
Type of action	Incentives; Further research; Education/Outreach
Lead action implementor	City of Richmond, City of San Pablo, Groundwork Richmond, Urban Tilth, Contra Costa County
Related existing Program, Policy, or Initiative	See Urban Greening 1.1
Partners in action implementation	Community-based organizations, workforce development programs
Key stakeholders to engage in action implementation	Underserved communities: immigrant, youth, communities of color, low-income, PTCA area high schools, Contra Costa Community College, YES Nature to Neighborhoods
Potential obstacles	Limited long-term funding for workforce development programs and connecting trainees to jobs.
Action initiation timeframe	Long > 4 years
Action intervention point	Emissions, health effects
Action impact timeframe	Long > 4 years

³³ Green Workforce: a broad grouping of careers that contribute directly to moving society and the built environment towards sustainability.

Action #	UG 1.4
Measure/metric of action implementation	How many people have been trained and hired into green workforce development programs?
Can any emission/exposure reduction be estimated	-

Appendix B: Community Description

The Path to Clean Air CERP is comprised of the cities of Richmond and San Pablo and the following unincorporated areas in Contra Costa County: Bay View, East Richmond Heights, Rollingwood, Tara Hills, Montalvin Manor, North Richmond, and El Sobrante. These cities and places were founded on land originally inhabited by the Ohlone people. From here on, we will refer to this land and people within the geographic bounds of the CERP as the 'CERP Community' (see Figure 1).

Situated near the East Bay waterfront, our CERP Community — with a current population of 166,415 — was a magnet for World War II-era industries like shipbuilding, chemical production, and oil refining. In the 1940s, the population surged as many workers, including many people of color, flocked here for jobs. This period was part of the Second Great Migration when Black Americans migrated en masse to the West Coast for jobs and to find respite from the Jim Crow policies prevalent in the American South that enforced segregation and marginalized Black communities. Despite their contributions to the region's growth during and after the war, newly arrived Black and Brown people were targets of exclusionary labor and housing policies that continue to negatively affect income, homeownership, mobility, and wealth accumulation to this day.

Today, our community has become a significant corridor for transporting goods via ship, rail, and 18-wheelers, leading to congested freeways and roads running through residential communities. These transportation corridors include I-580 to the south, I-80 to the east, Richmond Parkway to the west, and San Pablo Avenue through the center of our community. In addition to these transportation corridors, the Chevron Refinery, rail yards, and rail lines associated with the Port of Richmond lie west of the CERP Community. The Chevron Refinery is a concerning source of air pollution emissions in the CERP Community. As it emits more fine particulate matter and sulfur dioxide than all other contributing sources in our community combined. Chevron is also the largest source of numerous toxic air contaminants, such as hydrogen cyanide, sulfuric acid, manganese, and hydrogen sulfide.

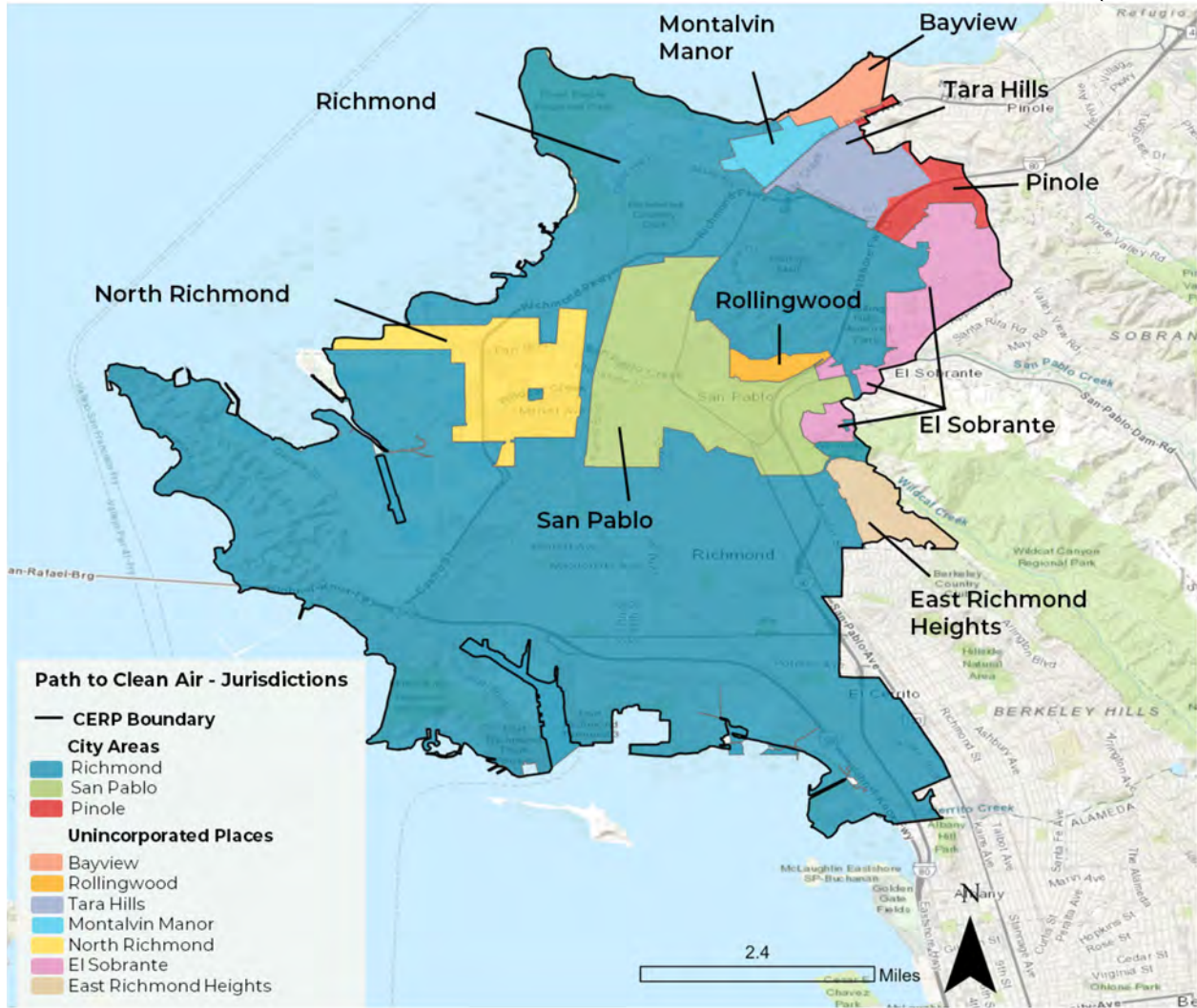


Figure 1. Community Emissions Reduction Plan Boundary and Component Geographies.

I. Land History

The PTCA Community sits on the original territory of Huichin, home to the Chochenyo and Kirkin-speaking Muwekma tribe of the Ohlone nation. The Ohlone stewarded the land that is now Richmond for generations before facing waves of genocide since contact was made with Spanish colonizers. Today, the Ohlone continue to fight for their right to their land, and we acknowledge the impact of colonialism, genocide, exploitation, and displacement on the Muwekma Ohlone Tribe.



Figure 2. Ohlone People Crossing the Waters. Source: Painting of three Ohlone people crossing the waters in San Francisco Bay by Louis Choris, 1816 or 1822.

Ohlone is an umbrella term for approximately 50 distinct tribes with related languages. The Ohlone are Native American people located on the Northern California Coast, inhabiting areas from the San Francisco Bay Area to the Monterey Bay and lower Salinas Valley. The Ohlone family of tribes has inhabited the Bay Area for at least 10,000 years. The Ohlone language groups present in the PTCA Community are the Chochenyo and the Karkin (also spelled "Carquin") -- see Figure 3. The Huichin tribe inhabited most of what today is Richmond.¹ Traditionally, the Ohlone people who resided in the region that includes the current PTCA Community subsisted by hunting, gathering, and harvesting the rich wildlife and diverse plants of the East Bay.

¹ "Chochenyo." California Language Archive, <https://cla.berkeley.edu//languages/chochenyo.html>. Accessed 18 May 2022.

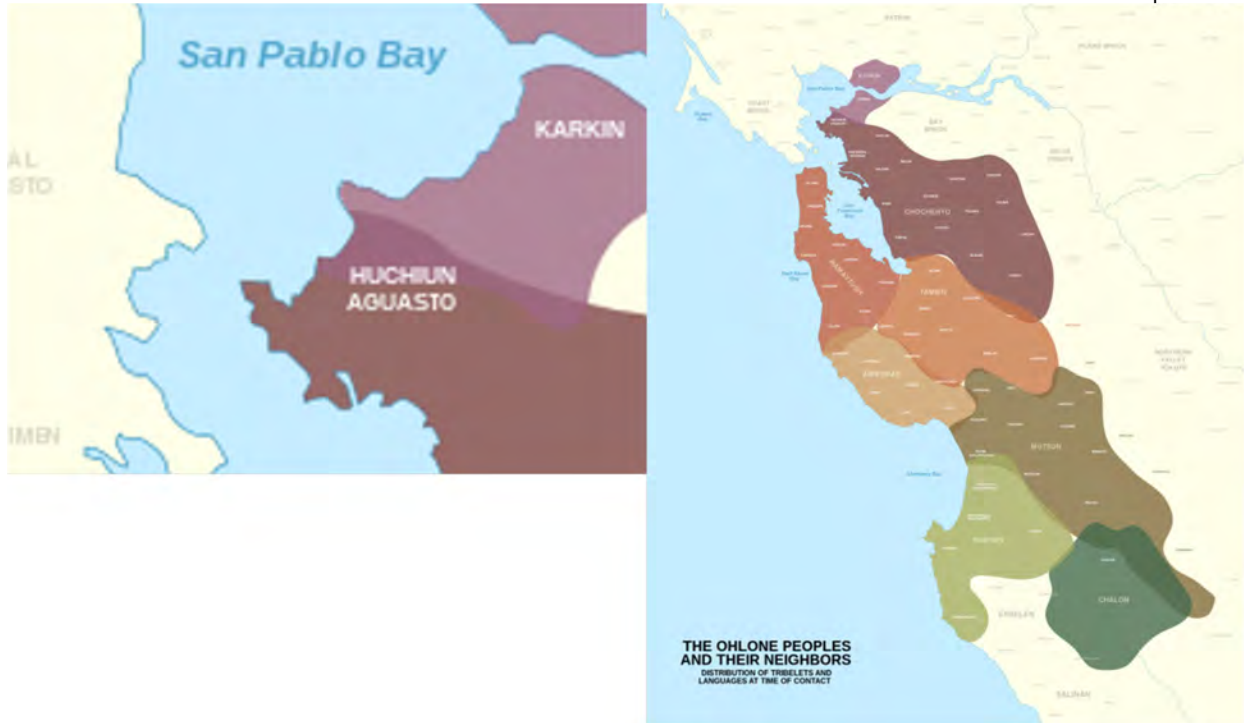


Figure 3. Map of Ohlone Traditional Territories. Source: Randall Milliken (1995): <https://museumsrv.org/the-bay-miwok-language-and-land/> California Indians and Their Environment: An Introduction (pg 34) Randall Milliken (2007). <https://cejce.berkeley.edu/ohloneland>.

A current initiative by Ohlone people is the women-run Sogorea Te Land Trust. This is an urban land trust founded in 2012 with the goal of returning indigenous land to indigenous people.² Sogorea Te encourages all people living on Ohlone land to pay *Shu'mi*, or a land tax, to support the work of the land trust and indigenous sovereignty efforts, including the practices of rematriation, cultural revitalization, and land restoration.

II. Land Use and Activism

Industry, Segregation, and Pollution Exposure

Richmond is the largest geography within the PTCA boundary. Richmond is a relatively large city of fifty-six square miles that developed around the needs of two large industrial operations at the turn of the 20th century: The Santa Fe Railroad and the Standard Oil of California refinery (now Chevron). When incorporated in 1905, Richmond had a population of 2,150 and was an industrial town. In 1909 the city charter was adopted, and by 1910 the city had a population of 7,500. Within a few years, the following industries were located in Richmond: Winehaven, Pullman Palace Car Shops, American Radiator, Standard Sanitary Company, and Stauffer Chemical Company, among others. With the arrival of new industrial uses, land previously used for agricultural purposes began subdividing into uniform city lots for development.

As the City grew during the 1920s and 1930s, Richmond's Downtown emerged as the City's business and retail center. Construction of shipping port terminals began in this period. By 1907 harbor construction was being promoted, and bonds issued in 1912 and 1920 funded dredging

² "Sogorea Te." The Sogorea Te Land Trust, <https://sogoreate-landtrust.org/>. Accessed 18 May 2022.

and terminal construction. In the 1920s, tideland filling made the opening of the Ford Motor Assembly Plant and the Felice and Perelli Cannery in 1931 possible. The City's population grew from 2,150 in 1905 to 23,600 in 1940.

In 1941, to meet WWII industrial demands, the Kaiser Richmond Shipyards opened Richmond's South Shoreline. Between 1940 and 1945, Richmond's population soared in response to wartime manufacturing needs, rising from 23,000 in 1940 to over 100,000 in 1945. Richmond's Black population increased from 270 to 14,000, many of whom migrated from the economically depressed South and Southwest to work in the shipyards.³

To accommodate this influx of workers, the federal government funded the development of 24,000 public housing units for 60,000 wartime workers under the condition that units be racially segregated. Units built for Black workers were intended to be temporary, built with low-quality materials, and sandwiched between factories, refineries, and rail lines. These units were the least desirable housing locations with high air pollution exposure yet conveniently close to job sites. Many of these "temporary" housing units are still in use today. If housing could not be found, workers often built temporary shelters such as cardboard shacks, barns, and tents or even used open fields in what is now North Richmond, an unincorporated area without city services.⁴

On the other hand, housing for white workers was of a higher quality and intended to be permanent.⁵ During this time, the unincorporated area of Rollingwood was created as a new suburb to help meet wartime housing demands; Federal officials approved bank loans to finance construction that required that none of its 700 houses be sold to a Black person - an example of prevalent racial covenants of the time.



³ *An Avalanche Hits Richmond: A Study of the Impact of War Production upon the City of Richmond, California, and an Outline of Measures Necessary to Provide the Facilities for Normal Postwar Community Service, a Report.* The City Manager, 1944. <https://alexismadrival.files.wordpress.com/2019/01/an-avalanche-hits-richmond.pdf>

⁴ *Ibid*

⁵ *Ibid*

Figure 4. Kaiser Shipyards, Richmond, CA. Source: Shift Change 3:30 PM – Coming on of Yard 3 – Kaiser Shipyards, Richmond, CA, Circa 1942, Dorothea Lange, Film negative, Gift of Paul S. Taylor, 5 in x 7 in, A67.137.42097.2

The Kaiser shipyards (see Figure 4), a significant wartime employer, initially attempted to use only white employees in its skilled shipyard trades but relented due to Black worker advocacy and eventually employed more Black workers than any other industry in Richmond.⁶ However, the unions involved in wartime industries took exclusionary actions against Black workers, and the Kaiser shipyards and other employers refused to interfere.⁷ Thus, Black workers were either excluded from unions altogether or given limited rights and positions - suffering denials of promotion or being paid as trainees instead of full-fledged employees.⁸ This job exclusion meant lower incomes for highly skilled laborers and limited housing options for Black workers.



Figure 5. Kaiser Shipyard Workers Circa 1942. Source: Shipyards and industrial history, Women line up for paychecks- Richmond Shipyards, Richmond, CA, Circa 1942, Dorothea Lange, Film negative, Gift of Paul S. Taylor, 5 in x 4 in, A67.137.42080.4

⁶ Moore, Shirley Ann Wilson. *To Place Our Deeds: The African American Community in Richmond, California, 1910-1963*. Univ of California Press, 2000.

⁷ Johnson, Marilyn S. *The Second Gold Rush: Oakland and the East Bay in World War II*. Univ of California Press, 1994.

⁸ Richard Rothstein. *The Color of Law: A Forgotten History of How Our Government....* Liveright Publishing Corporation, 2018.

At the end of WWII in 1945, the shipyards closed, and a far-reaching readjustment began. Industrial production rapidly declined, and the population decreased steadily from 101,500 persons in 1947 (a special census count) to 71,900 in 1960. Post-war development included strong growth in warehousing, distribution, chemical, and research facilities.

With the population decreasing, Richmond removed the federal housing originally constructed for wartime workers. The 1950 City of Richmond Master Plan details decisions to bulldoze these majority Black-populated “blighted areas” of wartime housing and build fewer public housing units for Black refinery and shipyard workers to replace these units.⁹ Workers were then funneled into sub-standard public housing in Richmond and San Pablo in the mid-1960s. The 1950 Master Plan wanted to maintain “[...] the neighborhoods that contained “small, pleasant, single-family homes” to “[...] control home occupations and [...] to maintain the harmonious residential character of neighborhoods[...].”¹⁰ “Harmonious” is a codeword for using racial homogeneity to maintain all-white occupancy. Additionally, white wartime workers could get cheap loans, aiding their ability to move to single-family suburbs, while the federal government refused to insure bank loans made to Black Americans seeking to buy or build homes.¹¹

In sum, when WWII was over, Black workers in the PTCA Community saw stunted income gains compared with white workers and were not permitted to live in the newly built single-family suburbs. Instead, Black workers lived near industrial areas and sources of air pollution in cheaper multi-family dwelling units. In the PTCA Community and across the U.S., Black people and other people of color were excluded from buying or building homes, limiting wealth accumulation, and stunting the transfer of intergenerational wealth.¹² A 2020 Brookings Institute study found that the average white family in the US has a net worth of \$171,000, while the average Black family has a net worth of \$17,000.¹³

By the 1960s, exclusionary labor and housing practices in the U.S. (e.g., redlining) had firmly established racial income inequality and suburban segregation.¹⁴ The below “Negro Concentration” maps developed by the Commission on Civil Rights show the PTCA Community’s racial segregation in 1967 – the darker areas show greater concentrations of Black residents (see Figure 6). This map serves as a proxy for the “redlining” maps developed by the federal government in the 1930s to guide mortgage investment away from communities of color, which were considered “too risky” for investment. When placed alongside a current map of household mean income for 2020 to 2016 (Figure 7), we see that the high segregation rates are closely aligned with the lowest-income census tracts of today. Exclusionary housing policies and practices of the past shape neighborhood conditions in the present in the entire PTCA Community. Places that once hosted Black wartime housing, and later public housing, saw less financial investment and development over time and to date; these places remain neighborhoods with less desirable housing stock. Today, these are areas where lower-income residents of color live, mainly Hispanic and Latino residents.

⁹ Housing and Redevelopment, a Master Plan of Richmond California. Master Plan, 1950. https://alexismadrigal.files.wordpress.com/2019/01/1950-richmond-housing-and-redevelopment_complete.pdf

¹⁰ Ibid

¹¹ Richard Rothstein. *The Color of Law: A Forgotten History of How Our Government...* Liveright Publishing Corporation, 2018.

¹² Ibid

¹³ Shambaugh, Kriston McIntosh, Emily Moss, Ryan Nunn, and Jay. “Examining the Black-White Wealth Gap.” Brookings, 27 Feb. 2020, <https://www.brookings.edu/blog/up-front/2020/02/27/examining-the-black-white-wealth-gap/>.

¹⁴ Richard Rothstein. *The Color of Law: A Forgotten History of How Our Government...* Liveright Publishing Corporation, 2018.

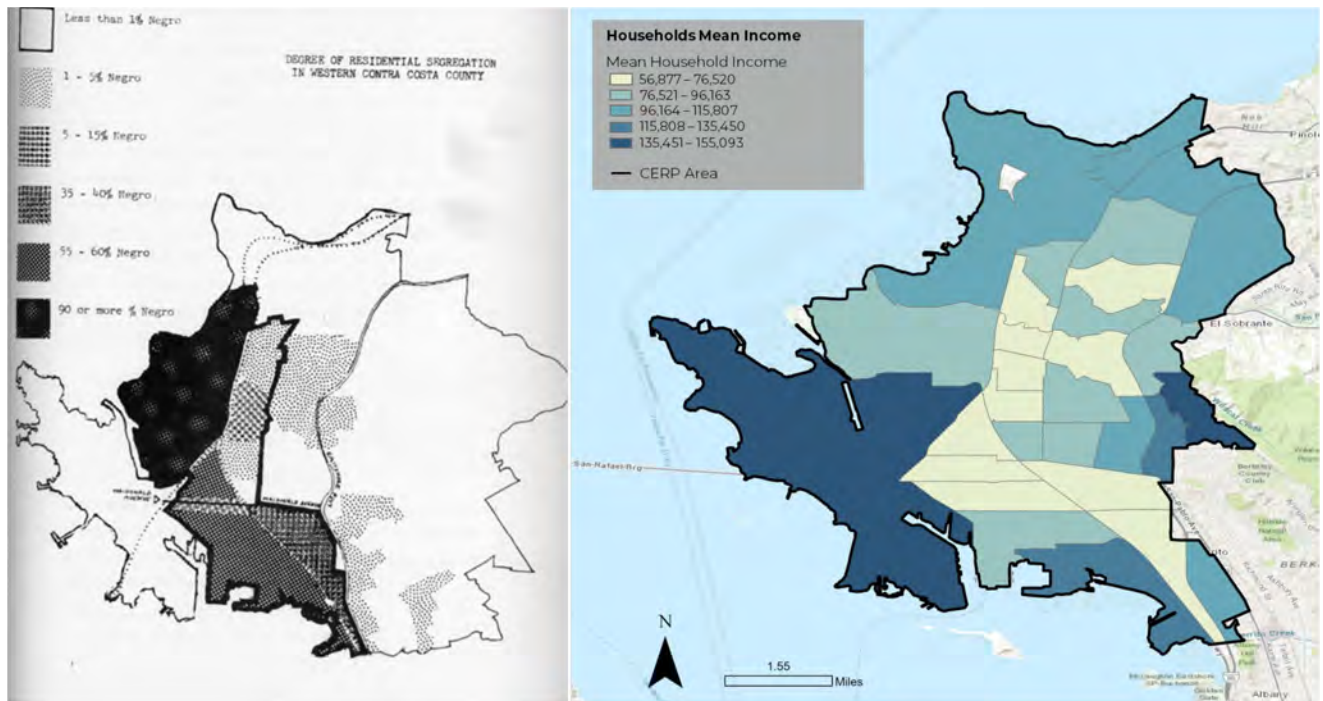


Figure 6. Map of residential segregation in Richmond, CA, 1967 (Left). Source: U.S. Commission on Civil Rights. Figure 7. Map of Household Mean Income, 2020-2016 (Right). Source: Census Table S1902, MEAN INCOME IN THE PAST 12 MONTHS (IN 2020 INFLATION-ADJUSTED DOLLARS), 2020-2016: ACS 5-Year Estimates Subject Tables.

The combination of single-family homes – more expensive, per-unit, than multi-family dwellings – and exclusionary housing and labor practices have concentrated low-income communities of color near the many air pollution sources in the PTCA Community. With limited economic mobility, people could not and still cannot afford housing further from pollution hot spots such as industrial businesses, freeways, railways, and refinery operations. As shown below in the map showing PM_{2.5} exposures (Figure 8), the more densely populated areas near the northwest of the PTCA Community have a higher portion of the exposure from local sources of emissions. These areas are also lower-income areas. For more information on air pollution assessments, see Chapter 5.

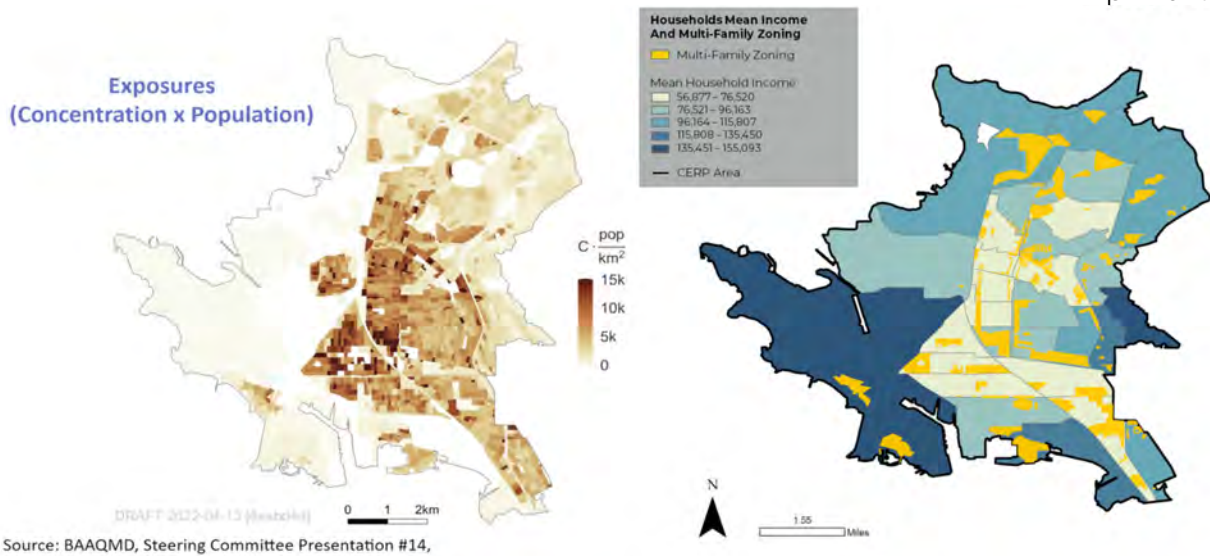


Figure 8. Modeled PM_{2.5} Exposure from Local Sources (Left). Figure 9. Mean Household Income and Multi-Family Zoning (Right). Source: Modeled PM_{2.5} Impacts from Local Sources, Air District, Steering Committee Presentation #14, results from modeling and monitoring.

Beyond the inequity of air pollution exposure in the PTCA Community, from 1960 to 1995, significant changes happened in Richmond's geography and its economy. Starting in the mid-1970s, the Harbor Redevelopment Project on the city's South Shoreline led to the transformation of the old Inner Harbor Basin (the site of the wartime Kaiser shipyards) into the Marina Bay development, a 350-acre master-planned waterfront community with over 2,000 residential units and 650,000 square feet of commercial space. In addition, Hilltop Mall Regional Shopping Center opened in 1976. Hilltop is a 1.3 million square foot enclosed shopping center located in the northern corner of the City along Interstate 80. Richmond's downtown business district began to decline in the early 1970s as its large retailers (Macy's, J.C. Penney's, Thrifty, and Woolworth's) all either moved to Hilltop or closed their Richmond operations entirely.

Transportation infrastructure changed in 1978 when the proposed Hoffman Freeway (now the Knox Freeway, Interstate 580) was designated a part of the Interstate freeway system, thereby ensuring its construction. Construction was mostly completed by the end of 1991. This freeway crosses Richmond's South Shoreline and connects Interstate 80 with the Richmond-San Rafael Bridge. The freeway provided seven new interchanges along the South Shoreline and has made it an attractive corridor for high-tech industries, business parks, and commercial developments. The construction of another freeway, the Richmond Parkway, began in 1990. The Parkway is a 7 1/2-mile expressway linking the northern edge of Richmond (Interstate 80 at Hilltop) and the City's southwest corner (the new I-580 freeway and the Richmond-San Rafael Bridge). The Parkway has fostered the development of a large industrially zoned area that is becoming a major logistics and distribution hub.

Throughout this history, Chevron has occupied 13% of the land area of the City of Richmond (see Figure 10) and has been its biggest taxpayer. It has grown steadily and remains one of the City's biggest employers, along with Kaiser Permanente, the Social Security Administration, and the City government. Chevron's refinery is the largest on the West Coast of North America and sells \$15-30 billion in finished goods every year (mainly depending on prices), making, on average, well over \$1 billion per year.

The result of the PTCA Community's industrial heritage is a crescent of industrial zoning (shown in purple below) from the southern-most shoreline along the I-580 corridor up to the Chevron

refinery in Point Richmond and bending northeast up to Hilltop and Interstate 80 along the Richmond Parkway and Castro Street. Rail lines exist both within the industrial crescent and through residential neighborhoods.

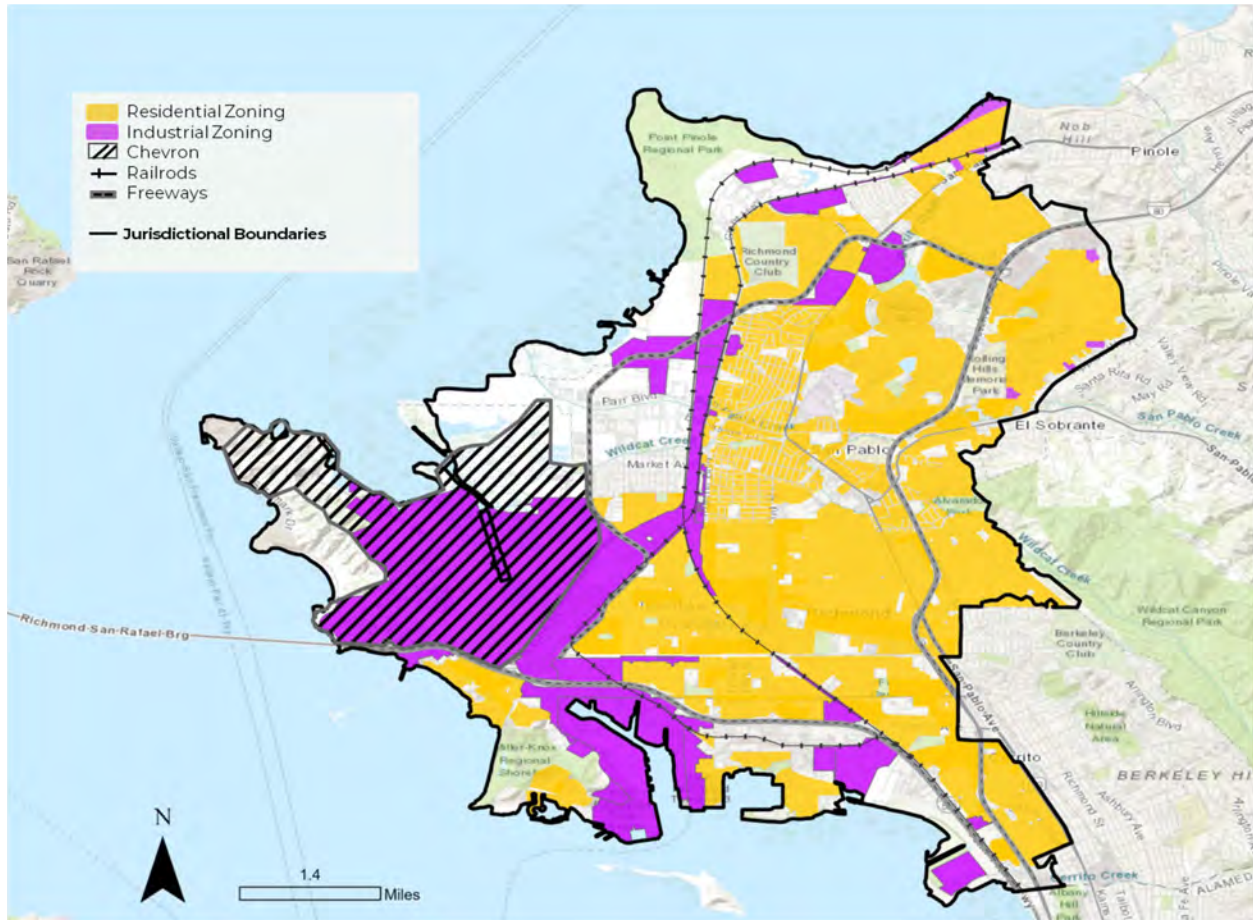


Figure 10. Land Use in the PTCA Community. Source: City of Richmond, City of San Pablo, County of Contra Costa. Note: Many of the “holes” or “breaks” in the “industrial crescent” are due to either no zoning classification for county land in North Richmond or the rezoning of some previously industrial areas to mixed-use – most of the uncolored areas are mixed-use commercial or planned areas. Many of the areas on the shoreline have legacy issues from industrial pollution in the past.

Environmental Justice and Activism in the PTCA Community

The PTCA Community has a long and deep history of environmental and social justice activism in the region. Community members and activists have formed coalitions to unite against fossil fuel operations in our cities and have primarily been led by Black and Brown activists. This section highlights the efforts of several historic and current local organizations that have worked with community members to advocate for more just, equitable, and safe community environments.

Black Panther Party

The Black Panther Party was founded in October 1966 in Oakland and had a significant presence in communities such as North Richmond, where they worked to meet the needs of Black and Brown communities ignored by decision-makers.

West County Toxics Coalition (WCTC)

The West County Toxics Coalition (WCTC) was formed in 1986 and aimed to empower low-income residents in communities of color to exercise greater control over environmental problems generated by the Chevron Refinery and other sources of pollution in Contra Costa County.¹⁵ Residents in this area still face prevalent environmental hazards due to various industries in the area, so WCTC works to empower residents to be actively involved in developing and implementing environmental justice policies and assessing environmental conditions in collaboration with other community residents, activists, and organizations.¹⁶ Efforts include incorporating environmental justice into ordinances in Richmond, Contra Costa County, and the State of California as well as holding regulatory agencies accountable for equitably enforcing environmental laws.¹⁷ WCTC was instrumental in mobilizing thousands of residents between 1989 to 1994 in response to major chemical incidents by the Chevron Oil refinery and General Chemical plant to demand compensation, prevent future incidents, and remediate existing systems.¹⁸

Communities for a Better Environment (CBE)

Communities for a Better Environment (CBE), an environmental justice organization that launched in California in 1978, similarly advocated strongly for greater emissions restrictions and improved safety for the Chevron refinery and decreasing greenhouse gas emissions from Richmond facilities.¹⁹ Along with other community organizations, CBE contributed to organizing efforts, including increased community participation at hearings regarding Chevron, legal organizing, media and outreach efforts, and political advocacy.²⁰ In general, CBE provides low-income residents and communities of color in heavily polluted areas in California with “organizing skills, leadership training, and legal, scientific and technical assistance” to address threats to environmental health.²¹ In addition, CBE is working to “build a just transition from fossil fuels and advocating for clean energy and community-based solutions to fight climate change and build a new economy.”²²

Asian-Pacific Environmental Network (APEN)

Asian-Pacific Environmental Network (APEN) is an environmental justice organization founded in the early 1990s with strong ties to California’s Asian immigrant and refugee communities in the Bay Area.²³ In particular, APEN engaged with the Laotian refugee community in Richmond. These efforts included developing a multi-language seafood consumption guide and community garden projects to engage with the community about toxic substances and their impacts.²⁴ APEN also advocated for the first country-wide Multilingual Warning System following a fire at the Chevron refinery, organized with other community organizations to stop the Chevron refinery from expanding and processing dirtier crude oil, and stopped large developers from transporting dirty coal through the Bay.²⁵ APEN plays a critical role in bringing together

¹⁵ “Welcome.” West County Toxics Coalition, https://dhventures.com/West_home.htm. Accessed 26 June 2023.

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ “Northern California.” Communities for a Better Environment, <https://www.cbecal.org/>. Accessed 26 June 2023.

²⁰ Ibid.

²¹ Ibid.

²² Ibid.

²³ “Home.” Asian Pacific Environmental Network, <https://apen4ej.org/>. Accessed 26 June 2023.

²⁴ Ibid.

²⁵ Ibid.

Asian immigrants in the Oakland and Richmond area to fight for solutions and put power back in the hands of these communities.

Groundwork Richmond

Groundwork Richmond was founded in 2010 and is one of 20 local affiliates of the larger Groundwork USA organization.²⁶ Groundwork Richmond’s mission is to regenerate, improve, and manage the physical environment through developing community-based partnerships, empowering community members and organizations, and promoting environmental, economic, and social well-being.²⁷ Groundwork Richmond’s efforts center on increasing green spaces and the tree canopy in Richmond, monitoring air quality and educating the community on air quality findings, reclaiming vacant lands for conservation and recreation purposes, and providing youth opportunities to engage in science, technology, engineering, art, and math projects.²⁸

Urban Tilth

Urban Tilth was founded in 2005 and focuses on community justice and health by building more sustainable food systems.²⁹ Urban Tilth utilizes school and community gardens and small urban farms to teach community members about growing and cultivating food, feeding the community, restoring relationships with the land, and the relationships between food, health, poverty, and justice.³⁰

Safe Organized Spaces Richmond (SOS Richmond)

Safe Organized Spaces Richmond (SOS Richmond) is a community organization that coordinates with both housed and unhoused residents to advocate for jobs, encampment services, outreach, and safe living spaces as solutions to homelessness.³¹ These efforts include developing safe, sanitary interim housing options with pathways to permanent housing, creating job opportunities for unhoused community members that encourage long-term career development and security, delivering water, sanitation, and hygiene responses and providing amenities to improve unsafe encampment conditions, and building relationships with community members and public agencies.³²

²⁶ “The Groundwork Mission.” Groundwork Richmond, <http://www.groundworkrichmond.org/about.html>. Accessed 26 June 2023.

²⁷ Ibid.

²⁸ Ibid.

²⁹ “About Us.” Urban Tilth, <https://urbantilth.org/about-us/>. Accessed 26 June 2023.

³⁰ Ibid.

³¹ “SOS Mission.” Safe Organized Spaces Richmond, <https://www.sos-richmond.org/what-we-do1.html>. Accessed 26 June 2023.

³² Ibid.

III. Racial Composition

The total population in the PTCA Community is 166,415.³³ Proportionally, there are more people of color in the PTCA Community (82%) than in Contra Costa County as a whole (57%) -- see Figures 11 and 12. Most PTCA geographies - cities and unincorporated areas - within the PTCA boundary are 50% or more Hispanic/Latino, Asian, and Black/African American residents. East Richmond Heights is the only geography within the PTCA Community with a white resident majority.

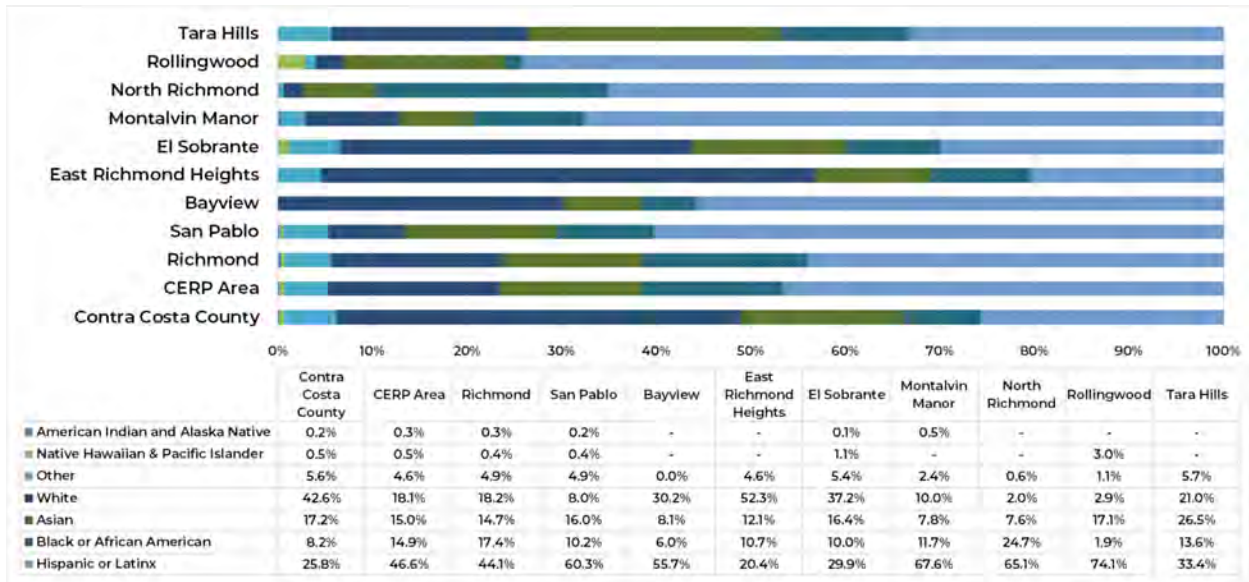


Figure 11. Race Within the PTCA Community. Source: Census Table B03002, HISPANIC OR LATINO ORIGIN BY RACE, Universe: Total population, 2020-2016: ACS 5-Year Estimates Subject Tables. <https://api.census.gov/data/2020/acs/acs5>.

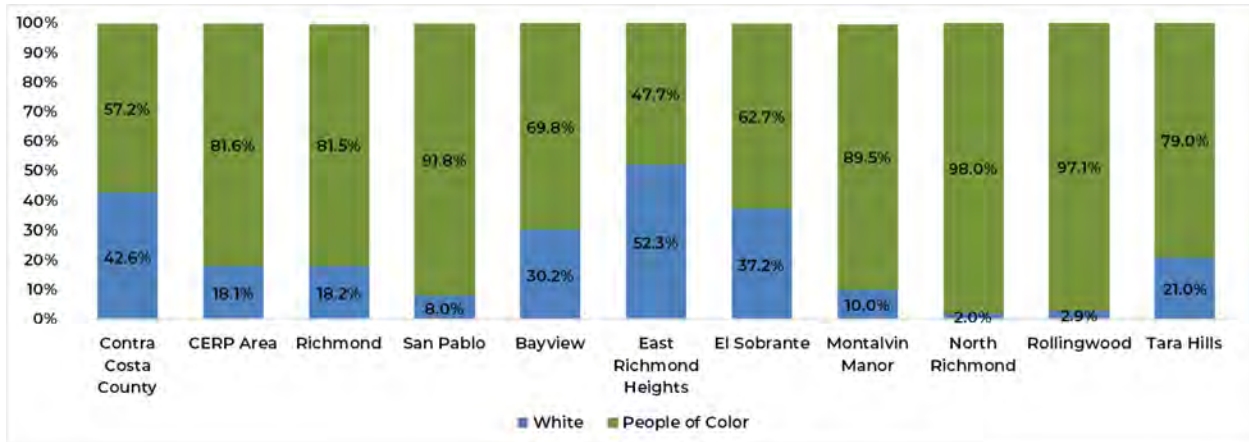


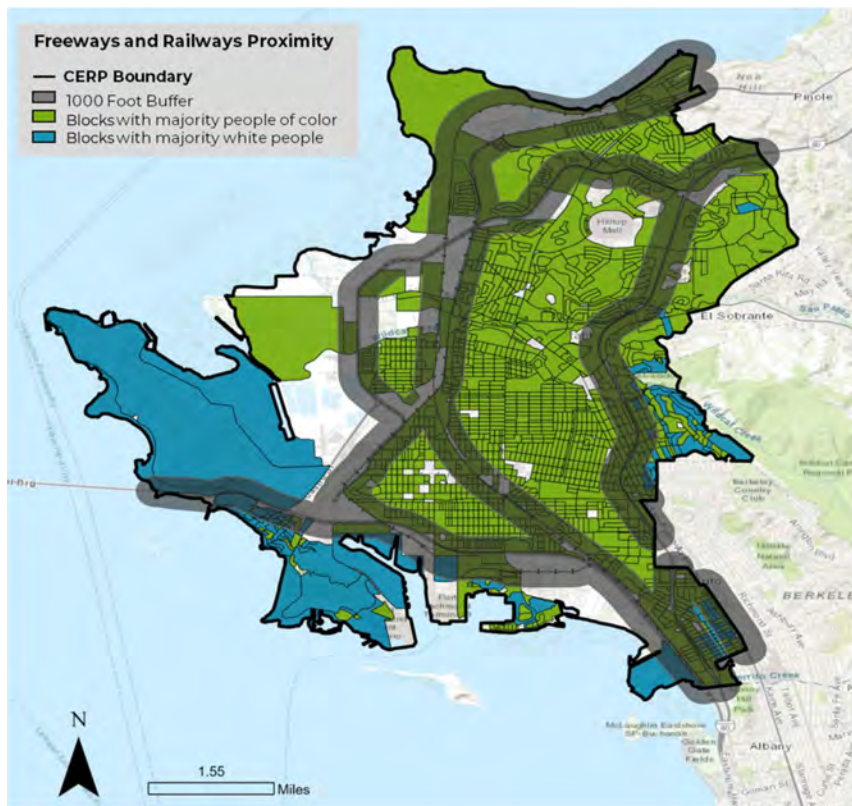
Figure 12. Race by Percent People of Color and Percent White Within the PTCA Community. Source: Census Table B03002, HISPANIC OR LATINO ORIGIN BY RACE, Universe: Total population, 2020-2016: ACS 5-Year Estimates Subject Tables. <https://api.census.gov/data/2020/acs/acs5>.

³³ Source: Census Table P2, HISPANIC OR LATINO, AND NOT HISPANIC OR LATINO BY RACE, 2020, Decennial Census Redistricting Data, Census Blocks, <https://www2.census.gov/programs-surveys/decennial/2020/data/>

IV. Pollution Burden

Exposure

Communities of color and low-income communities across the United States experience higher exposure to air pollution than other communities, making air pollution exposure a national environmental justice issue.³⁴ ³⁵ ³⁶ This pattern holds true for the PTCA Community, where most census blocks within 1,000 feet of a freeway or railway have a population of 50% or more people of color (this excludes blocks with a population of zero) -- see Figure 13 below. Living or working near highly trafficked freeways, industries with emitted pollutants, railway and rail yards, and marine ports often lead to greater exposure to air pollutants, particularly to fine particulate matter of diameters smaller than 2.5 micrometers (PM_{2.5}), increasing the risk of adverse health effects.³⁷ The pollution burden is addressed in greater detail in the Technical Assessment section in Chapter 5.



³⁴ Environmental Defense Fund. *Analysis of PM_{2.5}-Related Health Burdens Under Current and Alternative NAAQS*. 15 Apr. 2022, <https://globalcleanair.org/files/2022/05/Analysis-of-PM2.5-Related-Health-Burdens-Under-Current-and-Alternative-NAAQS.pdf>.

³⁵ Tessum, Christopher W., et al. "PM_{2.5} Polluters Disproportionately and Systemically Affect People of Color in the United States." *Science Advances*, vol. 7, no. 18, 2021, p. eabf4491.

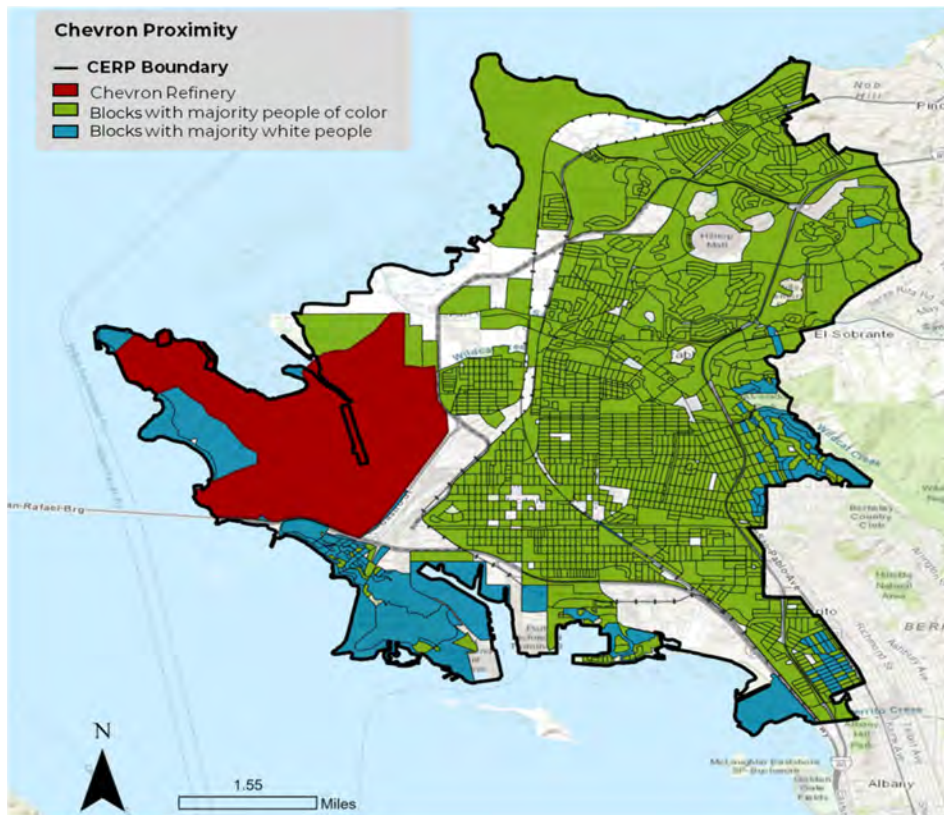
³⁶ Jbaily, Abdulrahman, et al. "Air Pollution Exposure Disparities across U.S. Population and Income Groups." *Nature*, vol. 601, no. 7892, 2022, pp. 228–33.

³⁷ U.S. EPA, ORD. *Research on Near Roadway and Other Near Source Air Pollution*. 16 July 2014, <https://www.epa.gov/air-research/research-near-roadway-and-other-near-source-air-pollution>.

Figure 13. Freeways and Railways Proximity to Census Block by Race. Source: Census Table P2, HISPANIC OR LATINO, AND NOT HISPANIC OR LATINO BY RACE, 2020, Decennial Census Redistricting Data, <https://www2.census.gov/programs-surveys/decennial/2020/data/>.

For many air pollutants, the Chevron Refinery is by far the largest single generator of emissions in the area. For example, Chevron emits more of the criteria air pollutants, such as fine particulate matter (PM_{2.5}) and sulfur dioxide, than all other sources in the community-scale emissions inventory combined, and the refinery is also the largest source of numerous toxic air contaminants, such as hydrogen cyanide, sulfuric acid, manganese, and hydrogen sulfide. Criteria air pollutants are six common air pollutants that the U.S. EPA has determined ambient air quality standards for ground-level ozone, particulate matter, carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead.³⁸ Toxic air contaminants are air pollutants that are known to increase the risk of cancer and/or other health effects.³⁹

Of the neighborhoods close to the Chevron Refinery, only one has a majority white population - Point Richmond. The other Richmond neighborhoods near Chevron (North Richmond, the Iron Triangle, Atchison Village, Santa Fe, and Shields-Reid) have populations of at least 50% of people of color (excluding blocks with zero population) -- see Figure 14.



³⁸ *Criteria Air Pollutants*. CARB. (n.d.). <https://www2.arb.ca.gov/our-work/programs/criteria-air-pollutants/about>

³⁹ *Toxic Air Contaminants*. Bay Area Air Quality Management District. (n.d.). <https://www.Air District.gov/about-air-quality/research-and-data/emission-inventory/toxic-air-contaminants>

Figure 14. Chevron Proximity to Census Block by Race. Source: Census Table P2, HISPANIC OR LATINO, AND NOT HISPANIC OR LATINO BY RACE, 2020, Decennial Census Redistricting Data, <https://www2.census.gov/programs-surveys/decennial/2020/data/>.

We can examine the Air District’s Rule 6-5 analysis to investigate PM_{2.5} exposure to Chevron emissions by race. Please note that while these results include the PTCA Community, they also include areas beyond the PTCA Community that are also exposed to Chevron emissions, as a larger modeling domain was used for Rule 6-5.

The analysis shows that, on average, African American/Black residents are the most exposed to PM_{2.5} from Chevron in all modeled results, and white residents are the least exposed (see Figure 15 below). Sources other than the refinery Fluidized Catalytic Cracking Unit (FCCU), which is used in the refining process and results in air pollution emissions, drive these disparities.

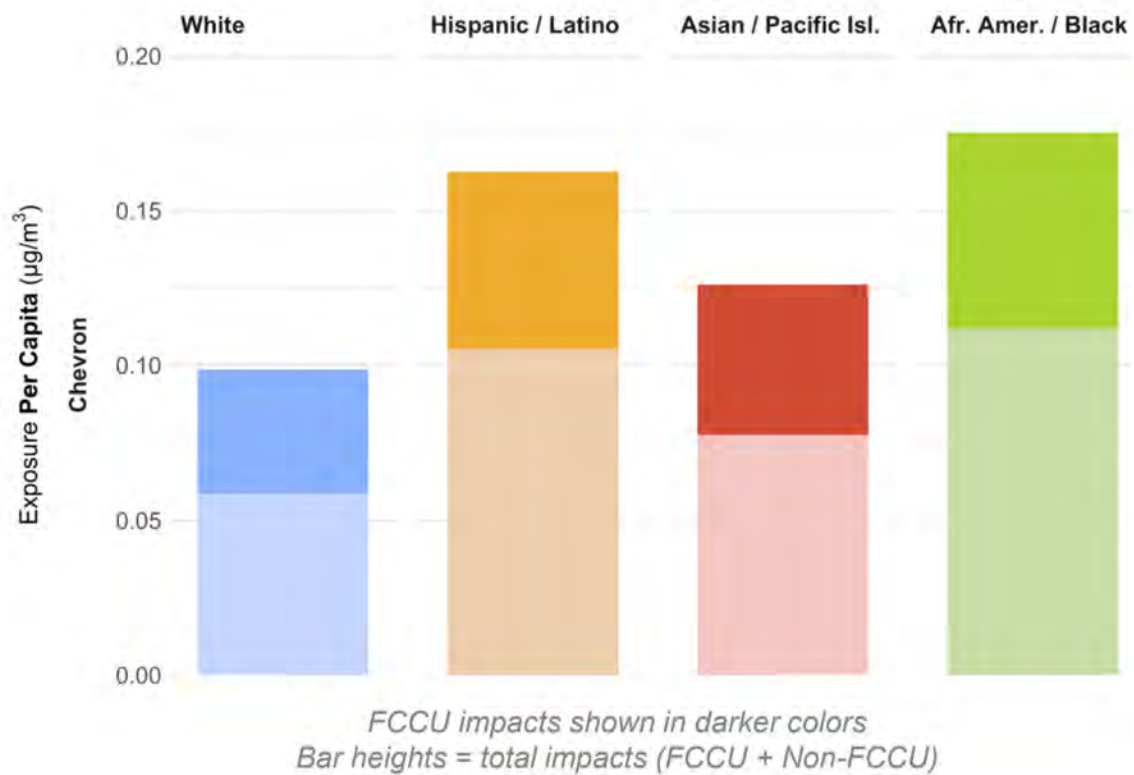


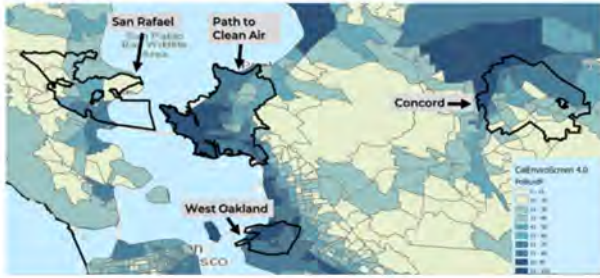
Figure 15. Disparities in PM_{2.5} Exposure from Chevron. Source: Bay Area Air Quality Air District. See Figure 5-22 in Chapter 5. Disparities in PM_{2.5} exposure resulting from emissions from the Chevron Refinery.

Pollution Comparisons

It is helpful to profile the differences between relatively non-industrial cities such as Concord and San Rafael and communities with industrial areas such as the PTCA Community and West Oakland. To make comparisons, we use CalEnviroScreen 4.0, a tool from OEHHA, which compares pollution burdens across census tracts throughout California.

CalEnviroScreen 4.0 shows us that over 32% of our PTCA Community census tracts are in the top quartile of California census tracts for pollution burden – a composite indicator – while Concord and San Rafael are less impacted by the pollution burden (see Figure 16 below).

Pollution Burden Percentile
Percentile of combined Exposures and Environmental Effects Indicators



Pollution Burden Percentile

Most West Oakland's tracts rank as highly impacted percentiles (76th +) for *Pollution Burden* impact. Path to Clean Air tracts are distributed more equally across the 26th to 100th percentile range. Populations in these tracts have high cumulative exposures and hazards (see right).

Percentile	Path to Clean Air	West Oakland	Concord	San Rafael	Total Tracts
Low (0-25)	1	0	11	4	16
Medium (26-50)	8	0	8	4	20
Medium-High (51-75)	10	5	5	1	21
High (76-100)	9	8	1	2	20
Total Tracts	28	13	25	11	

Pollution Burden

Exposures

- Air Quality Index
- Hazardous Waste
- Lead
- Noise
- Pesticides
- Radon
- Traffic
- Water Quality

Environmental Effects

- Asthma
- Cancer
- Cardiovascular Disease
- Diabetes
- High Blood Pressure
- Lung Disease
- Reproductive and Birth Defects

Figure 16. Pollution Burden Percentiles.

CalEnviroScreen shows that over half of our PTCA Community census tracts are in the top quartile of California census tracts for toxic release emissions, as are other census tracts close to refineries such as Rodeo and parts of Martinez, while toxic emissions impact Concord and San Rafael less (see Figure 17 below).⁴⁰ It should be noted that other communities with refineries in Contra Costa County, such as Martinez and Rodeo, also have pollution burdens and health profiles almost identical to the half of our PTCA Community closest to the Chevron refinery. The strategies we recommend for our PTCA Community will be relevant to other refinery towns in California.

Toxic Releases from Facilities
Toxicity-weighted concentrations of modeled chemical releases to air from facility emissions and off-site incineration (averaged over 2017 to 2019)



Toxic Releases Percentile

More than half of Path to Clean Air tracts rank as highly impacted percentiles (76th +) for the *Toxic Releases* Indicator. West Oakland tracts are largely in the 51-75th percentile range.

Percentile	Path to Clean Air	West Oakland	Concord	San Rafael	Total Tracts
Low (0-25)	0	0	0	0	0
Medium (26-50)	0	1	0	10	11
Medium-High (51-75)	13	12	25	1	51
High (76-100)	15	0	0	0	15
Total Tracts	28	13	25	11	

Figure 17. Toxic Releases from Facilities and Toxic Releases Percentile.

16% of census tracts in Concord are in the top quartile for DPM emissions, and San Rafael does not have any census tracts in the top quartile (see Figure 18 below). Our PTCA Community and West Oakland are far more impacted.

⁴⁰ August, Laura. "CalEnviroScreen 4.0." OEHA, 20 Sept. 2021, <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>.

Diesel Particulate Matter

Spatial distribution of gridded diesel PM emissions from on-road and non-road sources 2016 (tons/year).



Diesel Particulate Matter Percentile

All West Oakland tracts rank as highly impacted percentiles (76th +) for the Diesel Particulate Matter Indicator. More than half of Path to Clean Air tracts also rank as highly impacted percentiles.

Percentile	Path to Clean Air	West Oakland	Concord	San Rafael	TOTAL
Low (0-25)	0	0	8	2	10
Medium (26-50)	1	0	7	4	12
Medium-High (51-75)	6	0	6	5	17
High (76-100)	21	13	4	0	38
Total Tracts	28	13	25	11	

NOTE: Diesel PM emissions in CalEnviroScreen are from 2016 and won't necessarily match up with the BAAQMD 2019 inventory developed for the PTCA study area. However, the percentiles discussed here won't likely change much whether 2016 or 2019 DPM emissions were used.

Figure 18. DPM and DPM Percentile.

The CalEnviroScreen 4.0 database shows all comparison geography census tracts as mostly average or below average in terms of PM_{2.5} measurements (see Figure 19 below). However, the CalEnviroScreen 4.0 PM index is an estimate of the total annual average concentration, so local emissions contributions, concentrations, and exposures will look different (see Chapter 5 for more information).

PM 2.5

Annual mean concentration of PM_{2.5} (weighted average of measured monitor concentrations and satellite observations, µg/m³), over three years (2015 to 2017).



PM2.5 Percentile

None of Path to Clean Air tracts rank in the top 50 percentiles for the PM_{2.5} Indicator.

Percentile	Path to Clean Air	West Oakland	Concord	San Rafael	Total Tracts
Low (0-25)	0	0	0	11	11
Medium (26-50)	28	9	25	0	62
Medium-High (51-75)	0	4	0	0	4
High (76-100)	0	0	0	0	0
Total Tracts	28	13	25	11	

NOTE: CARB, local air pollution control districts, tribes and federal land managers all maintain a wide network of air monitoring stations in California. However, in the Bay Area, the Bay Area Air Quality Management District maintains the network of air monitoring stations throughout.

Figure 19. PM_{2.5} and PM_{2.5} Percentile.

When looking at our local Emissions Inventory, Concord is similar to San Rafael, and both are very different from the PTCA Community and West Oakland regarding toxic air contaminants. We would like more data on which toxic air contaminants (TACs) are present and at what levels. TACs include DPM, ammonia, arsenic, nickel, formaldehyde, hydrogen cyanide, hydrogen sulfide, sulfuric acid, manganese, arsenic, and diethanolamine.

Table 1. Pollution Comparisons - Permitted Sources from Air District Emissions Inventories.

Metric	PTCA Community	San Rafael	Concord	West Oakland
Population	159,000	61,000	125,000	26,000
Permitted Sources	303	146	153	205
TACs in Inventory	79	33	23	50

Metric	PTCA Community	San Rafael	Concord	West Oakland
TAC Emissions (tons per year)	284.1	7.1	7.3	31.7
PM _{2.5} Emissions (tons per year)	502.8	7.6	0.7	17.8

Note: The number of permitted sources includes large and small businesses.

The PTCA Community is exposed to more chemical emissions that are absent or are only present in very small amounts in San Rafael and Concord, cities that have less industrial land use and fewer industrial activities. The comparisons might look different for largely suburban cities like Walnut Creek or San Ramon without industrial sources of air pollution.

Table 2. TAC Emissions Comparisons - Permitted Sources from Air District Emission Inventories.

Pollutant	Emissions (lbs./year)			
	PTCA Community	San Rafael	Concord	West Oakland
Manganese	2,282.87	0.07	0.04	N/A
Nickel Compounds	300.44	0.80	0.51	0.07
Sulfuric Acid	18,134.12	N/A	7.03	N/A
Hydrogen Cyanide	91,667.17	N/A	N/A	N/A
Hydrochloric Acid	33,846.32	7.06	N/A	124.70
Formaldehyde	21,920.19	145.15	158.34	3,073.31
Benzene	7,001.52	138.57	241.35	1,467.77
Arsenic	32.25	0.02	0.01	0.05
Diethanolamine	2,994.27	N/A	N/A	N/A
Hydrogen Sulfide	8,716.54	N/A	N/A	4,923.07

The attributable number of deaths, premature deaths, and cases of disease related to air pollution can be found in academic literature.^{41 42 43} While it is not a part of Air District's methodologies for CERPs currently, estimates of attributable numbers of premature death and new cases of disease from air pollution would be valuable information for the PTCA Community and would help measure the health impacts of air pollutants for community members.

Air pollution exposure from sources like freeways, railways, and Chevron, along with other factors such as noise pollution, can potentially repress housing prices as buyers reject 'unhealthy' neighborhood environments. As air pollution affects property values, it can also lower property tax revenues received by cities and counties, making them less able to provide services and programs that mitigate or reduce air pollution.

V. Health Impacts

Exposure to air pollution increases the risk of numerous diseases and health issues. Reducing air pollution exposure to protect our community members' health is a primary purpose of our PTCA Plan.

Health outcomes in the U.S. also are closely linked with economic, social, and environmental advantages or disadvantages, which can result in disparities or inequities between groups of people and their health outcomes - such as higher mortality rates. Health disparities adversely affect people who have experienced systematic social or economic obstacles to health care and healthy environments based on their racial or ethnic group, socioeconomic status, gender, age, mental health or ability, and other characteristics linked to discrimination or exclusion. In the United States, research on air pollution disparities shows that census tracts with a majority of people of color or low-income populations are correlated with increased exposure to fine particulate matter (PM_{2.5}).⁴⁴ Academic literature also documents that in the U.S., people of color and low-income people have a higher risk of death from being exposed to PM_{2.5}.^{45 46 47 48} The burden of death attributed to PM_{2.5} is especially high for Black and Hispanic populations.⁴⁹ Racist and exclusionary practices, such as redlining and racial covenants, have systematically

⁴¹ Southerland, Veronica A., et al. "Assessing the Distribution of Air Pollution Health Risks within Cities: A Neighborhood-Scale Analysis Leveraging High-Resolution Data Sets in the Bay Area, California." *Environmental Health Perspectives*, vol. 129, no. 3, p. 037006. [ehp.niehs.nih.gov \(Atypon\), https://doi.org/10.1289/EHP7679](https://doi.org/10.1289/EHP7679).

⁴² Environmental Defense Fund. *Analysis of PM_{2.5}-Related Health Burdens Under Current and Alternative NAAQS*. 15 Apr. 2022. <https://globalcleanair.org/files/2022/05/Analysis-of-PM2.5-Related-Health-Burdens-Under-Current-and-Alternative-NAAQS.pdf>.

⁴³ Anenberg, Susan C., et al. "Particulate Matter-Attributable Mortality and Relationships with Carbon Dioxide in 250 Urban Areas Worldwide." *Scientific Reports*, vol. 9, no. 1, 1, Aug. 2019, p. 11552. [www.nature.com, https://doi.org/10.1038/s41598-019-48057-9](https://doi.org/10.1038/s41598-019-48057-9).

⁴⁴ Colmer, Jonathan, et al. "Disparities in PM_{2.5} air pollution in the United States." *Science* 369.6503 (2020): 575-578.

⁴⁵ Di, Qian, et al. "Air Pollution and Mortality in the Medicare Population." *New England Journal of Medicine*, vol. 376, no. 26, 2017, pp. 2513-22.

⁴⁶ Bell, Michelle L., et al. "Evidence on Vulnerability and Susceptibility to Health Risks Associated with Short-Term Exposure to Particulate Matter: A Systematic Review and Meta-Analysis." *American Journal of Epidemiology*, vol. 178, no. 6, 2013, pp. 865-76.

⁴⁷ Wang, Yan, et al. "Long-Term Exposure to PM_{2.5} and Mortality among Older Adults in the Southeastern U.S." *Epidemiology (Cambridge, Mass.)*, vol. 28, no. 2, 2017, p. 207.

⁴⁸ Kioumourtzoglou, Marianthi-Anna, et al. "PM_{2.5} and Mortality in 207 U.S. Cities: Modification by Temperature and City Characteristics." *Epidemiology (Cambridge, Mass.)*, vol. 27, no. 2, 2016, p. 221.

⁴⁹ Environmental Defense Fund. *Analysis of PM_{2.5}-Related Health Burdens Under Current and Alternative NAAQS*. 15 Apr. 2022. <https://globalcleanair.org/files/2022/05/Analysis-of-PM2.5-Related-Health-Burdens-Under-Current-and-Alternative-NAAQS.pdf>.

located people of color and low-income people near sources of air pollution, leading to high levels of exposure and health disparities.^{50 51}

Social determinants of health (SDH) are social conditions that influence health outcomes. The World Health Organization states SDHs are a “[...] set of forces and systems shaping the conditions of daily life. These forces and systems include economic policies and systems, development agendas, social norms, social policies, and political systems. [...] Research shows that the social determinants can be more important than health care or lifestyle choices in influencing health.”⁵²

As an example, note that health insurance coverage is a social determinant of health (SDH), as possessing health insurance increases access to health care and improves health outcomes.

In the PTCA Community, fewer people have health insurance coverage than in Contra Costa County (see Figure 20 below).

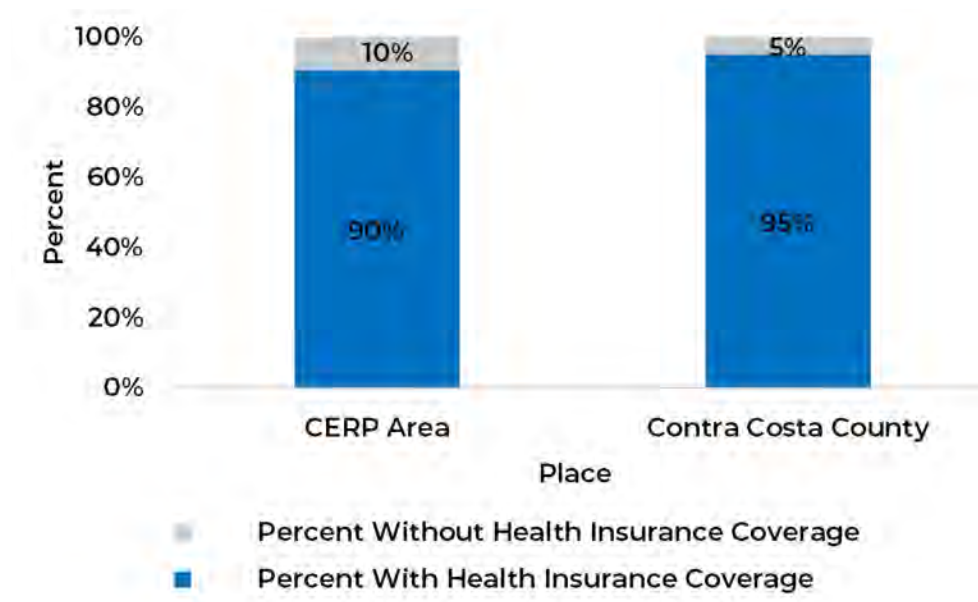


Figure 20. Health Insurance Coverage in the PTCA Community and Contra Costa County. Source: Census Table DP03, SELECTED ECONOMIC CHARACTERISTICS, 2020-2016: ACS 5-Year Estimates Subject Tables. <https://api.census.gov/data/2020/acs/acs5/profile>.

Air pollution damages not only the lungs and airways but also other organs in the body. A study by the Forum of International Respiratory Societies in 2019 estimated that “[...] about 500,000 lung cancer deaths and 1.6 million COPD [chronic obstructive pulmonary disease] deaths can be attributed to air pollution, but air pollution may also account for 19% of all cardiovascular

⁵⁰ Lane, Haley M., et al. "Historical Redlining Is Associated with Present-Day Air Pollution Disparities in U.S. Cities." *Environmental Science & Technology Letters* 9.4 (2022): 345-350.

⁵¹ Hajat, Anjum, Charlene Hsia, and Marie S. O'Neill. "Socioeconomic disparities and air pollution exposure: a global review." *Current environmental health reports* 2.4 (2015): 440-450.

⁵² Social Determinants of Health. <https://www.who.int/health-topics/social-determinants-of-health>. Accessed 18 May 2022.

deaths and 21% of all stroke deaths.”⁵³ Air pollution also has been linked to poor cognitive function, increased risk of dementia, allergic responses, diabetes mellitus prevalence, morbidity, and mortality. Air pollution is primarily a man-made phenomenon, and therefore, it and its health effects are potentially preventable. (ibid) Air pollution is especially harmful to fetuses and children and has been linked to childhood leukemia, delayed psychomotor development, lower child intelligence, and stunted lung development in childhood – a predictor for lung impairment in adults. (ibid) For children, PM_{2.5} has been associated with an increased incidence of ADHD.⁵⁴ Ultrafine particulate matter (PM_{0.1}) exposure for pregnant women may increase the risk of low birth weight, especially in those living within 50 meters of heavy traffic.⁵⁵

Life Expectancy

Life expectancy is arguably the most important measure of health, broadly speaking. Epidemiological studies from the 1990s analyzed the correlation between PM exposure and premature mortality, finding that long-term exposure to PM is associated with an increased risk of death by all cardiovascular causes.⁵⁶ This conclusion suggests that reducing PM levels would prevent premature deaths and extend average life expectancy. In 2009, Pope et al. examined data on life expectancy and other socioeconomic and demographic characteristics in addition to fine particulate matter air pollution concentrations for 211 counties in 51 metropolitan areas in the United States between the late 1970s and the early 2000s.⁵⁷ This study found that a 10 µg per cubic meter decrease in fine particulate matter concentration was associated with an increase in average life expectancy of 0.61±0.20 years, or approximately 7.3 (±2.4) months. Further, this study concluded that reductions in air pollution contributed to significant and measurable improvements in United States life expectancy, accounting for up to 15% of the overall increase in life expectancy in the study areas.⁵⁸ In a separate data analysis from 1990 to 2008, Bay Area Air Quality Management District staff similarly estimated that air quality improvements increased the average life expectancy per person in the Bay Area by approximately six months.⁵⁹

More recently, a 2019 study by the Public Library of Science estimated the health and longevity impacts of current PM_{2.5} concentrations in the U.S., looking at life expectancy, among other impacts. It found that the estimated deaths from PM_{2.5} “[...] would lower national life expectancy by an estimated 0.15 years (0.13–0.17) for women and 0.13 years (0.11–0.15) for men.” A 2020 study published in *Cardiovascular Research* found that exposure to ambient air pollution is a leading cause of excess mortality and can cause a significant loss of life expectancy, mainly through cardiovascular and respiratory diseases.⁶⁰ This study utilized a data-informed atmospheric model and global exposure mortality model to analyze exposure to PM_{2.5}

⁵³ Schraufnagel, Dean E., et al. “Air Pollution and Noncommunicable Diseases: A Review by the Forum of International Respiratory Societies’ Environmental Committee, Part 2: Air Pollution and Organ Systems.” *Chest*, vol. 155, no. 2, 2019, pp. 417–26.

⁵⁴ Yuchi, Weiran, et al. “Neighborhood Environmental Exposures and Incidence of Attention Deficit/Hyperactivity Disorder: A Population-Based Cohort Study.” *Environment International*, vol. 161, Mar. 2022, p. 107120. ScienceDirect, <https://doi.org/10.1016/j.envint.2022.107120>.

⁵⁵ Laurent, Olivier, et al. “Sources and contents of air pollution affecting term low birth weight in Los Angeles County, California, 2001–2008.” *Environmental research* 134 (2014): 488-495.

⁵⁶ Bay Area Air Quality Management District. (2012). *Understanding Particulate Matter: Protecting Public Health in the San Francisco Bay Area*.

⁵⁷ Pope, C. A., Ezzati, M., & Dockery, D. W. (2009). Fine-particulate air pollution and life expectancy in the United States. *New England Journal of Medicine*, 360(4), 376–386. <https://doi.org/10.1056/nejmsa0805646>

⁵⁸ Ibid.

⁵⁹ Bay Area Air Quality Management District. (2012). *Understanding Particulate Matter: Protecting Public Health in the San Francisco Bay Area*.

⁶⁰ Lelieveld, J., Pozzer, A., Pöschl, U., Fnais, M., Haines, A., & Münzel, T. (2020). Loss of life expectancy from air pollution compared to other risk factors: A worldwide perspective. *Cardiovascular Research*, 116(11), 1910–1917. <https://doi.org/10.1093/cvr/cvaa025>

and loss of life expectancy in comparison to other global risk factors and concluded that the loss of life expectancy due to PM_{2.5} exposure “surpasses that of HIV/AIDS, parasitic, vector-borne, and other infectious diseases by a large margin” and “exceeds the [loss of life expectancy] due to all forms of violence by an order of magnitude and that of smoking by a third.”⁶¹

The 2019 study by the Public Library of Science also found that in the U.S., “[a]t any PM_{2.5} concentration, life expectancy loss was, on average, larger in counties with lower income and higher poverty rate than in wealthier counties.”⁶² In the U.S., poverty rates in 2020 were highest for Black (19.5%) and Hispanic (17%) people. This is compared to 8.2% of white people in poverty, and 8.1% of Asian people in poverty.⁶³ In sum, exposure to air pollution is associated with a reduced life expectancy, and low-income people of color can be expected to bear the brunt of this effect.

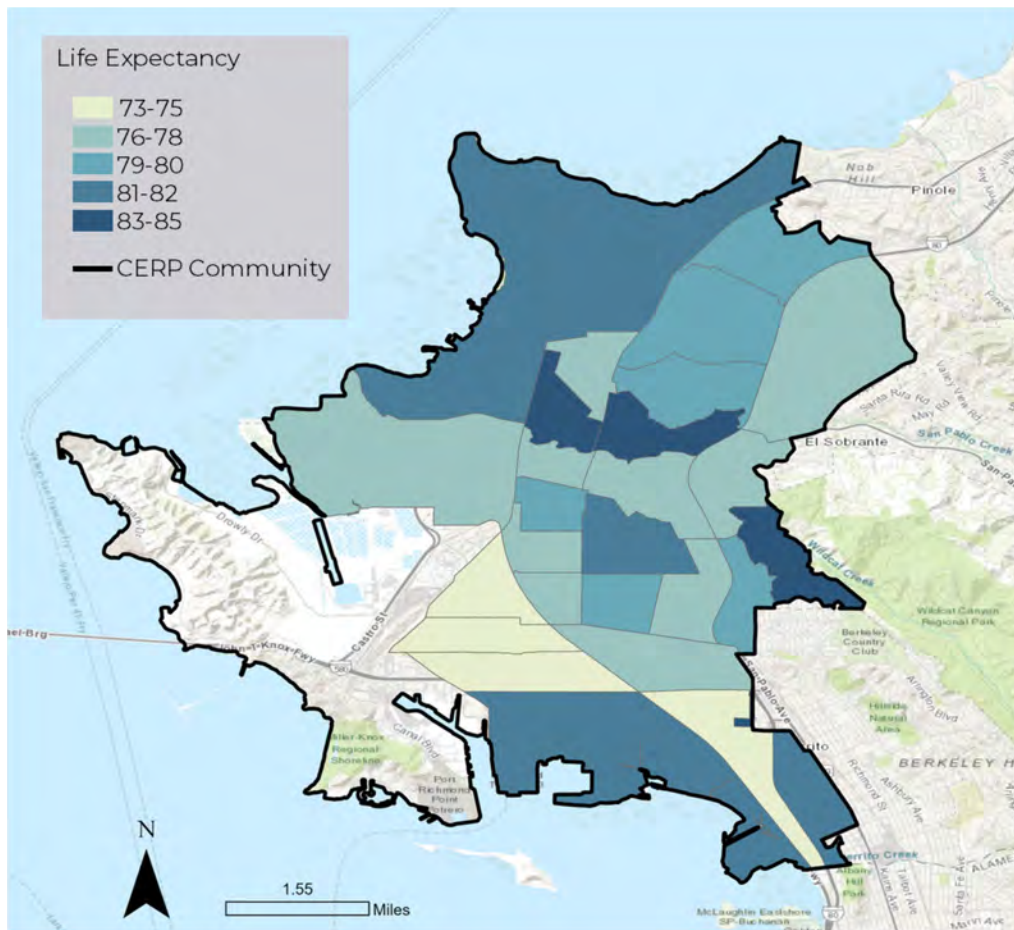


Figure 21. Life Expectancy (2010-2015). National Center for Health Statistics. U.S. Small-Area Life Expectancy Estimates Project (USALEEP): Life Expectancy Estimates File for {Jurisdiction}, 2010-2015]. National Center for Health Statistics. 2018. Available from: <https://www.cdc.gov/nchs/nvss/usaleep/usaleep.html>.

⁶¹ Ibid.

⁶² Bennett, James E., et al. “Particulate Matter Air Pollution and National and County Life Expectancy Loss in the USA: A Spatiotemporal Analysis.” PLOS Medicine, vol. 16, no. 7, July 2019, p. e1002856. PLoS Journals, <https://doi.org/10.1371/journal.pmed.1002856>.

⁶³ Bureau, U.S. Census. “Income and Poverty in the United States: 2020.” Census.Gov, <https://www.census.gov/library/publications/2021/demo/p60-273.html>. Accessed 5 July 2022.

In the PTCA Community, the lowest life expectancy is seen in the census tracts around the Iron Triangle neighborhood, an area with low median household income (see Figure 21 above). East Richmond Heights is the wealthiest part of the PTCA Community, and it has the highest life expectancy. The estimates below are older data from 2010-2015.

Mortality

In the PTCA Community, mortality rates by race – the number of deaths in a population for a given time period – are only available for the cities of Richmond and San Pablo (combined) and Contra Costa County. Due to census data limitations, we must use crude mortality rates, which are based solely on the populations of Richmond and San Pablo, are not adjusted and, therefore, cannot be compared to other geographies. Looking at crude rates for various mortality indicators related to air pollution, we see that Black residents, followed by white residents, in Richmond and San Pablo have the highest rates (see Figure 22 below). * Black residents in Contra Costa County, which includes the PTCA Community, also have the highest rates of asthma emergency department visits. Note that when the numbers of American Indians or Alaskan Native (AIAN) are significant (over ten) and can be reported, such as for mortality, their rates are very high as well.

**Age-adjusted rates are preferable to crude rates. However, age-adjusted rates require decennial census detailed tables that include specific age breakdowns. Age-adjusting rates are a way to make fairer comparisons between groups with different age distributions. For example, Contra Costa County has a higher percentage of elderly people and, therefore, may have a higher rate of death or hospitalization than the PTCA Community with its younger population because the elderly are more likely to die or be hospitalized. Keep this caveat in mind when looking at the crude rates in the following graphs.*

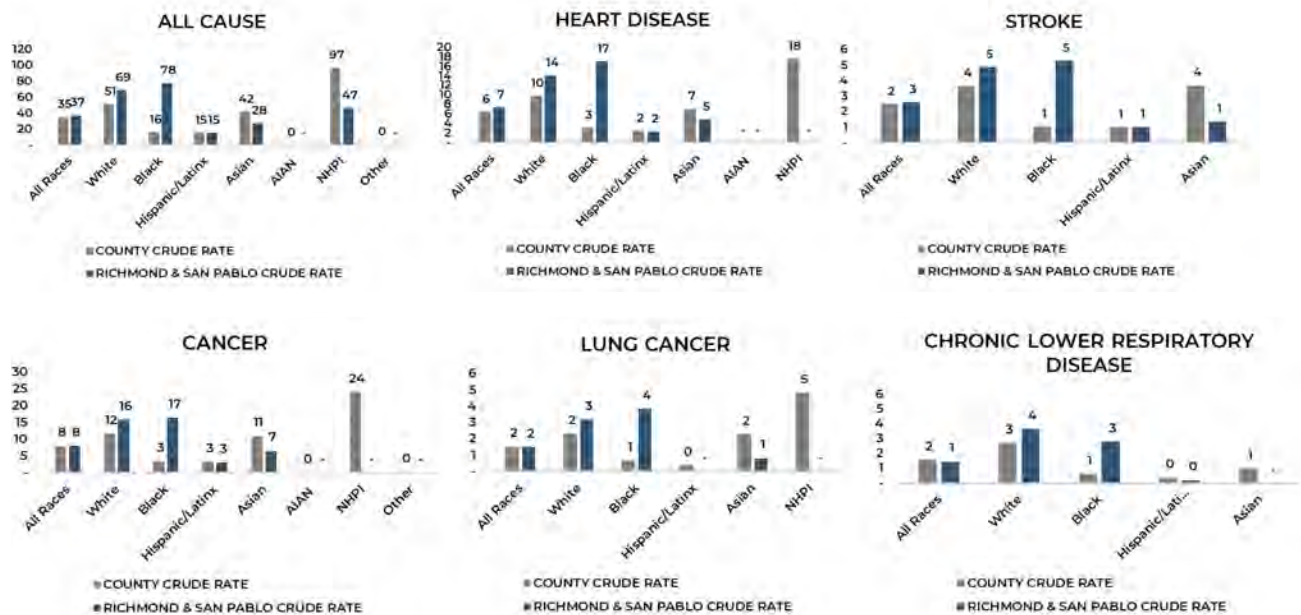


Figure 22. Mortality Rates by Race for Air Pollution-Related Diseases (rates are per 1,000 people) Sources: Mortality numbers are from the California Comprehensive Death Files 2016,2017,2018,2019,2020 Access through Vital Registration Business Information System 8/2021. Population information is from the census: 2Table B03002 HISPANIC OR LATINO ORIGIN BY RACE 2020, 2020-2016 ACS 5-year estimates.

Note: All rates per 1,000 people. All measures associated with counts < 11 are excluded for data de-identification purposes.

Low Birth Weight

An article from 2017 describes low birth weight as “[...] associated with long-term neurologic disability, impaired language development, impaired academic achievement, and increased risk of chronic diseases including cardiovascular disease and diabetes.”⁶⁴ Prenatal exposure to air pollutants, especially PM_{2.5}, is associated with an increased risk of low birth weight.⁶⁵

Within Richmond and San Pablo, Black, and Asian residents have the highest rates of low-birth-weight births (see Figure 23 below). For most races, the rates for Richmond and San Pablo are the same or higher than the county rates.

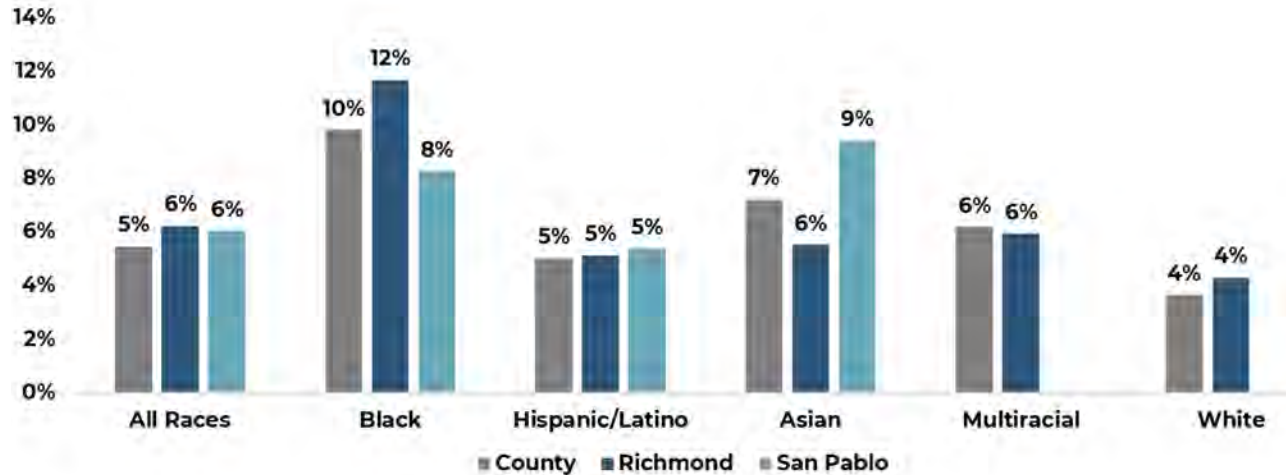


Figure 23. Percent of Low-Weight Births by City, Contra Costa County, and Race. Source: Provided by the Contra Costa County Health Department, California Comprehensive Birth Files 2016, 2017, 2018, 2019, 2020, accessed through Vital Registration Business Information System 8/2021

Note: Percent of Singleton Live Births with Birthweight < 2500g.

Asthma

For asthma, emergency department visit rates are the most common indicator of severe asthma events. For ordinary or daily asthma data we have no comprehensive data. For example, there is no automated or centralized tracking of variables like children’s daily inhaler use. The rate of asthma emergency department visits by race and age are only available for the PTCA Community by ZIP code. See below for a reference map of the ZIP code areas inside the PTCA boundary.

⁶⁴ Cutland, Clare L., et al. “Low Birth Weight: Case Definition & Guidelines for Data Collection, Analysis, and Presentation of Maternal Immunization Safety Data.” *Vaccine*, vol. 35, no. 48Part A, Dec. 2017, pp. 6492–500. PubMed Central, <https://doi.org/10.1016/j.vaccine.2017.01.049>.

⁶⁵ Li, Changlian, et al. “Maternal Exposure to Air Pollution and the Risk of Low Birth Weight: A Meta-Analysis of Cohort Studies.” *Environmental Research*, vol. 190, Nov. 2020, p. 109970. ScienceDirect, <https://doi.org/10.1016/j.envres.2020.109970>.

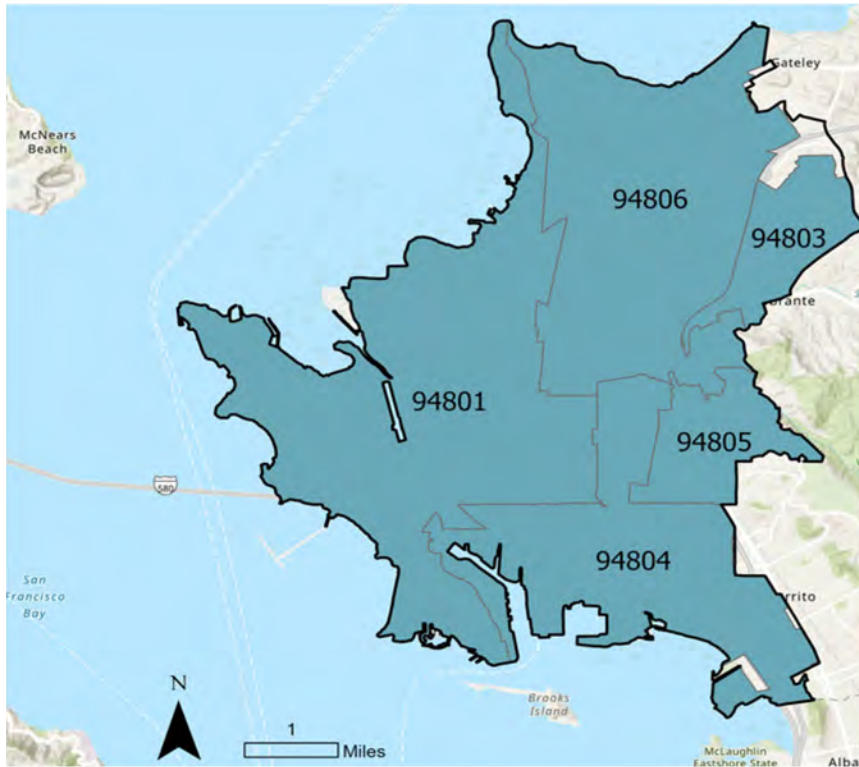


Figure 24. ZIP Code Areas inside the PTCA Boundary.

Black residents experience higher rates of asthma emergency department visits than all other racial groups (see Figure 25 below).

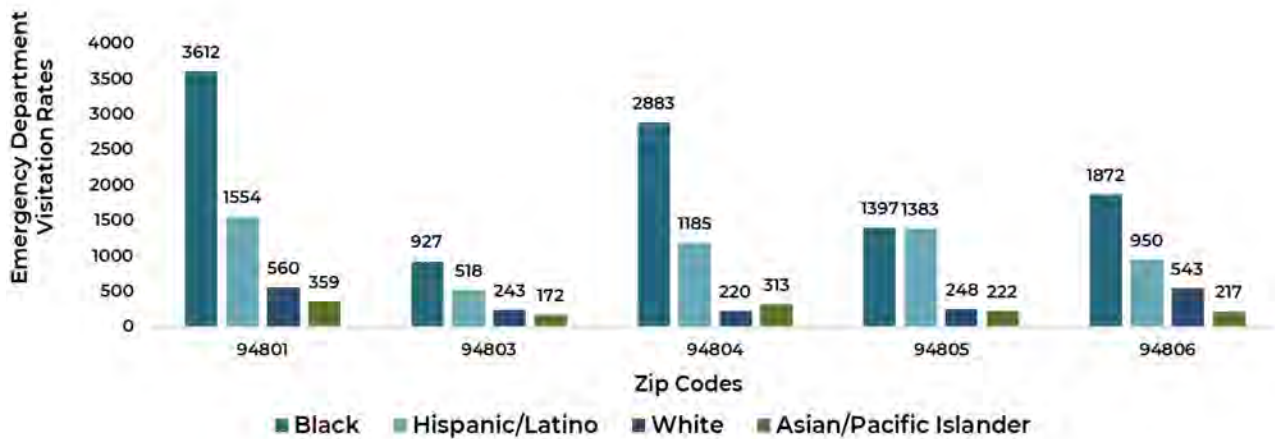


Figure 25. Asthma Emergency Department Visits by Race and Zip Code (Rate per 10,000 people between 2016-2020).
Source: 2016-2020. CA Department of Public Health:
<https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHIB/CPE/Pages/CaliforniaBreathingCountyAsthmaProfiles.aspx>.

The rate of asthma emergency department visits by age for Contra Costa County for the years 2016 through 2020, shows that children under age five remain the most impacted group (Figure 26).

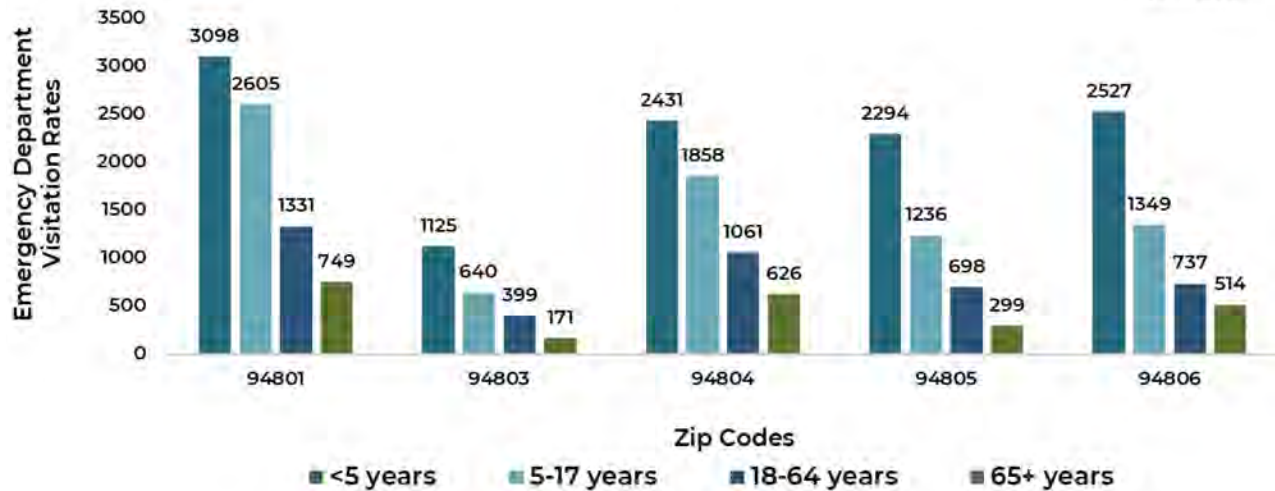


Figure 26. County Asthma Emergency Department Visits by Age (Rate per 10,000 people between 2016-2020). 2016-2020. CA Department of Public Health: <https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHIB/CPE/Pages/CaliforniaBreathingCountyAsthmaProfiles.aspx>.

To look at asthma by census tract, we can use CalEnviroScreen’s 2015-2017 spatially modeled age-adjusted rate of emergency department visits for asthma. Of the census tracts shown below (Figure 27) with the highest rates of emergency department visits for asthma, five and a half are below Area Mean Income (census tracts changed from 2010 to 2020 - some current 2020 census tracts are smaller than the 2010 tracts). In other words, the tracts with high asthma ED visits are also lower-income tracts.

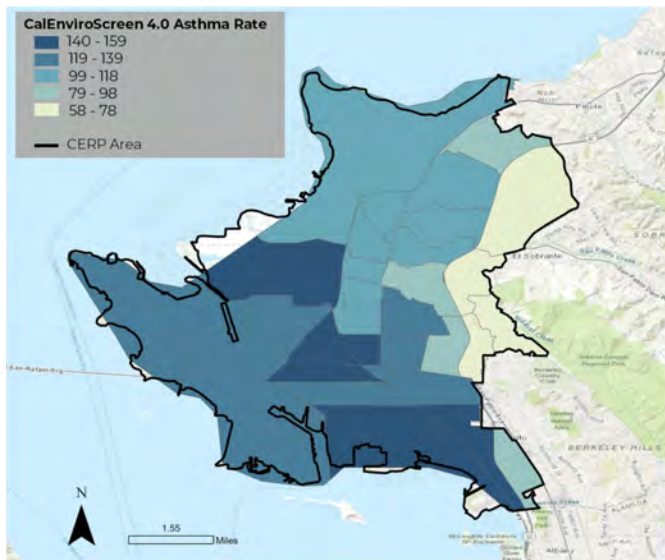


Figure 27. Asthma by Census Tract - CalEnviroScreen 4.0. Source: CalEnviroScreen 4.0. The spatially modeled age-adjusted rate of ED visits for asthma per 10,000 (averaged over 2015-2017). <https://oehha.ca.gov/media/downloads/calenviroscreen/report/calenviroscreen40reportf2021.pdf>.

Note: Rates per 10,000 persons.

Health Comparisons

CalEnviroScreen 4.0, a California-wide index, is used here to compare three indicators of air quality-related health impacts across four geographic areas: the PTCA Community, Concord, San Rafael, and West Oakland.⁶⁶ West Oakland also has a PTCA and many air pollution issues. The indicators analyzed are low birth weight, asthma, and cardiovascular disease. The measurements for each are first, percent of low-birth-weight births (2009-2015), second, modeled age-adjusted rate of ED visits for asthma per 10,000 (averaged over 2015-2017), and third, modeled age-adjusted rate of emergency department (ED) visits for heart attacks (averaged over 2015-2017).⁶⁷

When comparing the PTCA Community to the other geographies, we see that Concord and San Rafael fare better across all three indicators. Concord and San Rafael are not as impacted by air pollution. West Oakland is surrounded by freeways, bisected by a railway, and next to a heavily trafficked port. West Oakland has the most census tracts with high rates of low-birth-weight births.

Low Birth Weight Infants Percent low birth weight (2009-2015)



Low Birth Weight Percentile

Almost all West Oakland's tracts rank as highly impacted percentiles (76th +) for Low Birth Weight outcomes. Half of all Path to Clean Air census tracts are highly impacted.

Percentile	Path to Clean Air	West Oakland	Concord	San Rafael	Total Tracts
Low (0-25)	1	1	9	3	14
Medium (26-50)	6	1	8	6	21
Medium-High (51-75)	6	0	4	1	11
High (76-100)	15	9	4	1	29
Total Tracts	28	11*	25	11	

*Some tracts are not included due to insignificant data

Figure 28. Low Birth Weight Infants and Low Birth Weight Percentile.

The PTCA Community has the most census tracts in the top quartile for cardiovascular disease emergency department visits (see Figure 29 below). Note that cardiovascular disease is measured in the CalEnviroScreen 4.0 as a function of heart attack emergency room visits.

Cardiovascular Disease Spatially modeled, age-adjusted rate of emergency department (ED) visits for heart attacks (averaged over 2015-2017)



Cardiovascular Disease Percentile

Path to Clean Air has the most tracts rank as highly impacted percentiles (76th +) for heart attacks emergency room department visit rates.

Percentile	Path to Clean Air	West Oakland	Concord	San Rafael	Total Tracts
Low (0-25)	0	2	6	5	13
Medium (26-50)	5	4	12	6	27
Medium-High (51-75)	14	7	2	0	23
High (76-100)	9	0	5	0	14
Total Tracts	28	13	25	11	

Figure 29. Cardiovascular Disease and Cardiovascular Disease Percentile.

⁶⁶ August, Laura. "CalEnviroScreen 4.0." OEHA, 20 Sept. 2021, <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>.

⁶⁷ CalEnviroScreen 4.0, October 2021, <https://oehha.ca.gov/media/downloads/calenviroscreen/report/calenviroscreen40reportf2021.pdf>

Both West Oakland and the PTCA Community have many tracts with high rates of asthma emergency department visits (Figure 30). Seventy percent of our PTCA Community’s census tracts are in the top ten percent for asthma state-wide, and all West Oakland’s census tracts are in the top ten percent. However, West Oakland is a smaller geographic area than the PTCA Community. It is worth noting that asthma emergency room visit rates are high in tracts with high percentages of low-birth-weight rates.

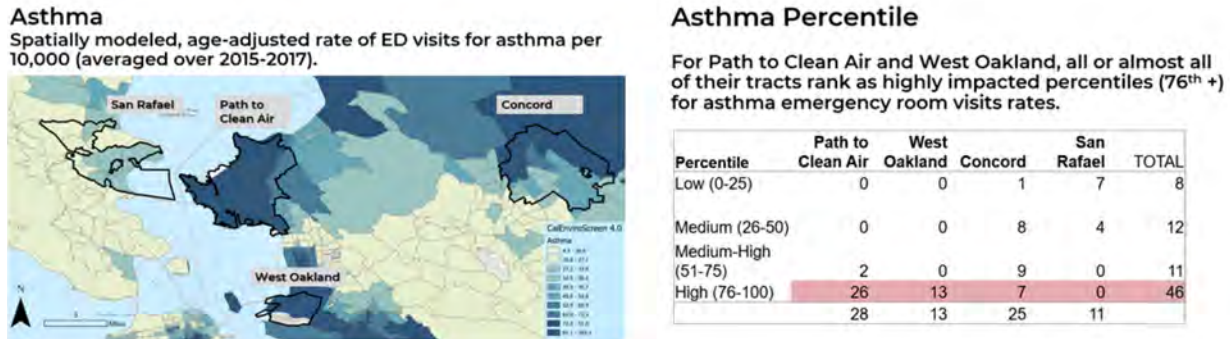


Figure 30. Asthma and Asthma Percentile.

Chronic obstructive pulmonary disease (COPD) and other respiratory problems (including low-grade asthma in children) are not addressed in the CalEnviroScreen 4.0 database. Broadly speaking, the data we have documented for health problems in the PTCA Community could be more detailed. For example, it would be beneficial to have data on how many children are using inhalers for asthma by the school or census tract, how many new cases of childhood asthma are diagnosed every year, and how many adults are being treated for chronic obstructive pulmonary disease (COPD). Additionally, organizations tracking all types of pollution may have underestimated the significance of DPM emissions and exposure, as well as the number of abandoned industrial and hazardous waste sites because some of these hazardous waste sites could leak VOCs and other toxins into groundwater, the Bay, and the air.

West Oakland and the PTCA Community also share very high exposures to lead, clean-up sites contaminated with harmful chemicals, and hazardous waste.⁶⁸ It is likely that this combination of exposures increases the risk for many health issues. Comparisons like this show that the PTCA Community is not only highly burdened with air pollution-related disease compared to the state but also is highly burdened with air pollution-related disease compared to other geographies in the Bay Area.

Food Access

Limited access to healthy affordable food is often measured by proximity to food stores, income, and the financial ability to buy healthy food, and the ability to travel to a grocery store. Proximity, income, and the ability to travel to grocery stores make it more difficult for people to eat a healthy diet and therefore put people at risk for various health issues.

To demonstrate food access and lack of food access, we will use data from the USDA’s Food Access Research Atlas which uses 2019 grocery store data.⁶⁹ The following maps (see Figure 31 below) show low-income census tracts in Contra Costa County and the PTCA Community with

⁶⁸ August, Laura. "CalEnviroScreen 4.0." OEHHA, 20 Sept. 2021, <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>.

⁶⁹ USDA ERS - Go to the Atlas. <https://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas/>. Accessed 26 May 2022.

at least 500 people, or 33 percent of the population in the tract, living more than one-half mile from the nearest supermarket, supercenter, or large grocery store.⁷⁰ In the map below, the cross-hatching denotes a low-income tract where at least 100 households or more live one-half mile from the nearest supermarket *and* have no access to a vehicle. Low-income tracts are defined by one of the following conditions:

- The tract’s poverty rate is 20 percent or greater, or
- The tract’s median family income is less than or equal to 80 percent of the State-wide median family income, or
- The tract is in a metropolitan area and has a median family income less than or equal to 80 percent of the metropolitan area's median family income. (Ibid)

In Contra Costa County, the PTCA Community, Martinez, Pittsburgh, Antioch, and Concord all have low-income and low-food access census tracts, with many people residing more than half a mile from a grocery store. However, the PTCA Community has the most census tracts where a significant number of households have low food access *and* no car access – potentially hindering their ability to travel to a grocery store.

PTCA Community

Contra Costa County

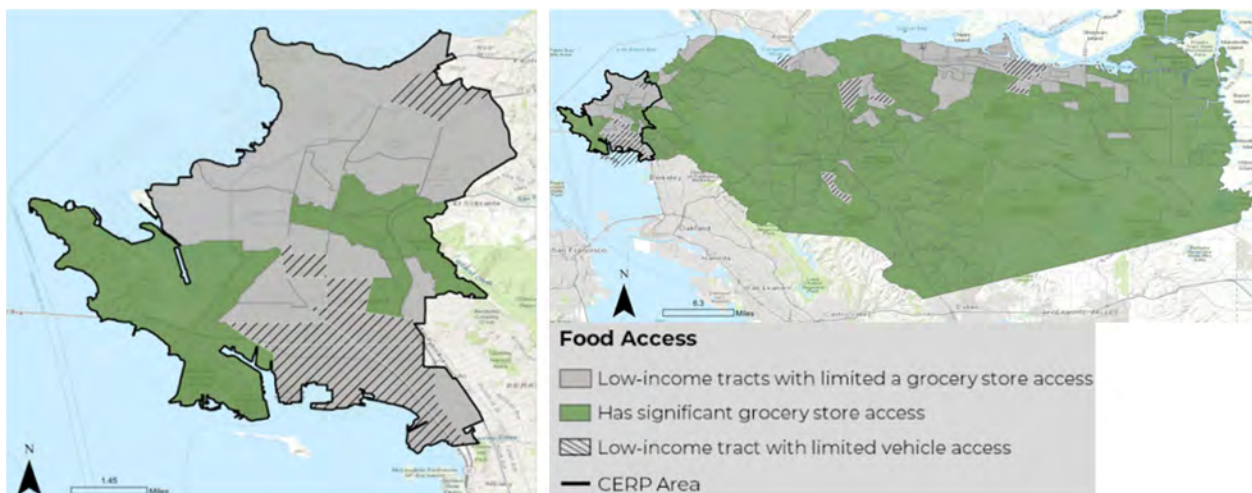


Figure 31. Census Tracts with Limited Food Access, Lower-Incomes, and Limited Car Access. Sources: In the Food Access Research Atlas, a directory of supermarkets, supercenters, and large grocery stores within the United States was derived from merging the 2019 STARS directory of stores authorized to accept SNAP benefits and the 2019 Trade Dimensions TDLinx directory of stores. Population data are from the 2010 Census of Population and Housing. These data were aerially allocated down to ½-kilometer-square grids across the United States. For each ½-kilometer-square grid cell, the distance was calculated from its geographic center to the center of the grid cell with the nearest supermarket. Income data are from the 2014-18 American Community Survey's tract estimates. Rural or urban status is designated by the Bureau of the Census 2019 urban area definition.

VI. Income Distribution

Area Median Income (AMI) is the income of families in the exact middle of the income distribution (half above and half below), with adjustments for family size. For the 2017-2020

⁷⁰ USDA ERS - Documentation. 24 May 2021, <https://www.ers.usda.gov/data-products/food-access-research-atlas/documentation/>.

period, the AMI for households in Contra Costa County was \$103,599.⁷¹ Low-income families are those with incomes that earn less than 50 percent of the area median income, so for a family of four, that is less than \$51,780 in Contra Costa County.⁷² In the PTCA Community, 66% of households make under the AMI (\$103,566), and 34% make at or above the AMI.⁷³ In the PTCA Community 33% of households are low-income and make less than half of the AMI. In Alameda County, about 25% of households are low-income and make less than half of the AMI.⁷⁴

As mentioned above, the median identifies the income in the middle of the sample for every year, half of the incomes are higher, and half is lower. We can use census median income to compare geographies within the PTCA Community (Figure 32). Doing this, we see that Bay View and El Sobrante are close to the County’s median household income, Richmond Heights is above the County’s median income, and all others are below. Contra Costa County, Bayview, El Sobrante, and Richmond Heights all have the highest percentage of white residents.



Figure 32. Median Household Income (2020 inflation-adjusted dollars). Source: Census Table S1903, MEDIAN INCOME IN THE PAST 12 MONTHS (IN 2020 INFLATION-ADJUSTED DOLLARS), Universe: Households, 2020-2016: ACS 5-Year Estimates Subject Tables. <https://api.census.gov/data/2020/acs/acs5/subject>.

The mean is the average across all families or the average income for individuals. The mean income value answers the question: “If income would be equally distributed to everyone or every family, how much would be earned?” For individuals’ income, also called per capita income, the mean income within the PTCA Community (Figure 33) was highest for white people. Please note that the ‘Hispanic / Latinx’ category potentially overlaps with all other racial groups except the white racial group. Some data are unavailable for the following census groups: American Indian, Alaska Native and Native Hawaiian, and Other Pacific Islander groups.

⁷¹<https://www.huduser.gov/portal/datasets/il.html#2020>. Area Median Income is based on a The Department of Housing and Urban Development (HUD) calculation.

⁷²“Who Is Low-Income and Very Low Income in the Bay Area?,” Ángel Mendiola Ross and Sarah Treuhaft, September 21, 2020, <https://bayareaequityatlas.org/node/60841>

⁷³Census Table B19001, MEDIAN INCOME IN THE PAST 12 MONTHS (IN 2020 INFLATION-ADJUSTED DOLLARS), Universe: Households, 2020-2016: ACS 5-Year Estimates Subject Tables.

⁷⁴Census Table B19001, MEDIAN INCOME IN THE PAST 12 MONTHS (IN 2020 INFLATION-ADJUSTED DOLLARS), Universe: Households, 2020-2016: ACS 5-Year Estimates Subject Tables.

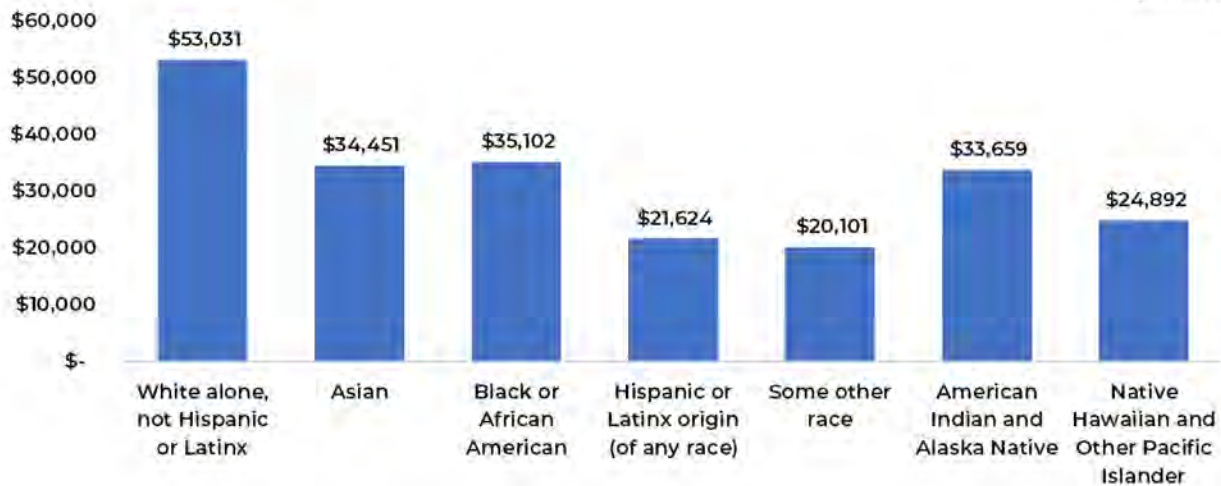


Figure 33. Mean Income Per Capita (2020 inflation-adjusted dollars). Source: Census Table S1902, MEAN INCOME IN THE PAST 12 MONTHS (IN 2020 INFLATION-ADJUSTED DOLLARS), 2020: ACS 5-Year Estimates Subject Tables. <https://api.census.gov/data/2020/acs/acs5/subject>.

By mapping the mean household income for all of Contra Costa County (Figure 34), we see that many census tracts within the PTCA Community are below the AMI for the County.

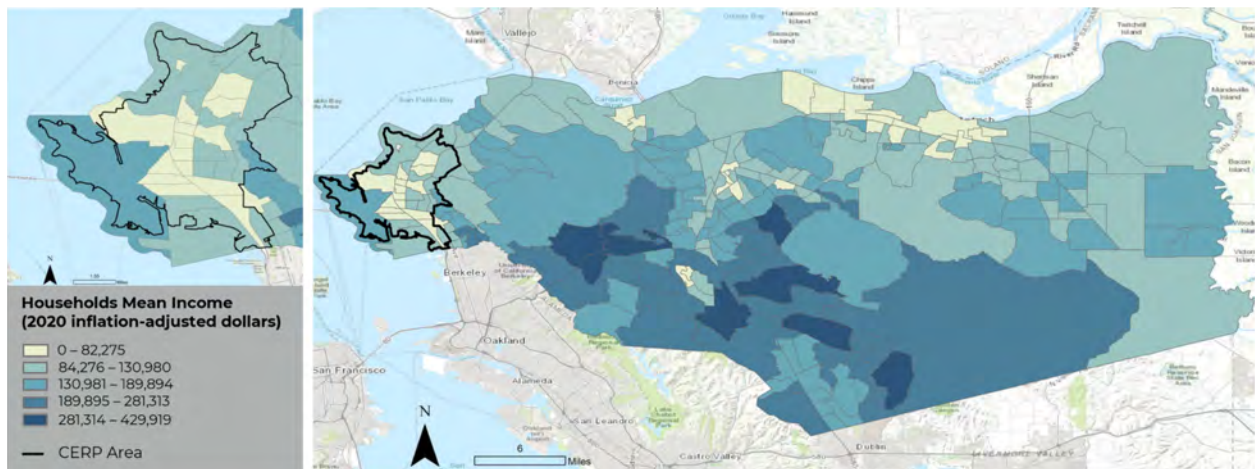
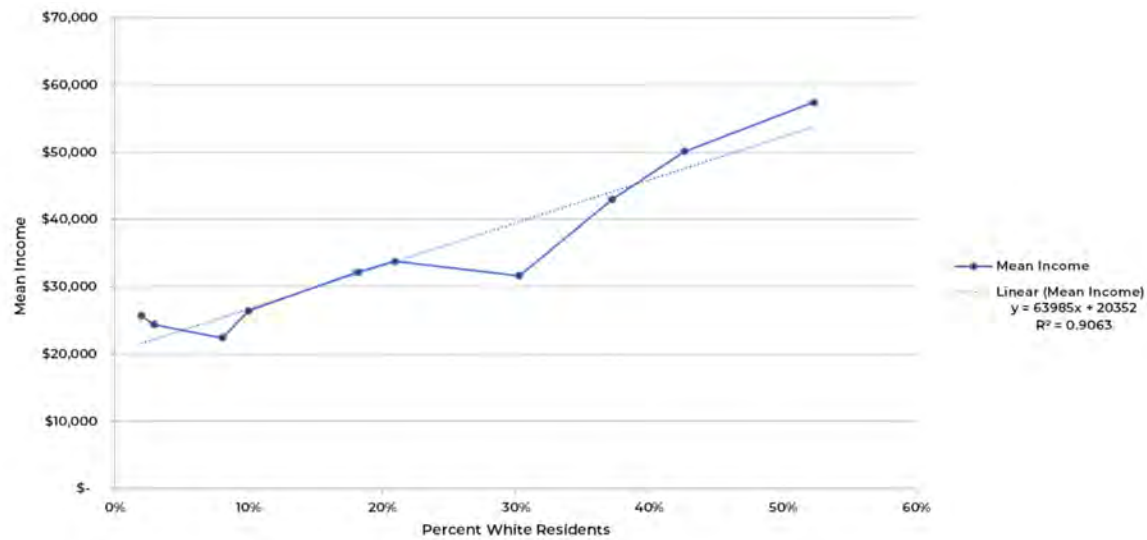


Figure 34. Mean Household Income for all of Contra Costa County. Source: Census Table S1902, MEDIAN INCOME IN THE PAST 12 MONTHS (IN 2020 INFLATION-ADJUSTED DOLLARS), 2020-2016: ACS 5-Year Estimates Subject Tables. <https://api.census.gov/data/2020/acs/acs5/subject>.

If we graph the percent of white people and mean per capita income for each PTCA geography (Figure 35), we see higher per capita incomes in areas with more white people.



Place	Percent White	Mean Per Capita Income
East Richmond Heights	52%	\$ 57,416
Contra Costa County	43%	\$ 50,118
El Sobrante	37%	\$ 43,017
Bayview	30%	\$ 31,653
Tara Hills	21%	\$ 33,775
Richmond	18%	\$ 32,177
Montalvin Manor	10%	\$ 26,420
San Pablo	8%	\$ 22,405
Rollingwood	3%	\$ 24,412
North Richmond	2%	\$ 25,709

Figure 35. Graph of PTCA Geographies and Mean Per Capita Incomes. Source: Census Table B19001, HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2020 INFLATION-ADJUSTED DOLLARS), Universe: Households, 2020: ACS 5-Year Estimates Subject Tables.

VII. Education

Socioeconomic factors, such as education, influence health outcomes.⁷⁵ Education can lead to higher-paid work, reduced financial stress, and allow individuals to live in healthier places that are further from environmental hazards like air pollution.

In the PTCA Community, fewer people have a higher education degree than in Contra Costa County. In the PTCA Community, the number of people with less than a high school level of education is twice as high as in Contra Costa County (see Figure 36). Marin County is included here to provide a comparison of the educational attainment of one of the Bay Area’s highest-income counties.

⁷⁵ Braveman, Paula, and Laura Gottlieb. “The Social Determinants of Health: It’s Time to Consider the Causes of the Causes.” *Public Health Reports*, vol. 129, no. 1_suppl2, Jan. 2014, pp. 19–31. SAGE Journals, <https://doi.org/10.1177/00333549141291S206>.

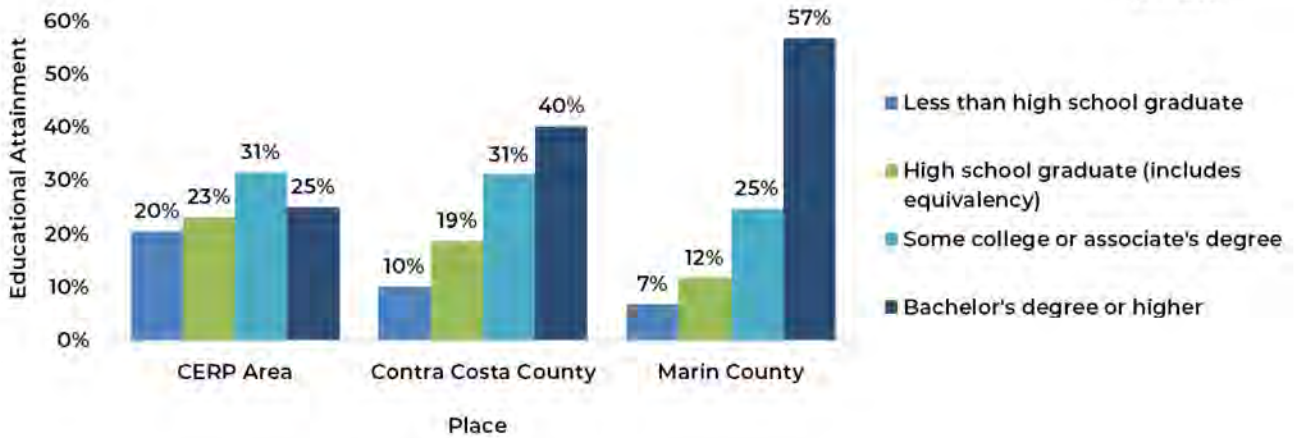


Figure 36. Educational Attainment in the PTCA Community. Source: Census Table S1501, EDUCATIONAL ATTAINMENT, 2020-2016: ACS 5-Year Estimates Subject Tables.

The bar graph below (Figure 37) shows the distribution of race in the PTCA Community and, within each population bracket, the percentage of each racial group with less than a bachelor's degree and a bachelor's degree or higher. In the PTCA area, white people, followed by Asian people, make up the highest proportions of those with a higher education degree.

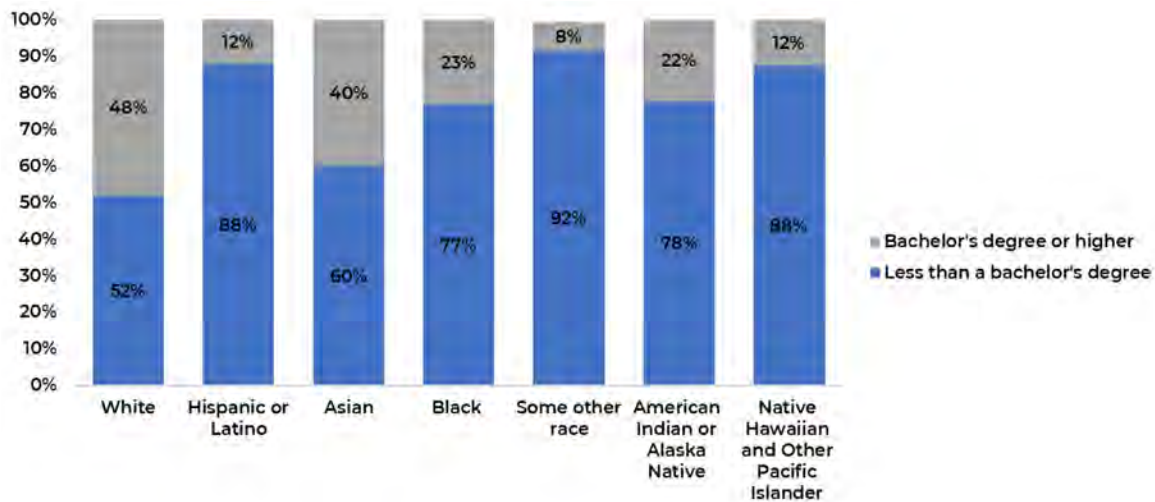


Figure 37. Educational Attainment by Race in the PTCA Community. Source: Census Table S1501, EDUCATIONAL ATTAINMENT, 2020-2016: ACS 5-Year Estimates Subject Tables.

VIII. Employment

Of people living within the PTCA Community and in the County, the largest fields with employment are education, health, and social assistance. Compared with the County, residents in the PTCA Community are more often employed in arts, entertainment, accommodation, food services, construction, transportation and warehousing, and utilities (Figure 38).

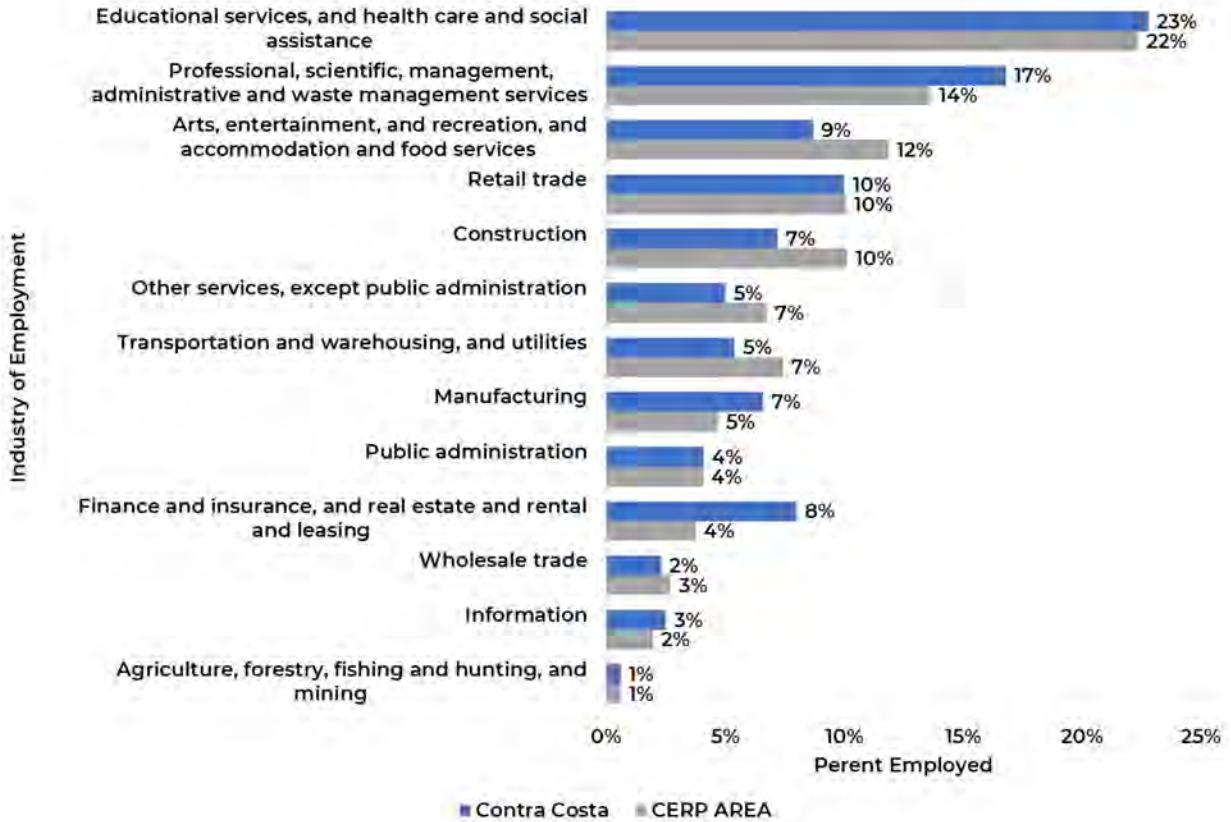


Figure 38. Fields of Employment in Contra Costa County and PTCA Community. Source: Census Table S2405, INDUSTRY BY OCCUPATION FOR THE CIVILIAN EMPLOYED POPULATION 16 YEARS AND OVER, 2020-2016: ACS 5-Year Estimates Subject Tables.

Within the PTCA Community, there are fewer people in the labor force than in Contra Costa County, or even in the United States as a whole (Figure 39). This may be because the population in the PTCA Community is younger than that in the County.

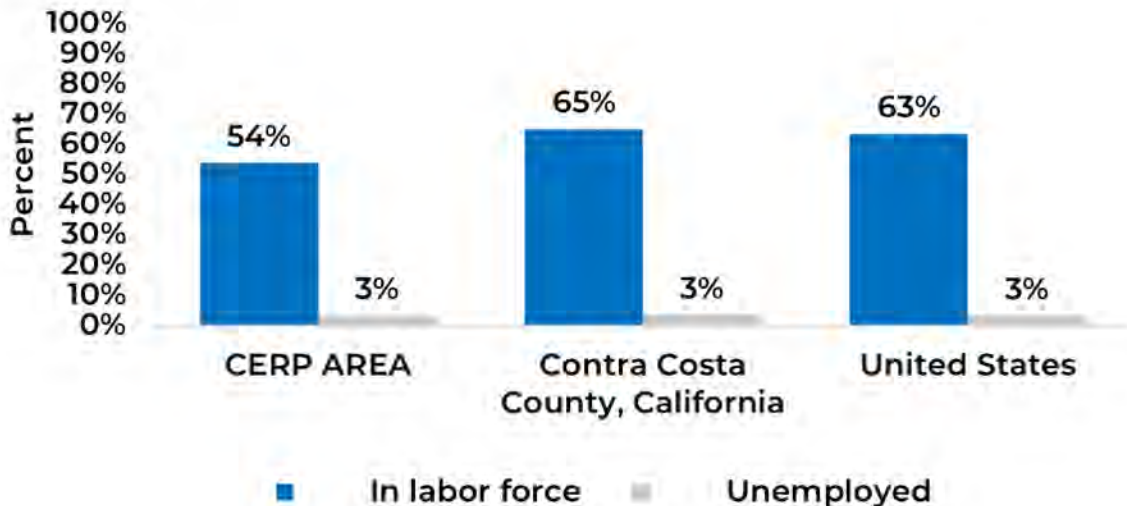


Figure 39. Percentage of Community in the Labor Force and Unemployed. Source: Census Table DP03, SELECTED ECONOMIC CHARACTERISTICS, 2020-2016: ACS 5-Year Estimates Subject Tables. <https://api.census.gov/data/2020/acs/acs5/profile>.

IX. Age Distribution

The age distribution in the PTCA Community is slightly different than in Contra Costa County (see Figures 40 and 41 below). In the PTCA Community, there are fewer people over 55 years of age and more people under 30.

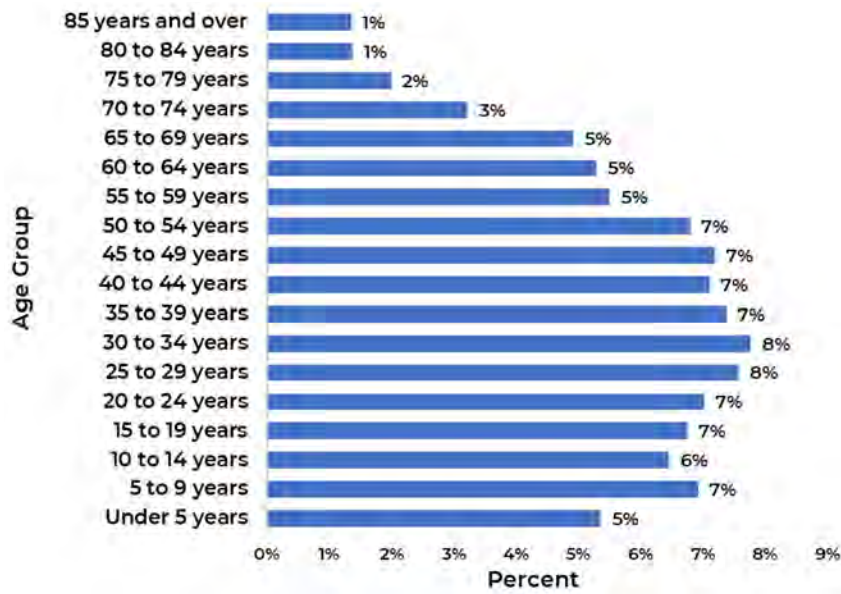


Figure 40. Age Distribution in PTCA Community. Source: Census Table S0101, AGE AND SEX, 2020-2016: ACS 5-Year Estimates Subject Tables.

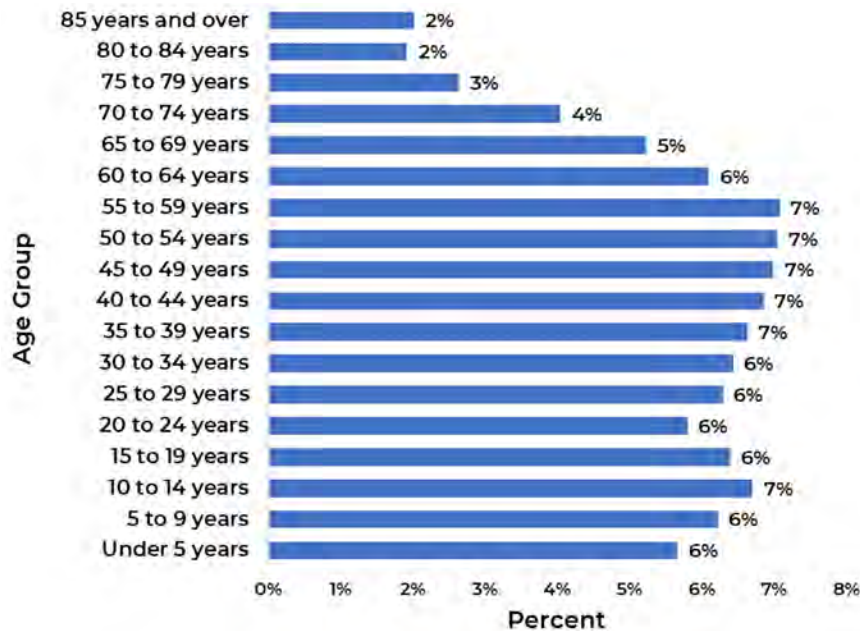


Figure 41. Age Distribution in Contra Costa County. Source: Census Table S0101, AGE AND SEX, 2020-2016: ACS 5-Year Estimates Subject Tables.

X. Unhoused Population

The Unhoused and Air Pollution Exposure

Ambient air pollution exposure is linked to severe health outcomes for morbidity as well as mortality.⁷⁶

Morbidity refers to having symptoms of a disease, while mortality is related to the number or rate of deaths caused by a disease or health event.⁷⁷ Exposure for the unhoused is a pressing concern because this vulnerable population often lives in structures not intended for human habitation near mobile sources of pollution, such as under freeways and on the shoulders of railways, or near stationary sources of air pollution, such as near industrial sites that are removed from residential neighborhoods.⁷⁸ ⁷⁹ Unlike those with housing, the unhoused cannot benefit from exposure-reducing strategies like indoor air filtration, meaning outdoor air pollution reduction is crucial for these populations.

With ambient air pollution expected to increase in the western United States due to wildfires and exacerbated by climate change, exposure will likely worsen for the unhoused. According to the U.S. Department of Housing and Urban Development (HUD), the proportion of unhoused individuals who experience unsheltered homelessness is increasing.⁸⁰ Unsheltered individuals are acutely vulnerable to poor air quality. While patterns of air pollution exposure among unhoused populations are understudied, research in this area is burgeoning.

The unhoused have greater pollution exposure from local sources in the PTCA Community than housed residents. To explore if the unhoused in our PTCA Community are experiencing elevated levels of local air pollution exposure, we compared the annual-average exposure per capita for the entire PTCA Community to the average for census blocks with homeless encampments or habitation (see Table 3 below). A census block is the smallest geographic unit used by the United States Census Bureau. In urban areas, census blocks look like city blocks and are bounded on all sides by streets. The averages are population-weighted and show four air quality metrics (see below). Where the unhoused live, cancer risk and particulate matter exposure attributable to local sources are about 50% higher, and the chronic hazard index and PM_{2.5} concentration are 26% and 16% higher respectively, than for the entire PTCA Community. These averages are based on modeled exposures to local source emissions only and do not reflect source emissions that may be transported in from outside the PTCA Community, for instance from other cities or wildfires. For more information on the exposure data, see Chapter 5: Air Pollution Overview.

⁷⁶ Lelieveld, Jos, et al. "The contribution of outdoor air pollution sources to premature mortality on a global scale." *Nature* 525.7569 (2015): 367-371.

⁷⁷ Hernandez, J. B. R. (2023). *Epidemiology Morbidity And Mortality. StatPearls.*

⁷⁸ Liu, Jia Coco, et al. "Particulate air pollution from wildfires in the Western U.S. under climate change." *Climatic change* 138.3 (2016): 655-666.

⁷⁹ Hong, Chaopeng, et al. "Impacts of climate change on future air quality and human health in China." *Proceedings of the National Academy of Sciences* 116.35 (2019): 17193-17200.

⁸⁰ 2018 AHAR: Part 1 - PIT Estimates of Homelessness in the U.S. <https://www.hudexchange.info/resource/5783/2018-ahar-part-1-pit-estimates-of-homelessness-in-the-us>. Accessed 29 Apr. 2022.

	Blocks with Encampments	All PTCA Blocks	Difference	Percent Difference
CANCER RISK	122	84.3	38	45% higher
CHRONIC HAZARD INDEX	0.14	0.11	0.03	26% higher
DIESEL PARTICULATE MATTER	0.15	0.1	0.05	47% higher
PM _{2.5}	1.23	1.06	0.17	16% higher

Table 3. Comparison of Pollution Exposure in PTCA Community Blocks with Encampments and All PTCA Community Blocks.

XI. Voter Participation

Low political participation may result in fewer opportunities, services, and social programs for disadvantaged groups, lowering the quality of life for already vulnerable populations. This may be especially true for undocumented communities. As the California Department of Public Health says, “Although there is no direct evidentiary connection between voter registration or participation and health, there is evidence that populations with higher levels of political participation also have greater social capital. Social capital is defined as resources accessed by individuals or groups through social networks that provide a mutual benefit.”⁸¹

Voters in Contra Costa County are largely Democrats, about 50%, with Republicans comprising about 20% (Figure 42).

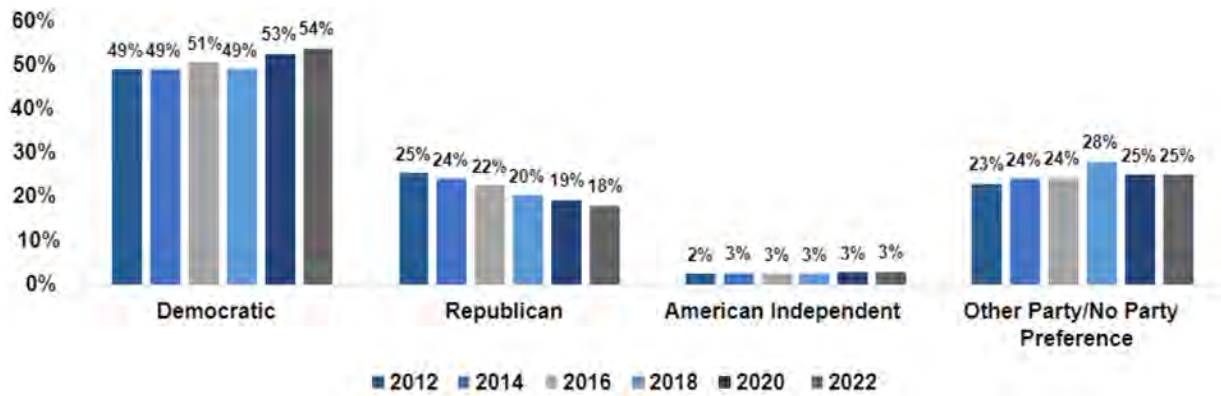


Figure 42. Political Party Distribution for Contra Costa County. Source: Elections Statistics: California Secretary of State, Voter Participation Statistics by County, General Election - 60-Day Report of Registration. <https://www.sos.ca.gov/elections/voter-registration/voter-registration-statistics>

⁸¹ Voter Registration - California Health and Human Services Open Data Portal. <https://data.chhs.ca.gov/dataset/voter-registration-2002-2010>. Accessed 17 May 2022.

Voter participation is measured by dividing the number of adults who voted in elections by those who registered. In Contra Costa County general elections, voter participation rose from 2010 to 2020 but decreased in 2022. For the presidential primary elections, voter participation has fallen since 2004 (Figure 43).

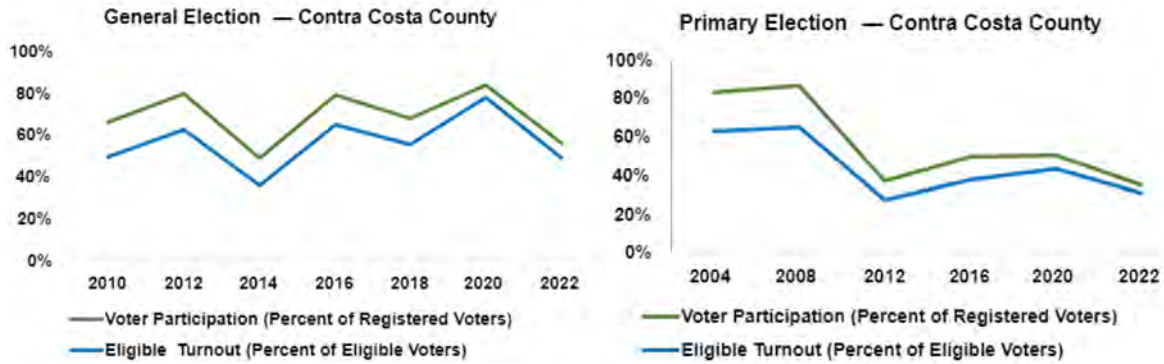


Figure 43. Contra Costa County Voter Participation in Presidential Primary (Left) and General Election (Right). Source: Elections Statistics: California Secretary of State, Voter Participation Statistics by County, <https://www.sos.ca.gov/elections/statistics/voter-participation-stats-county>

Geographic data for census tracts were only found for the general election years 2016 and 2018. While voter participation has decreased from 2016 to 2018 in the County, the PTCA Community and the City of Antioch appear to have the lowest participation rates in the County (Figures 44 and 45).

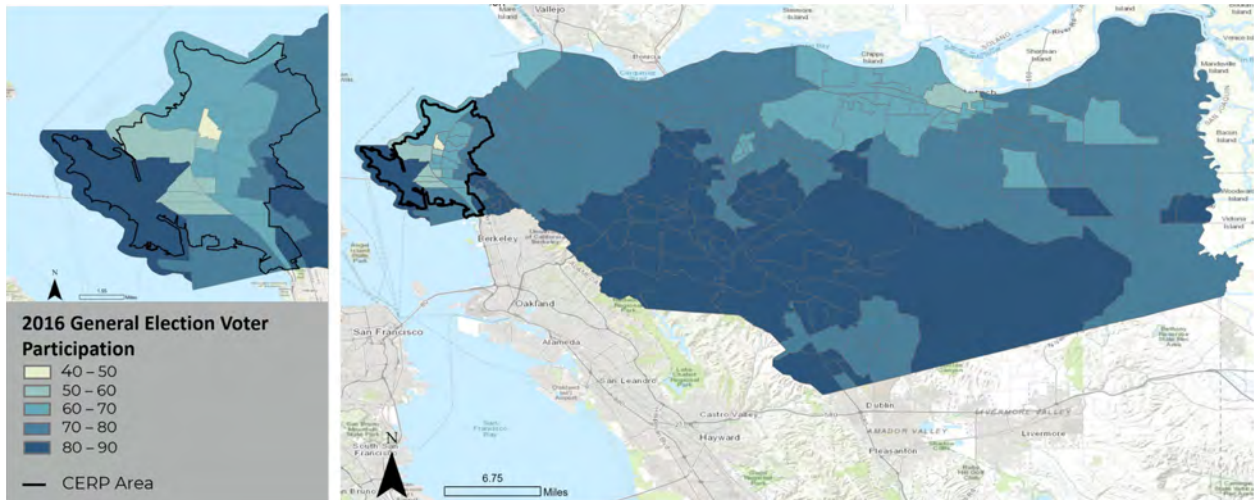


Figure 44. 2016 General Election Voter Participation. Source: 2016 Voter Registration - California Health and Human Services Open Data Portal. <https://data.chhs.ca.gov/dataset/voter-registration-2002-2010>. Accessed 17 May 2022.

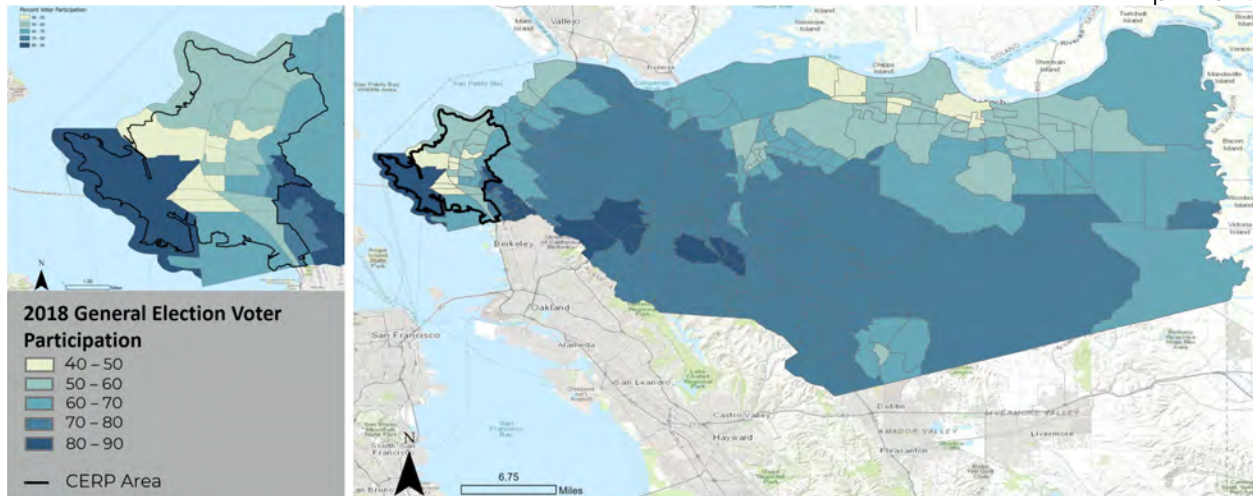


Figure 45. 2018 General Election Voter Participation. Source: 2018 Voter Registration - California Health and Human Services Open Data Portal. <https://data.chhs.ca.gov/dataset/voter-registration-2002-2010>. Accessed 17 May 2022.

XII. Community Concerns

Community concerns were gathered from a Town Hall event, the Community Assets and Air Pollution Mapping Project, and a virtual ideas wall. There were six overarching community concerns that emerged. For the full report on community concerns visit this [document](#).

Community Concern: Addressing Public Health and Reducing Exposure

Throughout the Community Assets and Air Pollution Mapping Project, health-related words and physical reactions to air pollution were the most commonly recurring themes. This section includes concerns about populations that are more vulnerable to air pollution and opportunities to prevent exposure.

Here is feedback on concerns from the community:

- Solar panels (affordable) with batteries, hybrid cars, EV, get rid of electrical outages from PG&E.
- We need more information disseminated about health impacts from pollution (air+water), especially in our communities. info is just being made available.
- The wildfires were the worst air pollution while living here. the red electrical storms and last year, there was a lot of ash that fell on my yard and plants.
- There is a lot of sites that need remediation. There used to be gas stations, laundromats, or short-term infrastructure, and started to get mold and other unhealthy conditions.
- Seniors having a lot of respiratory issues.
- How many children are suffering from asthma and how many school days are missed from asthma? We could use more health education for communities.
- The campfires from unhoused encampments.

Community Concern: Fuel Refining, Support Facilities, Storage, and Distribution

Community members expressed concern about how neighborhoods across the PTCA Community are impacted by sources of air pollution from the Chevron refinery sources/operations (including non-stack sources such as tank storage, bioreactor, and current or former refinery ponds). This thematic area also includes other related businesses that support the processing, distribution, and storage of fuel and fuel-related products.

Here are stories we have heard from the community:

- Flaring. Visibly being able to see them. There are times when I'm driving it looks like a house is burning, but then I realize it's just flaring. That really pulls on people's fear (flaring was a frequently recurring comment).
- I am aware during an acute event like a fire or flaring then when I am outside like running or riding a bike – or when I visit other communities and feel the difference in how it is to breathe there as opposed to here in Richmond.
- Smoke coming out of the many refineries in the Richmond community. The smell is sometimes unbearable, and I tend to go inside to avoid it.
- Leaks that have happened as well.
- Oil leaking in our local beach.

Community Concern: Industrial and Commercial Sources Near Communities

Emissions of air pollutants from some businesses and activities can have a significant exposure impact on the nearby areas, even if they contribute a small percentage of the region's total emissions of that pollutant. This can be especially true for businesses located near where people live or spend time. There also are larger industrial operations that contribute to both local and area-wide impacts, depending on the activity at the facility generating the emissions. Industrial sites and sources of concern are solid waste and recycling facilities, scrap metal facilities, auto body shops, aggregate facilities or materials handling, concrete production facilities, restaurants and food trucks, dust on local roadways, shipping terminals, dry cleaners, backup generators; commercial kitchens, bakeries, wineries, breweries, coffee roasteries; dust from construction, demolition, nurseries, and vacant lots; contaminated soil from hazardous waste clean-up sites; and construction and heavy diesel equipment.

Here are stories we have heard from the community:

- Park Blvd near the landfill or the Recycle plant near Jackson – there are small and large industrial activities. I wonder about County oversight.
- The landfill is used as a transfer station⁸² and can impact the community.
- Industrial fires. There was a fire at Simms Metal, and there was so much released in the air.

⁸² Note: A transfer station is a site with the capacity to store, consolidate, and aggregate garbage or recyclables.

- Fine black dust that appears in the neighborhood (this comment was shared by a few community members).
- Rise of sea level (release of pollutants due to change of sea level) and its effect on harmful pollutants that are currently in an area away from the sea.
- Chemical explosion that happened in North Richmond that harmed many. "Anything could blow at any time".

Community Concern: Odors from Industries

Odors from industrial activities are a major concern throughout the different neighborhoods in the PTCA area. Certain land use types are more likely to result in odor impacts, including wastewater treatment plants; landfill, recycling, and composting facilities; petroleum refineries, fuel storage, and distribution; chemical plants; cannabis growing and processing; and food services. Odors can have a major quality of life and health risk impact. Reactions to odors can range from psychological to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). Learn more about environmental odors and health effects at the Agency for Toxic Substances and Disease Registry Environmental Odors FAQ page.⁸³

Here are stories we have heard from the community:

- On warm days you can still smell the landfill. North Richmond always had problems with the landfill.
- Smells from landfill are heightened during the wildfires.
- Odors on certain days of the year and times of day.
- Sense of odors are desensitized because people get used to the odors.

Community Concern: Vehicles and Trucks, Streets and Freeways, and Logistics and Warehouses

The PTCA Community has many sources of vehicle and truck traffic that impact neighborhoods throughout the focus area via a multitude of mechanisms. Goods movement hubs and logistics centers act as magnet sources that draw in vehicles and require the use of heavy-duty diesel equipment, causing mobile source emissions. Travel on I-580 and I-80, busy and congested traffic in neighborhoods and public spaces, and trips to and from warehouses and other truck-related businesses result in significant emissions.

Here are stories we have heard from the community:

- There are multiple massive fulfillment centers and warehouses that are expecting 100s of vehicles in and out per day. That is a serious threat to health in North Richmond and Richmond (there were a few comments that mentioned warehouses).
- Unintended impact of the bypass is that traffic is being rerouted and causing pollution in the area.

⁸³ <https://www.atsdr.cdc.gov/odors/faqs.html>

- Traffic on bridge backup days is pretty bad.
- Cut through traffic trying to get around the lights on the Richmond Parkway.
- Number of trucks driving through the neighborhood and neighborhood streets.
- When traffic is backed up on Fred Jackson Way, and I have to walk down that road or ride my bike home my lungs burn.
- Finally being able to breathe when far away from major highways.

Community Concern: Marine and Rail

From massive cargo ships to smaller harbor craft such as ferries and tugboats, marine vessels impact California's air quality, especially in communities near ports. Locomotive diesel exhaust comprises particulate matter, smog-forming oxides of nitrogen, sulfur dioxide, greenhouse gases, and toxic chemicals. Marine and rail equipment tend to have quite long useful lives, meaning that they can be older and dirtier equipment that is less likely to have been upgraded and replaced despite the existence of more modern technology. Tugboats and ferries that run on diesel fuel were a concern for the community, along with rail-going trains and rail yards.

Here are stories we have heard from the community:

- Richmond lives close to the port and gets a lot of particulate exposure. Very visible.
- Port sources are also a large contributor.
- There is a rail freight line that runs right behind the terra hills mobile manor senior park; according to her research, it is an illegally close distance to the residences.

Appendix C: Supplemental Technical Information – Emissions and Modeling

As discussed in PLAN Chapter 5 (Air Quality Overview), the Air District worked closely with the CSC to conduct an extensive technical assessment of air pollution sources and impacts in the PTCA area. This appendix builds on Chapter 5 by providing supplemental technical information related to emission inventory development, air quality modeling, and exposure assessment. This supplemental information covers four main topics:

1. **Technical Approach** – provides an overview of the methods and datasets used to develop the emissions inventory and conduct the modeling-based exposure assessment.
2. **Additional Modeling Results** – presents an evaluation of background and local contributions to pollutant concentrations in the PTCA community and an analysis of the potential for acute respiratory impacts from flaring events at the Chevron Refinery.
3. **Chevron Inventory Update** – summarizes a 2021 emissions inventory for Chevron Refinery that was assembled following the development of the initial 2019 baseline inventory that is presented in Chapter 5 of the PLAN.
4. **Emissions Forecasts** – summarizes “business as usual” emissions inventories for 5- and 10-year milestones (2029 and 2034) after PLAN approval.

The following sections cover each of these topic areas in detail, with the section on Chevron inventory updates being of special interest for tracking emissions changes in the community going forward.

Technical Approach

Technical analyses for the PTCA area were guided, in part, by the California Air Resources Board’s (CARB) Community Air Protection Program Blueprint (California Air Resources Board, 2018a), which outlines a general methodology for community-scale technical assessments. Key requirements in the CARB Blueprint include a community-scale emissions inventory and a source attribution analysis to estimate the relative contribution of sources or categories of sources to elevated air pollution exposure in the community. Methods and datasets used to conduct these analyses are discussed in the sub-sections that follow.

Emissions Inventory Development

As part of the technical assessment process, CARB prescribes the development of a planning emissions inventory for all AB 617 communities. This inventory must include criteria pollutants¹ and toxic air contaminants (TACs)² for all sources within the community boundary for a selected base year (California Air Resources Board, 2019). The District worked with CARB to establish a base year (2019) and planning inventory domain for the PTCA community. The inventory domain was defined as a rectangular area that aligns with a network of 1-km x 1-km grid cells from CARB’s

¹ Criteria pollutants include carbon monoxide (CO), nitrogen oxides (NOx), total organic gases (TOG), reactive organic gases (ROG), ammonia (NH₃), sulfur oxides (SOx), particulate matter 10 microns or smaller (PM₁₀), and particulate matter 2.5 microns or smaller (PM_{2.5}).

² TACs, or “air toxics,” have been identified by CARB or the U.S. Environmental Protection Agency (EPA) as pollutants that may cause cancer or other serious health effects (e.g., birth defects).

statewide modeling domain (California Air Resources Board, 2020). As shown in Figure A-1, this rectangular emissions inventory boundary covers the PTCA area, as well as surrounding areas with emission sources that are likely to impact the community.



Figure A-1. Map showing the emissions inventory boundary in relation to the PTCA community boundary.

Emissions inventories are often organized into four broad source sectors: point sources, area sources, on-road mobile sources, and off-road mobile sources. Table A-1 provides a definition of these source sectors and summarizes the general methods used to estimate their emissions in the PTCA area. Note that the baseline inventory represents a combination of information from the Air District and CARB, and that detailed local data were used where available.

Table A-1. Emissions inventory methods by source sector.

Source Sector	Definition	Methodology
Point	Stationary sources that are permitted or otherwise treated as individual facilities (e.g., refineries and power plants)	Emissions based on data reported to the Air District annually by each permitted facility and reviewed by District engineers. Emissions estimated at the process/device level using a variety of methods and datasets, including source tests and emission factors.

Source Sector	Definition	Methodology
Area	Stationary sources that are too small or dispersed to be treated individually (e.g., residential sources)	Emissions estimated by CARB or the District at the county level and down-scaled using spatial surrogates such as land use or population data. For commercial cooking, the District developed restaurant-specific estimates that were based on generalized assumptions about the type and quantities of meat cooked at various types of restaurants.
On-road	Mobile sources that operate on roadways (e.g., cars and trucks)	Roadway emissions based on detailed traffic data from Bentley's Streetlytics dataset and emission factors from CARB's EMFAC model. ^a Emissions also estimated for operations at truck-based businesses using results of a truck activity survey conducted by District staff.
Off-road	Mobile sources such as ships, locomotives, and construction equipment that do not operate on roadways	Emissions for rail lines, railyards, ferries, and construction activities prepared by the District based on local data. Emissions for remaining off-road sources (e.g., ocean-going vessels) were prepared by CARB using a variety of approaches.

^aThe 2019 on-road inventory was originally developed using data from EMFAC2017v1.0.2 (California Air Resources Board, 2018b). Resulting emissions estimates were adjusted to reflect data from EMFAC2021 (California Air Resources Board, 2021a) when that version of the model was released.

Note that for permitted sources, emissions data in the PTCA inventory were generally consistent with the reporting year 2019 datasets submitted to CARB under the Criteria Pollutant and Toxics Emissions Reporting (CTR) program, with updates to emissions at four facilities to reflect data recently compiled by the District for rulemaking efforts. For example, PM_{2.5} emissions from the Chevron Refinery were updated to align with analyses recently conducted in support of amendments to Rule 6-5, which regulates particulate emissions from petroleum refinery fluidized catalytic cracking units. The PM_{2.5} inventory assembled for Chevron as part of the Rule 6-5 analyses includes adjustments to reflect the impacts of a recent modernization project (Bay Area Air Quality Management District, 2021). In addition, air toxics emissions from Chevron, Chemtrade, and the West Contra Costa County Sanitary Landfill were updated using preliminary inventories developed to support upcoming Health Risk Assessments (HRAs) for those facilities.

More generally, CARB has established a methodology for developing community-scale TAC emissions inventories and for comparing the relative toxicity of different compounds through the calculation of toxicity weighted emissions (TWE). In this methodology, point source emissions are based on toxics inventories reported to air districts by individual permitted facilities. For area, on-road mobile, and off-road mobile sources, TAC emissions are calculated by applying chemical speciation profiles to PM and TOG emissions. These speciation profiles, which are maintained by CARB, break down PM and TOG emissions for a given source category into individual chemical species. Then all the species that are listed in Appendix A-I of AB 2588 Air Toxics "Hot Spots" Emission Inventory Criteria and Guidelines Regulation are filtered out as toxics (California Air Resources Board, 2021b). TWE are then calculated by multiplying the mass emissions for each TAC by corresponding health values from the Office of Environmental Health Hazard Assessment (OEHHA). These health values include cancer potency factors and non-cancer chronic and

acute reference exposure levels (RELs), and the TWE calculations also include molecular weight adjustment factors to account for the molecular weight fraction of a compound associated with the specific health effects (California Air Resources Board, 2021b). As noted above, the resulting TWE provide a useful means of comparing the relative toxicity of TACs in an inventory; however, TWE do not quantify specific health risks, which are based on exposures to concentrations of specific TACs rather than emission levels only.

Once the planning inventory was complete, emissions estimates for PM_{2.5} and TACs were configured for use in dispersion modeling efforts. Modeling inventories were developed for all sources for which sufficient information (e.g., emissions rate, physical characteristics, spatiotemporal resolution) was available at the time of analysis.

Air Quality Modeling

Once emitted to the atmosphere, pollutants are subject to processes such as dispersion, chemical transformation, and wet and dry deposition. Air quality models use emissions inventories, meteorological data, and other inputs to simulate these processes and provide estimates of pollutant concentrations in specified locations of interest. To quantify concentrations of PM_{2.5} and other pollutants in the PTCA community, the Air District used three different air quality models, as described below.

First, the **Community Multiscale Air Quality (CMAQ)** model was used to provide an estimate of “background” concentrations in the PTCA community (i.e., concentrations that would exist in the absence of any local sources due to pollutant transport). CMAQ, a complex photochemical grid model, was used to evaluate the impact of these transported emissions. CMAQ requires a variety of input data, including meteorological information such as temperature, wind speeds, and precipitation rates. Air District staff prepared gridded meteorological inputs for CMAQ using the Weather Research and Forecasting (WRF) model, version 4.1. An existing CMAQ platform for 2016 (Tanrikulu et al., 2019) was then updated and used to conduct a baseline simulation for the entire Bay Area for 2018. In addition to the 2018 baseline simulation, a second 2018 CMAQ simulation was performed that excluded local emissions sources within the PTCA community. Differences between these two CMAQ runs were used to estimate background concentrations in the PTCA community, as shown in Table A-2. Further discussion of the relationship between background concentrations and local source impacts is provided in the “Additional Modeling Results” section of this appendix.

Table A-2. Background pollutant concentrations and cancer risk for the PTCA area.

Parameter	Value	Units
PM _{2.5} concentration	6.03	Micrograms per cubic meter (µg/m ³)
DPM concentration	0.15	Micrograms per cubic meter (µg/m ³)
Cancer risk	149	Additional cancer cases per million people

In addition, the **California Puff (CALPUFF)** model was used to estimate PM_{2.5} concentrations resulting from emissions sources at the Chevron Refinery in Richmond. This CALPUFF modeling was initially done to assess the air quality and health impacts of PM_{2.5} emissions from Chevron in support of amendments to Rule 6-5, which limits emissions from refinery fluidized catalytic cracking units. CALPUFF was run for the entire Bay Area at 1-km grid resolution and for a smaller

study area at 100-m grid resolution.³ The use of the 100-m sub-domain allowed for a more detailed analysis of refinery impacts than was available using CMAQ, which is typically run at 1-km or coarser grid resolutions. In addition, CALPUFF is able to use gridded meteorological information from WRF over the entire area where the emissions plume is expected to travel, which provides an advantage over dispersion models that use meteorological information at source locations only (Bay Area Air Quality Management District, 2021a). Because the detailed CALPUFF modeling of Chevron PM_{2.5} emissions was already available, those results were used to quantify PM_{2.5} concentrations resulting from that facility's operations. Modeled impacts for receptors in the PTCA community were extracted from the overall CALPUFF outputs and used for source attribution and exposure analyses.

Lastly, the **American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD)** was used to estimate pollutant concentrations for other local sources in the community. AERMOD is U.S. EPA's preferred model for near-field dispersion modeling and is required for all health risk assessment (HRA) modeling performed by or for the Air District (Bay Area Air Quality Management District, 2020b). In addition, AERMOD is the only model currently approved by U.S. EPA for mobile source applications such as PM hot-spot analyses (U.S. Environmental Protection Agency, 2021). Because of its ability to handle multiple source types, AERMOD was used to model dispersion from all local sources assessed in the PTCA emissions domain, except for the use of existing CALPUFF results to quantify impacts of PM_{2.5} emissions from the Chevron Refinery, as described above.⁴

In general, AERMOD applied using approaches consistent with those previously developed during the technical assessment for the West Oakland AB 617 community (Bay Area Air Quality Management District, 2019). One key difference from the West Oakland approach involves the meteorological data used for dispersion modeling. AERMOD is run using meteorological data that is representative of a single location, unlike the gridded meteorological fields that are used by CMAQ and CALPUFF. However, unlike West Oakland, the PTCA area is a challenging locale to model using only one meteorological set due the line of hills that run from Point San Pablo in the north southeast to Point Richmond, flat lands in the central area east of the domain, hills to the east of the flats, and a complex shoreline that surrounds the area on three sides. Because no single set of meteorological observations would be representative of this complex topography, the Air District relied on modeled meteorological data from WRF to run AERMOD, consistent with the modeled datasets used to run CMAQ and CALPUFF. An EPA utility program called the Mesoscale Model Interface Program (MMIF) was used to create AERMOD-ready meteorological for four representative sub-domains across the PTCA area. All sources within a given sub-domain were then modeled with AERMOD using the appropriate meteorological dataset.

AERMOD also requires a receptor file defining locations for which the model will estimate pollutant concentrations. A master receptor grid was generated with receptors spaced every 50 m in the x and y directions within the receptor domain, resulting in 76,072 discrete receptor locations. A spacing of 50 m was selected to sufficiently resolve spatial concentration gradients around emissions sources while keeping model runtimes reasonable (the more receptors that are defined, the longer it takes AERMOD to complete an annual simulation).

³ The 100-m domain covered areas from the 1-km CALPUFF run with simulated PM_{2.5} concentrations above 0.1 µg/m³.

⁴ Air toxics emissions from Chevron were evaluated in keeping with the HRA approach being implemented for Rule 11-18, which relies on AERMOD to characterize pollutant dispersion.

Exposure Assessment

To estimate air pollution exposures for community residents, annual average pollutant concentrations from the local-scale modeling were combined with Census population data. The latest decennial U.S. Census, conducted in 2020, provides residential population counts at the Census block level. This modeled population reflects a residential (“nighttime”) population, similar to that used in most large-scale epidemiological studies of outdoor air pollution. Total population exposure has units of persons multiplied by concentration (e.g., person- $\mu\text{g}/\text{m}^3$). We computed average exposures by first computing total exposures at Census-block resolution. We then computed an average exposure for all residents in the PTCA area by summing population exposure across all Census blocks and dividing by the sum of population. Consistent with epidemiological studies, we use “average exposures” interchangeably with “population-weighted concentrations,” or, equivalently, exposures “per capita.” These all have the same units as modeled concentrations. For $\text{PM}_{2.5}$, for example, the units are micrograms per cubic meter ($\mu\text{g}/\text{m}^3$).

To support PLAN strategy development, the contribution of individual sources and groups of sources to average residential exposure values were estimated based on air quality modeling results. This process is generally termed “source attribution” or “source apportionment,” and in this analysis, the results were already attributed to sources by virtue of having run each source individually in AERMOD. Because modeling was performed for each emissions source separately, the contributions from each source to modeled parameters (e.g., $\text{PM}_{2.5}$ concentrations or cancer risk) at each receptor location could be tracked and compared to contributions from other sources. Then, the total for a given parameter at a receptor could be calculated as the sum of contributions from individual sources. This process supported the analysis of how different source groups contribute to pollutant concentrations, exposures, and cancer risk in various parts of the community.

Additional Modeling Results

This section supplements the modeling results presented in Chapter 5 by presenting: (1) a modeled evaluation of total pollutant concentrations in the PTCA community that includes both background concentrations and local source impacts; and (2) a modeling analysis of the potential for acute respiratory impacts from flaring events at the Chevron Refinery.

Background Concentrations

Pollutant concentrations in the PTCA community are the result of both local emission sources and regional pollution that is transported from outside the study area. In other words, local sources contribute an incremental concentration that is added to the existing “background” concentration for a given pollutant, resulting in a total concentration to which residents are exposed. This total pollutant exposure can vary from year to year based on differences in emissions levels, meteorology, and other factors. For example, ambient monitoring data from 2013-2022 shows that annual average $\text{PM}_{2.5}$ concentrations at the San Pablo station have varied from $7.8 \mu\text{g}/\text{m}^3$ (2019) to $12.7 \mu\text{g}/\text{m}^3$ (2018) and averaged $10.1 \mu\text{g}/\text{m}^3$ across that decade. And though the PLAN is focused on reducing the local portion of that total exposure, it is useful to understand the relative contributions of local vs. regional sources to those total exposures. Therefore, the Air District performed regional- and local-scale modeling to estimate those contributions.

Figure A-2 shows annual average residential concentrations of PM_{2.5} and Diesel Particulate Matter (DPM),⁵ and average residential cancer risk⁶ for the PTCA community, all based on combined regional and local modeling results. For PM_{2.5}, the modeled regional component is 6.0 µg/m³ and the modeled local component is 1.1 µg/m³, or 15% of the total (7.1 µg/m³). The large regional component is partly due to secondary PM_{2.5} that forms from interactions of precursor species such as NO_x, SO_x, and ammonia. Because these interactions take time to complete, secondary PM_{2.5} formation generally happens well downwind of emissions sources. It should also be noted that the local PM_{2.5} component is underestimated due to sources omitted from the local-scale modeling.⁷ Some sources, such as residential fuel combustion and lawnmower use, were too small and dispersed to be included in the dispersion modeling, and these sources account for 19% of total PM_{2.5} emissions in the PTCA planning inventory.

For most TACs, secondary formation is not an important issue, so the local component is generally higher than was the case for PM_{2.5}. For DPM, local sources account for 40% of the annual average residential concentration of 0.25 µg/m³. Similarly, local sources account for 36% of the average cancer risk value of 232 in a million. These findings illustrate how local source impacts, which vary by pollutant, represent incremental increases on top of existing background concentrations and lead to disparities in air pollution exposure.

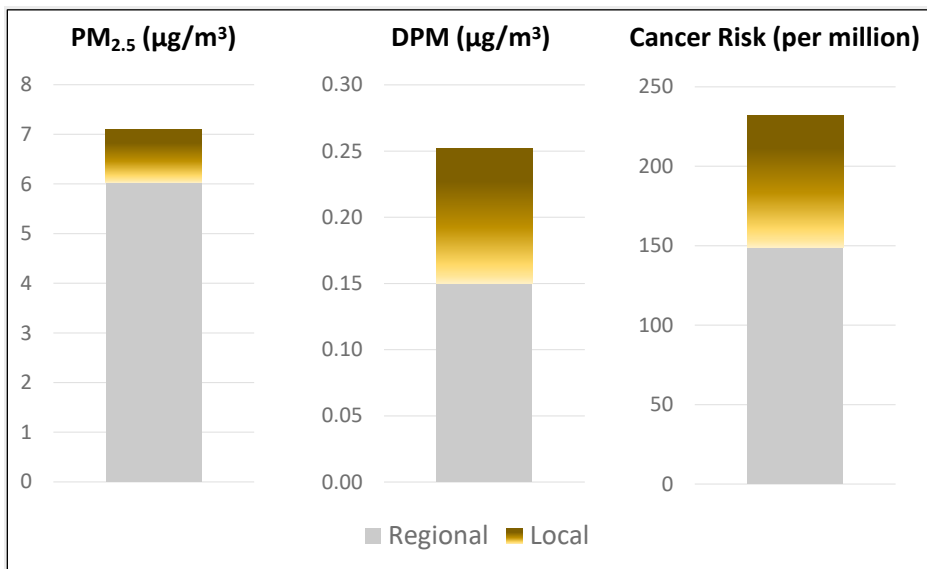


Figure A-2. Regional vs. local contributions to PM_{2.5} and DPM concentrations and cancer risk.

Potential Impacts From Chevron Flaring Events

Responding to community concerns about the impact of Chevron flaring events on respiratory health in the PTCA community, Air District staff undertook a model-based evaluation of these

⁵ These are the modeled pollutant concentrations to which the average PTCA area resident would be exposed.

⁶ Regional modeling results for chronic HI are not available, as the regional model can only be configured to simulate a limited number of TACs, and the District has historically focused on compounds that are key drivers of cancer risk.

⁷ Ambient monitoring data appear to confirm this underestimate; as previously noted, the San Pablo station reported an annual average PM_{2.5} concentration of 7.8 µg/m³ in 2019, which is 0.7 µg/m³ higher than the modeled total of 7.1 µg/m³ (regional plus local).

events. The evaluation focused on releases of sulfur dioxide (SO₂) due to: (a) the ready availability of daily SO₂ emissions data; and (b) the potential for acute SO₂ exposures to result in respiratory impacts. For example, in its rulemaking for the current national 1-hour SO₂ standard of 75 parts per billion (ppb), the U.S. Environmental Protection Agency noted that exposure to SO₂ at levels as low as 200 ppb for 5-10 minutes has been experimentally shown to cause moderately or severely decreased lung function in some exercising asthmatics.⁸

To support this analysis, reported daily SO₂ emissions totals for each flare at the Chevron Refinery were obtained for dates during 2020-2022 when any flare was reported as emitting 1,000 pounds of SO₂ or more (see Table A-3). To develop hourly emission rates, these daily totals were divided by the durations provided in the causal reports that described those specific flaring events. An SO₂ emission rate of 100 grams per second (g/s) was selected as a benchmark for modeling, a rate that is likely to occur at least several times per year, assuming the 2020-2022 data are predictive. To provide information on potential impacts of smaller or larger flaring events, emission rates of 30 g/s and 300 g/s were also modeled (note that the 2020-2022 data show multiple instances with estimated SO₂ emission rates of 300 g/s or higher).

Table A-3. Reported daily total SO₂ emissions for flares at the Chevron refinery during selected events. Source: <https://www.baaqmd.gov/about-air-quality/research-and-data/flare-data>.

Date	Flare	SO ₂ (lb)	Duration (h)	Rate (g/s)
2022-12-28	S6013: North Isomax Flare V-281	2,415	1.5	205
2022-08-18	S6010: High Level Flare, LSFO	1,520	10.6	18
2022-08-02	S6016: FCC Flare V-731	1,722	6.8	32
2022-03-04	S6013: North Isomax Flare V-281	2,148	2.0	135
2022-02-25	S6013: North Isomax Flare V-281	9,552	3.9	313
2021-12-30	S6013: North Isomax Flare V-281	23,178	9.4	309
2021-12-13	S6019: Alky-Poly Flare V-732	2,230	5.9	48
2021-12-13	S6016: FCC Flare V-731	1,566	5.8	34
2021-11-05	S6013: North Isomax Flare V-281	2,254	16.8	17
2021-11-04	S6013: North Isomax Flare V-281	2,048	—	—
2021-11-03	S6013: North Isomax Flare V-281	1,468	—	—
2021-11-02	S6013: North Isomax Flare V-281	4,580	—	—
2021-10-30	S6013: North Isomax Flare V-281	2,682	10.2	33
2021-10-28	S6013: North Isomax Flare V-281	1,868	—	—
2021-10-27	S6013: North Isomax Flare V-281	3,915	1.4	344
2021-10-25	S6016: FCC Flare V-731	4,734	—	—
2021-10-25	S6013: North Isomax Flare V-281	1,434	—	—
2021-10-24	S6039: Lube Flare V-3501	1,264	11.1	14
2021-10-24	S6013: North Isomax Flare V-281	10,379	13.0	101
2021-10-24	S6010: High Level Flare, LSFO	2,123	7.1	37
2021-08-14	S6039: Lube Flare V-3501	8,909	2.5	458
2021-05-14	S6039: Lube Flare V-3501	6,988	0.7	1,355

⁸ Federal Register, Vol. 75, No. 119 / Tuesday, June 22, 2010.

Date	Flare	SO ₂ (lb)	Duration (h)	Rate (g/s)
2021-05-02	S6013: North Isomax Flare V-281	7,217	4.0	226
2021-01-21	S6010: High Level Flare, LSFO	2,472	1.7	185
2021-01-16	S6013: North Isomax Flare V-281	3,626	—	—
2020-02-22	S6010: High Level Flare, LSFO	14,531	3.8	484
2020-02-16	S6013: North Isomax Flare V-281	1,286	0.3	463

The benchmark SO₂ emission rates of 30, 100 and 300 g/s were used as input for an AERMOD dispersion modeling simulation that was configured to predict the maximum 1-hour modeled impact for each potential downwind location in the community. Under these worst-case conditions, whenever the SO₂ emission rate for a simulated flare equaled or exceeded 100 g/s, the possibility of 1-hour average SO₂ concentrations exceeded 75 ppb was noted in all modeled residential areas. This means that a 100 g/s SO₂ emission rate could result in such an impact at any residential location in the community, given the right conditions (e.g., wind direction and speed). Even with rates as low as 30 g/s, the modeling still indicated potential for such impacts in neighborhoods close to the refinery.

Additional simulations were run to assess the likelihood of impacts to a substantial number of residents under less-than-worst-case conditions. Census data (2020) were used to represent the locations of residents, and meteorological conditions were drawn from the Air District's most recent annual application (2018) of the Weather Research and Forecasting (WRF) model. For a 100 g/s SO₂ release matched to a randomly selected set of hourly conditions, the modeling indicated at least a 5% chance of exposing at least 1,000 residents to a 1-hour average SO₂ level of 75 ppb or more (Table A-4). For a larger event (300 g/s), the probability increased to 15% or more, depending on which flare was the source. This indicates a meaningful chance of such an impact occurring during a typical year, given historical patterns of flaring activity and meteorology.

Table A-4. Modeled likelihoods at least 1,000 PTCA residents being exposed to a 1-hour SO₂ concentration of 75 ppb or more under various emissions scenarios.

Results for Various Simulated 1-Hour SO₂ Emission Rates (g/s)

Modeled Source	30 g/s	100 g/s	300 g/s
Alky-Poly Flare	0.01%	4.9%	15%
FCC Flare	0.00%	4.6%	15%
Hydrogen Plant Flare	0.31%	6.9%	18%
LSFO High Level Flare	0.06%	7.7%	21%
Lube Flare	0.00%	4.7%	15%
North Isomax Flare	0.00%	5.2%	16%
South Isomax Flare	0.00%	5.1%	15%

It should be noted that several aspects of the modeling approach could lead to underestimates of the potential for acute respiratory impacts from flaring. First, although the modeled SO₂ emission rates were informed by historical data, they were likely under-estimates of actual peak 1-hour SO₂ emission rates: a closer look at a sample of continuous emissions monitoring data showed that for some of the events that staff examined (Table A-3), most of the SO₂ was released over two consecutive hours or less, while the reported event durations were considerably longer. Second, conversion of total reduced sulfur compounds other than hydrogen sulfide (H₂S) may not have been fully factored into reported SO₂ totals. Third, simulations were run one flare at a time, while in reality, flaring events can involve multiple flares simultaneously. Fourth, flaring is known to result in emissions of pollutants other than SO₂—including fine particulate matter (PM_{2.5}) and some toxic air contaminants (TACs)—that can also contribute to respiratory impacts.⁹ At the same time, there are uncertainties attributable to the model used (AERMOD), and to the meteorological data (from WRF), which could lead to over-prediction of ground-level SO₂ concentrations.

Insights from modeling can sometimes be corroborated by air monitoring if some of the modeled potential scenarios actually occurred. As noted above, model predictions carry a degree of uncertainty, which is generally larger for more specific predictions (like what would happen under a single set of circumstances, rather than across a range of possibilities), so it is unreasonable to expect perfect agreement. Holding this aside, if air monitoring data do not show the same distribution of SO₂ levels that the modeling predicted (in this case, 1-hour averages over 75 ppb), it still does not mean that such impacts could not occur in the future under the right combination of conditions. Predicted impacts could also have occurred in the past, but at a location that did not have an SO₂ monitor.

With these limitations in mind, staff conducted a preliminary review of available SO₂ data from Air District monitoring sites and Chevron Ground Level Monitors (GLMs) in the PTCA region from 2017–2021. Numerous occurrences of hourly SO₂ concentrations above typical hourly levels were observed, including some occurrences of hourly concentrations approaching 75 ppb (Figure A-3). While none appeared to be traceable to a reported flaring event,¹⁰ the possibility still remains of flaring-related impacts at non-monitored locations, as well as the potential for future impacts at any location in the PTCA region. There are additional types of monitoring systems in place in the PTCA region, including refinery fenceline monitoring, that may add to our understanding of SO₂ emissions that cross the fenceline from flaring and non-flaring sources. Analyses of fenceline monitoring data in context with other monitoring information and modeling results can be included in future air quality assessments.

Based on the modeling results and related uncertainties, staff concluded that recent patterns of flaring have the potential to cause adverse respiratory impacts to sensitive groups in the Path to Clean Air (PTCA) community.

⁹ Suboptimal flaring conditions, which this analysis did not model, can increase emissions of these co-pollutants.

¹⁰ These observations could indicate the potential for SO₂ impacts from industrial sources other than flaring.

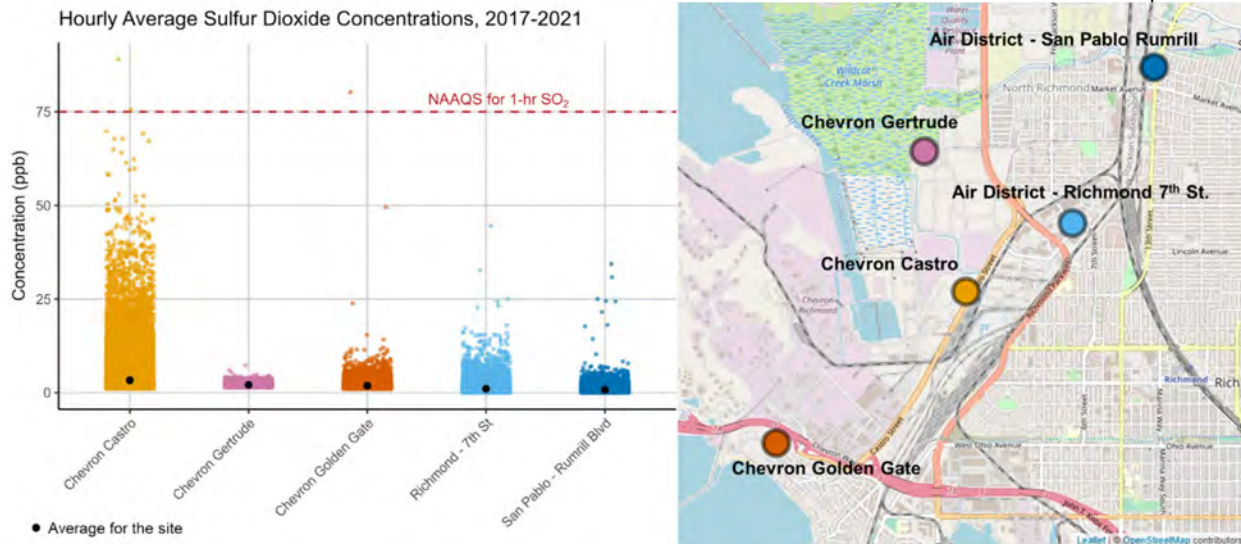


Figure A-3. Hourly average SO₂ concentrations at Chevron Ground Level Monitors (GLMs) and selected Air District monitoring sites for the period 2017–2021 (left), and map of monitoring site locations (right).

Chevron Inventory Updates

As documented in Chapter 5 of the PLAN, the Air District developed a 2019 baseline inventory that included emissions estimates for the Chevron Refinery and other permitted sources in the PTCA area. However, compiling an emissions inventory for a complex facility like Chevron is an iterative process, through which data are continually collected, quality assured, and integrated by source and pollutant type to improve the reliability and completeness of emissions estimates. Annual variations in emissions data may occur due to differing assumptions, associated levels of production, the availability of improved information, and other factors.

To both illustrate this iterative process and provide the latest information on Chevron, this section summarizes a more recent 2021 emissions inventory that was compiled for the refinery near the end of the PLAN development process. This inventory not only represents a more current year, but also incorporates findings from the Air District’s Heavy Liquids Study (HLS), which was conducted to improve estimation of organic emissions from fugitive leaks from refinery components (e.g., valves, connectors, etc.). The HLS established a set of average emission rates and pollutant profiles to be applied to fugitive emission components, many of which are associated with storage devices such as tanks.

A summary of the 2021 inventory and comparisons against the original 2019 baseline inventory are provided in the sub-sections that follow. These comparisons include a discussion of reasons for emission changes between 2019 and 2020, which may involve actual increases or decreases in emissions (e.g., due to changes in production or new sources coming online), improved information (e.g., results from the HLS), or both.

Toxic Air Contaminants

Table A-5 summarizes toxicity-weighted emissions from processes at the Chevron Refinery for 2021, with corresponding 2019 values shown alongside. Overall, total cancer TWE are 81% higher in the 2021 inventory than in the 2019 inventory, while total chronic TWE are 33% higher in 2021. For cancer TWE, the largest change occurs in fugitive emissions, specifically leaks from valves, flanges, connectors, pumps, and compressor seals. These changes are associated with the HLS

and are attributable to an improved understanding of emissions from these devices rather than an actual emissions increase. For chronic, TWE, the largest change occurs in emissions from boilers and process heaters, with much of the change attributable to reformer furnaces at the hydrogen plant.

Table A-5. Summary of cancer and chronic TWE from Chevron Refinery by process type.

Process Type	Cancer TWE		Chronic TWE	
	2021	2019	2021	2019
Boilers/Process Heaters	20,576.43	18,728.09	877.35	144.98
Sulfur Plants	NA	NA	517.82	195.35
Catalytic Cracking	179.00	1,064.00	224.01	592.81
Cogeneration	5,368.80	722.86	271.66	469.47
Storage Tank	2,047.80	633.95	23.38	12.53
Fugitives	12,106.51	231.91	18.26	15.02
Vapor Recovery/Flares	117.63	1,064.79	10.46	21.92
Other	108.55	153.03	2.94	4.25
Tanker Loading	18.34	NA	1.97	<0.01
Generator	1,236.15	34.24	1.83	0.05
Barge Loading	10.14	12.30	1.09	0.42
Backup Generator (Bug)	419.19	507.60	0.62	0.75
Coating And Cleanup	0.56	0.75	0.57	0.61
Cooling Towers	231.49	214.68	0.47	0.35
Storage/Transport Container Cleaning	2.89	4.33	0.31	0.15
Tank Cars and Trucks - Working Losses	10.42	10.46	0.27	0.27
Wastewater Treatment	7.61	82.67	0.17	5.15
Incineration	2.69	NA	0.07	NA
Surface Blasting	0.03	0.05	<0.01	0.01
Gasoline Dispensing	0.13	<0.01	<0.01	<0.01
Chevron Refinery Total	42,444.36	23,465.71	1,953.26	1,464.10

In PLAN Chapter 5, Tables 5-10 and 5-11 provide summary information for 12 individual TACs that accounted for 97% of the cancer TWE and 93% of the chronic TWE at Chevron in the 2019 inventory. However, in the 2021 inventory, a few other TACs emerge as important, including polycyclic aromatic hydrocarbons (PAHs), naphthalene, and ethylene dichloride. Table A-6 provides summary information for an expanded list of 20 high-priority TACs that account for 98% of the cancer TWE and 95% of the chronic TWE at Chevron in the 2019 inventory. Note that PAHs, which were included in the 2021 inventory based on HLS findings, are now the second highest contributor to cancer TWE at Chevron, behind only hexavalent chromium. It should also be noted that sulfuric acid emissions, which contribute to chronic health risks, are more than two times higher in the 2021 inventory than in the 2019 inventory.

Table A-6. Summary of cancer and chronic TWE from Chevron Refinery by pollutant.

Pollutant	Cancer TWE		Chronic TWE	
	2021	2019	2021	2019
Hexavalent Chromium	17,953.88	17,782.84	1.33	1.32
PAHs	10,580.29	17.14		

Pollutant	Cancer TWE		Chronic TWE	
	2021	2019	2021	2019
Naphthalene	2,807.87	144.41	20.41	1.05
Ethylene dichloride	1,967.83	0.04	0.52	0.00
DPM	1,732.91	541.84	2.57	0.80
Benzene	1,607.98	1,397.03	41.10	35.71
Formaldehyde	1,481.52	985.50	61.01	40.58
Cadmium	1,458.46	197.23	38.61	5.22
Arsenic	1,258.54	818.78	56.54	36.78
Nickel	686.09	539.71	419.16	329.73
1,3-butadiene	182.53	652.89	1.19	4.27
Ethylbenzene	56.42	32.95	0.03	0.01
Hydrogen Cyanide (HCN)			141.02	174.40
Acrolein			43.18	1.21
Toluene			0.53	1.84
Xylene			0.34	1.12
Manganese			223.09	434.32
Hydrochloric Acid			117.73	59.80
Sulfuric Acid			677.46	246.31
Hydrogen Sulfide (H2S)			19.32	10.96

The 2021 inventory also includes changes to criteria air pollutant (CAP) emissions, as shown in Table A-7. In general, CAP emissions are higher in the 2021 inventory, with percentage changes provided in the bottom row of the table. For example, NO_x emissions are 54% higher in 2021 than in 2019, due largely to higher emissions from boilers and process heaters. However, PM_{2.5} emissions are 8% lower in 2021 than in 2019, due largely to lower emissions from catalytic cracking. Specifically, PM_{2.5} emissions from the Fluidized Catalytic Cracking Unit (FCCU) decreased by about 28%, dropping from 228.6 tons per year (tpy) to 164.5 tpy. This decrease is consistent with the percent changes in throughput of refinery coke and barrels of fresh feed processed. PM_{2.5} emissions from cogeneration are also lower in the 2021 inventory, which partly reflects a redistribution of emissions between gas cogeneration turbines and associated heat recovery steam generators (HRSG), which are reported under the “Boilers/Process Heaters” process type. Total PM_{2.5} emissions from the cogeneration/HRSG units decreased by about 45% between 2019 and 2021, which reflects similar changes in throughput for these sources.

Table A-7. Summary of criteria air pollutant emissions from Chevron by process type.

Process Type	2021 Inventory (tons/year)					2019 Inventory (tons/year)				
	NO _x	TOG	SO _x	PM _{2.5}	CO	NO _x	TOG	SO _x	PM _{2.5}	CO
<i>Backup Generators (BUG)</i>	5.18	0.08	0.01	0.16	1.46	1.63	0.04	<0.01	0.10	0.36
<i>Barge Loading</i>	2.41	23.08	0.06	0.33	0.97				0.12	
<i>Boilers/Process Heaters</i>	472.26	59.78	36.07	80.62	45.26	300.21	37.11	43.05	54.18	172.42
<i>Catalytic Cracking</i>	83.07	6.03	164.47	165.24	40.44	101.96	7.72	200.46	228.61	28.84
<i>Coating And Cleanup</i>		0.08		0.01			0.01			
<i>Cogeneration</i>	142.49	53.91	19.82	49.83	240.08	33.47	15.36	4.16	91.17	0.63
<i>Cooling Towers</i>		7.08		126.43			6.13		76.34	
<i>Fugitives</i>		33.74		<0.01		0.02	86.09			0.07
<i>Gasoline Dispensing</i>		0.09					0.18			
<i>Generators</i>	11.55	0.84	0.05	0.20	23.12	0.66	0.06	<0.01	0.01	0.11
<i>Incineration</i>	0.03	0.19			0.07					
<i>Other</i>	0.66	54.00	0.05	1.34	1.00	8.44	53.69	0.30	0.75	3.20
<i>Storage/Transport Container Cleaning</i>	0.69	6.59	0.02	0.09	0.28					
<i>Storage Tanks</i>		102.60	0.59	0.71			119.43	0.10	0.12	
<i>Sulfur Plants</i>	15.43	0.42	24.55	5.52	40.07	28.83	0.20	68.09	19.54	
<i>Surface Blasting</i>				0.00						
<i>Tank Cars and Trucks - Working Losses</i>		22.30					29.21			
<i>Tanker Loading</i>	4.37	41.80	0.11	0.59	1.75				0.68	
<i>Vacuum Distillation</i>							0.02			
<i>Vapor Recovery/Flares</i>	7.82	51.62	174.17	3.33	37.81	9.82	30.70	5.92	1.36	1.23
<i>Wastewater Treatment</i>		43.24					13.32			
Totals	745.96	507.48	419.98	434.40	432.32	485.04	399.28	322.08	473.01	206.86
Percentage change from 2019	54%	27%	30%	-8%	109%	--	--	--	--	--

Emissions Forecasts

Forecasted emissions inventories were developed for all sources described in PLAN Chapter 5. As a starting point, a new baseline inventory was developed that combined the updated 2021 Chevron inventory described in the previous section of this appendix with 2019 baseline emissions for all other sources. Forecasted emissions were then estimated by combining the baseline data with ancillary datasets that provide growth factors and control factors based on business-as-usual (BAU) conditions. Here, “growth” refers to anticipated changes in activity (e.g., increases in vehicle miles traveled for the on-road fleet), while “control” refers to changes in emission characteristics (e.g., lower motor vehicle emission factors due to new technology introduced into the fleet). The BAU scenarios only consider controls resulting from existing (“on the books”) regulations and can be viewed as conditions that are projected to occur in the PTCA area without the implementation of the PLAN. These BAU conditions could also be called “without Plan” or “no Plan” scenarios.

The BAU forecasts were prepared using a variety of datasets:

- Growth profiles and control factors developed by the Air District as part of a recent trends analysis for criteria air pollutants (Bay Area Air Quality Management District, 2023). Growth profiles were based on socio-economic indicators and demographic data, while control factors reflect the anticipated impact of existing District regulations.
- Forecasting scalars provided by CARB that combine growth and control factors for future years out to 2034. These scalars were based on data from CARB’s California Emissions Projection Analysis Model (CEPAM) and reflect forecasts from the 2019 ozone state implementation plan (SIP) emissions inventory.
- Emission reduction factors from CARB that reflect impacts of recently adopted statewide regulations that were not considered in the CEPAM data referenced above. These statewide regulations largely address NOx and PM emissions from mobile sources, and descriptions of these regulations are provided in Table A-8.

Table A-8. Descriptions of recently adopted statewide regulations.

Regulation	Description	Adoption Date
Advanced Clean Cars II (ACCI)	Reduces emissions from new light- and medium-duty vehicles beyond the 2025 model year and increases the number of zero-emission vehicles for sale.	November 2022
Advanced Clean Fleets (ACF)	Aims to achieve a zero-emission truck and bus fleet by 2045 and significantly earlier for certain market segments (e.g., last-mile delivery and drayage applications)	April 2023
Heavy-Duty Inspection and Maintenance (HDIM)	Expands existing I&M programs to ensure all vehicle control systems (e.g., diesel particulate filters) are adequately maintained	December 2021
Small Off-Road Engine (SORE) Amendment	Accelerates the transition of SORE equipment (e.g., leaf blowers, portable generators) to zero-emission equipment starting in 2024	December 2021
Transport Refrigeration Unit (TRU) Regulation	Requires diesel-powered TRU to transition to zero-emission technology in two phases	February 2022
Commercial Harbor Craft (CHC) Regulation	Requires zero-emission options where feasible and Tier 3 and 4 engines on all other vessels	March 2022

Regulation	Description	Adoption Date
In-Use Locomotive Regulation	Reduces harmful emissions from locomotives, in part to address long-standing environmental justice concerns for communities near railyards	April 2023

Note that for permitted sources in the PTCA community, emissions were generally held constant for the 5- and 10-year BAU forecasts. For the Chevron Refinery, the impact of amendments to Air District Rule 6-5 on emissions from the FCCU unit was estimated for future years,¹¹ but emissions for other processes were kept at baseline levels due to a lack of information on future changes in throughput levels at the refinery.

Table A-9 provides a comparison between baseline and future year emissions for two example CAPs, NO_x and PM_{2.5}, which are the pollutants most impacted by recently adopted statewide regulations, as noted above. Compared to baseline levels, total NO_x emissions are 21% lower in 2029 and 29% lower in 2034. Similarly, total PM_{2.5} emissions are 18% lower than baseline levels in 2029 and 19% lower in 2034. Due to the impact of Rule 6-5, Chevron’s contribution to total PM_{2.5} emissions decreases from 61% in the baseline inventory¹² to 56% in the future year inventories. For NO_x, emissions reductions are largely due to changes in the on-road fleet, as emissions from Vehicles & Trucks are 66% lower in 2029 than baseline levels and 76% lower in 2034.

Table A-9. Baseline and future year NO_x and PM_{2.5} emissions in the PTCA area.

Emissions Source	NO _x Emissions (tpy)			PM _{2.5} Emissions (tpy)		
	Baseline	2029 BAU	2034 BAU	Baseline	2029 BAU	2034 BAU
Permitted Fuel Refining Sources	761.0	761.0	761.0	437.9	330.5	330.5
- Chevron Refinery (2021)	746.0	746.0	746.0	434.4	327.0	327.0
- Other Fuel Refining	15.1	15.1	15.1	3.5	3.5	3.5
Marine & Rail	1,167.0	1,002.4	834.5	26.7	18.6	15.9
- Ocean Going Vessels	587.8	690.2	670.2	12.4	13.6	14.7
- Ferries	122.9	67.7	45.4	3.1	0.8	0.2
- Commercial Harbor Craft	259.4	128.6	75.1	7.9	2.1	0.4
- Cargo Handling Equipment	5.7	2.0	0.8	0.0	0.0	0.0
- Railyards	44.4	33.6	14.4	0.9	0.7	0.3
- Rail lines	146.8	80.2	28.6	2.4	1.4	0.4
Industrial & Commercial Sources	73.9	73.9	73.9	107.2	103.0	105.7
- Permitted Sources (non-refining)	66.6	66.6	66.6	26.3	26.3	26.3
- Restaurants	0.0	0.0	0.0	12.0	11.8	12.4
- Construction (non-mobile)	0.0	0.0	0.0	11.0	12.8	14.8
- Residential wood combustion	7.4	7.4	7.4	57.9	52.2	52.2
Vehicles & Trucks	635.3	213.4	152.2	52.2	48.7	46.9
- Trucks	472.8	114.6	68.8	12.0	7.2	6.1

¹¹ Rule 6-5 was assumed to reduce future year emissions of PM_{2.5} and associated air toxics by 65% (BAAQMD, 2021b).

¹² The baseline inventory in Table A-9 includes 2021 emissions for Chevron and 2019 emissions for all other sources. When Chevron’s 2019 inventory is used, the refinery accounts for 63% of total PM_{2.5}, as documented in PLAN Chapter 5.

Emissions Source	NOx Emissions (tpy)			PM _{2.5} Emissions (tpy)		
	Baseline	2029 BAU	2034 BAU	Baseline	2029 BAU	2034 BAU
- Light Duty Passenger Vehicles	108.0	49.2	34.3	5.4	5.3	3.6
- Buses	10.9	7.3	5.9	0.2	0.2	0.2
- Motor Homes	2.5	1.5	1.3	0.1	0.1	0.1
- Motorcycles	12.2	11.5	11.6	0.1	0.1	0.1
- Road Dust	0.0	0.0	0.0	33.7	35.8	36.8
- Transportation Refrigeration Units	28.8	29.3	30.3	0.7	0.1	0.1
Misc. Sources	605.2	512.1	496.5	93.2	84.1	81.3
- Offroad Equip. (Construction, etc.)	179.1	116.5	105.3	14.3	10.5	9.6
- Recreational Boats	76.0	63.7	60.2	14.4	9.4	8.0
- Fuel Combustion (non-permitted)	318.5	301.6	301.5	55.5	54.9	54.5
- Other	31.7	30.1	29.4	8.9	9.3	9.2
Total - All Sources	3,242.4	2,562.9	2,318.1	717.2	584.9	580.2

Table A-10 provides a comparison between baseline and future year emissions for air toxics, focusing on cancer and chronic TWE. Compared to baseline levels, total cancer TWE are 40% lower in 2029 and 49% lower in 2034, changes that are largely due to decreases in mobile source DPM emissions.¹³ Changes in total chronic TWE are more modest, decreasing by 11% in 2029 and by 13% in 2034 relative to baseline levels. It should also be noted the contribution of Chevron and other fuel refining sources to the TWE inventories changes over time. For example, permitted fuel refining sources account for 17% of total cancer TWE in the baseline inventory¹⁴ but about 30% of cancer TWE in the future year inventories.

Table A-10. Baseline and future year toxicity weighted emissions in the PTCA area.

Emissions Source	Cancer TWE			Chronic TWE		
	Baseline	2029 BAU	2034 BAU	Baseline	2029 BAU	2034 BAU
Permitted Fuel Refining Sources	42,577.6	42,500.6	42,500.6	2,020.2	1,987.7	1,987.7
- Chevron Refinery (2021)	42,444.4	42,367.4	42,367.4	1,953.3	1,920.8	1,920.8
- Other Fuel Refining	133.2	133.2	133.2	66.9	66.9	66.9
Marine & Rail	99,005.8	55,877.2	41,789.6	248.2	193.6	176.5
- Ocean Going Vessels	29,180.9	31,827.5	36,062.6	144.5	157.7	167.8
- Ferries	15,220.7	3,959.6	908.8	22.6	5.9	1.3
- Commercial Harbor Craft	38,490.9	10,155.2	2,036.8	57.1	15.1	3.0
- Cargo Handling Equipment	241.9	89.1	0.0	0.4	0.1	0.0
- Railyards	4,035.1	3,077.3	968.3	6.2	4.8	1.7
- Rail lines	11,836.3	6,768.5	1,813.1	17.5	10.0	2.7
Industrial & Commercial Sources	4,403.8	4,595.1	4,982.1	131.9	141.0	155.5
- Permitted Sources (non-refining)	1,258.4	1,258.4	1,258.4	19.8	19.8	19.8

¹³ Total DPM emissions in the PTCA area are projected to decrease by 54% between 2019 and 2029 and by 65% between 2019 and 2034, largely due to reductions in mobile source emissions.

¹⁴ Note that when Chevron's 2019 inventory is used as the baseline, permitted fuel refining sources accounts for only 11% of total cancer TWE, as documented in PLAN Chapter 5.

Emissions Source	Cancer TWE			Chronic TWE		
	Baseline	2029 BAU	2034 BAU	Baseline	2029 BAU	2034 BAU
- Restaurants	38.3	39.9	42.0	2.1	2.1	2.2
- Construction (non-mobile)	2,417.1	2,684.2	3,069.0	88.7	100.2	114.6
- Residential wood combustion	690.0	612.6	612.6	21.3	18.9	18.9
Vehicles & Trucks	37,945.8	11,281.7	8,446.0	325.9	234.0	208.3
- Trucks	29,067.9	6,123.0	4,356.1	130.6	67.0	53.1
- Light Duty Passenger Vehicles	4,325.2	2,130.6	1,362.1	76.1	48.0	34.5
- Buses	649.1	92.6	72.3	1.7	0.9	0.9
- Motor Homes	280.7	174.3	128.1	0.8	0.5	0.4
- Motorcycles	1,565.5	1,403.6	1,394.9	32.2	28.9	28.7
- Road Dust	792.7	843.7	866.3	82.7	87.9	90.3
- Transportation Refrigeration Units	1,264.7	513.9	266.2	1.9	0.8	0.4
Misc. Sources	59,500.0	31,886.0	27,380.2	714.0	517.7	480.8
- Offroad Equip. (Construction, etc.)	36,857.0	17,249.0	13,748.0	163.5	106.6	90.4
- Recreational Boats	10,317.8	6,536.3	5,473.0	231.2	145.8	123.1
- Fuel Combustion (non-permitted)	4,871.8	4,894.3	4,941.8	135.4	133.8	133.4
- Other	7,453.3	3,206.4	3,217.4	183.9	131.4	133.9
Total (All Sources)	243,433.0	146,140.6	125,098.4	3,440.1	3,074.1	3,008.8

Though Tables A-9 and A-10 include anticipated emission reductions associated with the recently adopted statewide regulations listed in Table A-8, those tables do not provide any information on the impact of each regulation individually. Therefore, Table A-11 summarizes emission reductions associated with each statewide regulation. As previously noted, these regulations primarily impact NOx and PM emissions, so reductions for NOx, PM2.5 and DPM are shown in Table A-11. Collectively, these recently adopted regulations account for about 40% of the total NOx and DPM reductions projected to occur by 2029 and 2034. For PM_{2.5}, these regulations account for about 10% of the projected reductions for those future years.

Table A-11. PTCA emission reductions associated with recently adopted statewide regulations.

Sector	Regulation	Emissions Reductions (tpy)					
		NOx		PM _{2.5}		DPM	
		2029	2034	2029	2034	2029	2034
On-road	ACCII	4.84	19.03	0.76	2.94	<0.01	<0.01
	ACF	7.55	13.50	0.07	0.24	0.03	0.11
	HDIM	30.22	29.00	0.19	0.18	0.20	0.19
Off-road	SORE	6.35	10.33	0.94	1.84	0.00	0.00
	TRU	2.20	2.58	0.17	0.21	0.18	0.22
	CHC	169.61	229.91	7.05	8.60	7.36	9.04
	Locomotive	22.10	72.42	0.41	1.43	0.44	1.55
TOTAL		242.86	376.78	9.58	15.44	8.21	11.11

The 2029 and 2034 BAU forecasts summarized in this appendix are intended to serve as a starting point for tracking emissions changes over time. Emission reductions associated with specific PLAN actions will be discussed or quantified during the PLAN implementation phase. In addition, changes to the baseline or BAU inventories may be made as new information becomes available over time.

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Appendix D: Air Monitoring

This appendix contains additional information on air monitoring data and insights to supplement Chapter 5: Air Quality Overview and Chapter 7: Key Issues and Strategies, including:

- Background on the air monitoring datasets from different projects and programs that were used to help characterize community air quality for the Plan technical assessment
- Additional findings from different analyses to support specific key issues or strategies
- Resources on air quality monitoring and links to available real-time air quality data

Background And Resources On Air Monitoring Programs And Projects

Air monitoring data used for analyses that were included in the Plan came from several different air monitoring programs and projects. Data from the Air District's long-term air monitoring network were retrieved largely from the U.S. Environmental Protection Agency's Air Quality System (AQS), which is EPA's official repository for ambient air quality data.¹ These data are also available for download via the EPA's Air Data website, which has tools for visualizing and summarizing air quality data.² Each year EPA also develops an interactive, national report on the status and trends in key air pollutants using data from air monitoring stations operated by state, local, and tribal air quality agencies nationwide.³ Data for some pollutants measured at Air District monitoring sites, such as black carbon and ultrafine particles, were retrieved from Air District database systems. More information on the Air District's fixed-site air monitoring network, including the locations of air quality monitoring sites and the specific pollutants measured at different sites, is available in the latest version of the Annual Air Monitoring Network Plan.⁴ The Air District's air monitoring network is designed for compliance with EPA network design and data quality requirements, including acceptable instrumentation, monitor siting and operation, and laboratory analysis methods. More information about the requirements of EPA's national air monitoring programs as implemented by the Air District is available through EPA's Ambient Monitoring Technology Information Center (AMTIC).⁵

Aggregated air monitoring data from different projects or programs were shown in several plots, such as daily or annual average concentrations of different pollutants. In general, to calculate average pollutant concentrations, valid data must be available for at least 75% of the averaging period. For example, to calculate a valid 24-hour average pollutant concentration from hourly data, at least 18 hours of valid data must be available. For criteria pollutants, there are specific data completeness and data handling requirements for calculating design values for comparisons with the National Ambient Air Quality Standards (NAAQS).⁶

Hourly PM_{2.5} data from the network of Clarity air sensors in the PTCA area operated by Groundwork Richmond and Ramboll were provided to the Air District by Groundwork Richmond, Clarity, and Ramboll.⁷ Accuracy of data from lower-cost air sensors can vary greatly across

¹ EPA's Air Quality System (AQS), the official repository for ambient air quality data: <https://www.epa.gov/aqs>

² EPA's Air Data webpage: <https://www.epa.gov/outdoor-air-quality-data>

³ EPA's Air Quality Trends Report webpage: <https://www.epa.gov/air-trends>

⁴ Air District webpage for the Annual Air Monitoring Network Plan: <https://www.baaqmd.gov/about-air-quality/air-quality-measurement/ambient-air-monitoring-network>

⁵ EPA's Ambient Monitoring Technology Information Center (AMTIC) website: <https://www.epa.gov/amtic>

⁶ EPA's Air Quality Design Values website: <https://www.epa.gov/air-trends/air-quality-design-values>

⁷ Groundwork Richmond Air Rangers webpage: <http://www.groundworkrichmond.org/air-rangers.html>

manufacturers and from unit to unit, and can change over time. Where the air sensor is mounted relative to its surrounding and air flow can also cause differences between units that are not due to differences in concentrations. These air sensors, their siting/placement, and the data they provide do not undergo the same rigorous quality control and assurance protocols that are used for the Air District's fixed-site air monitoring network. However, the data from these networks can still show relatively large differences between locations or times that are helpful in identifying potential sources of fine particulate matter.

The Air District's PTCA Community Air Monitoring Plan (CAMP) website⁸ contains additional information and resources on air monitoring projects and programs that are referenced in this Appendix and in Chapter 5 of the Plan, including:

- The CAMP document⁹ and materials and resources from CAMP development
- Quarterly updates during implementation of the CAMP with information on air monitoring projects in the PTCA area and data analyses with insights
- The Air Monitoring Reference Guide for the PTCA area¹⁰, containing brief descriptions of several ongoing or completed air monitoring projects and programs, as well as links to available data and additional resources
- Materials related to the CAMP air toxics monitoring study, including an interactive StoryMap with insights¹¹; a Technical Support Document with more detail on the study development, approach, data collection, and findings; and a downloadable dataset

The CAMP air toxics monitoring study was conducted using the Air District's air monitoring van, to screen areas for certain Volatile Organic Compounds (VOC)s and identify locations with higher levels of those VOCs. This study found numerous occurrences of higher than typical levels of different VOCs, some of which were located in the vicinity of specific facilities and operations in the study area. Compared to measurements from nearby areas, these occurrences of relatively higher levels of VOCs can point to air quality issues, including unknown or potentially under-controlled sources of air pollution that may be opportunities for reducing pollution emissions and exposure. Several examples of these occurrences of higher levels of different VOCs are described in this Appendix. While some types of air monitoring data are comparable with health-based thresholds or standards, the 1-second data collected in this study are not directly comparable to health metrics (which are typically based on much longer averaging periods) and do not provide enough information to estimate health risk.

Information to Support Key Issues, Strategies, and Actions

Information on air monitoring data and analyses is organized below by community concern thematic areas and key issues. Much of the data and analyses provided are intended to inform generally at the Community Concern thematic area/key Issue level. References are provided for instances where certain data or analyses relate to specific Strategies.

⁸ The Air District's PTCA CAMP website: <https://www.baaqmd.gov/community-health/community-health-protection-program/richmond-area-community-health-protection-program/community-air-monitoring>

⁹ The PTCA CAMP document: <https://www.baaqmd.gov/-/media/files/ab617-community-health/richmond/richmondsanpabloairmonitoringplanjuly2020-pdf.pdf?la=en>

¹⁰ Air Monitoring Reference Guide for the PTCA area: <https://www.baaqmd.gov/-/media/files/ab617-community-health/richmond/quarterly-report-documents/ptca-monitoring-data-inventory-pdf.pdf?la=en>

¹¹ Interactive, public-facing StoryMap for the CAMP air toxics monitoring study: <https://storymaps.arcgis.com/stories/21c9cd2252fe4a7d8ab26ae2fa81ec47>

Fuel Refining

The Chevron Refinery operates certain air monitoring systems for compliance with different EPA regulations and Air District rules, described briefly in the PTCA Air Monitoring Reference Guide.¹² Air District Regulation 9, Rule 1 (Rule 9-1)¹³ and Regulation 9, Rule 2 (Rule 9-2)¹⁴ require Chevron to conduct ground-level monitoring of sulfur dioxide (SO₂) and hydrogen sulfide (H₂S) to demonstrate compliance with concentration limits. These monitoring stations are also audited by the Air District. SO₂ and H₂S are common byproducts of refinery operations and can contribute to odors. These pollutants also have other sources that are found in the PTCA area, including landfills, composting facilities, and water treatment facilities, and have natural sources as well. Exposure to SO₂ can harm the respiratory system and is particularly impactful on people with existing respiratory conditions like asthma. SO₂ also contributes to the formation of particulate matter.¹⁵

SO₂ data from the refinery ground-level monitoring sites are shown in comparison with data from nearby Air District monitoring sites in Figure 1. Each smaller dot represents an hourly SO₂ concentration, and the larger black dot represents the five-year average concentration. There were many more occurrences of higher SO₂ levels at the Chevron-Castro ground-level monitor compared to other monitors. Data from the refinery ground-level monitors are not subject to the NAAQS since they are inside a facility fence line, but they do show numerous occurrences of SO₂ concentrations approaching and exceeding the NAAQS (75 ppb) at the Chevron-Castro monitor.¹⁶ There were fewer occurrences of higher SO₂ concentrations at the other monitoring sites. SO₂ concentrations at Air District monitoring sites, which are located outside the refinery fence line, were comparatively lower and were well below the NAAQS. Data from the Oakland West monitoring site (near the Port of Oakland) and the San Jose-Jackson (urban area without refinery or port related SO₂ sources) are also shown for context. When comparing only Air District monitoring sites, there were more occurrences of relatively higher SO₂ concentrations (but below the NAAQS) at the Richmond-7th St., San Pablo-Rumrill, and Oakland West monitoring sites compared to the San Jose-Jackson monitoring site.

At the Chevron-Castro location, where measured SO₂ concentrations were generally highest compared to other monitoring sites, the higher concentrations occurred much more frequently from spring to early autumn (Figure 2). Factors such as seasonal operations at specific nearby refinery sources and meteorology (wind patterns and temperatures) may contribute to this seasonal variability.

The higher SO₂ concentrations measured at the Chevron Castro ground-level monitor tended to occur when winds were from the southwest, indicating a source or sources located to the southwest of the monitor. Figure 3 shows measured hourly SO₂ concentrations at Chevron Castro paired with wind speed and direction data from the nearby Chevron Gertrude ground-level monitor. The warmer colors (yellow, orange, red) indicate higher average SO₂ concentrations

¹² Air Monitoring Data Reference Guide for the Path to Clean Air area: <https://www.baaqmd.gov/~media/files/ab617-community-health/richmond/quarterly-report-documents/ptca-monitoring-data-inventory-pdf.pdf?a=en>

¹³ Air District Regulation 9, Rule 1: Sulfur Dioxide. <https://www.baaqmd.gov/rules-and-compliance/rules/reg-9-rule-1-sulfur-dioxide>

¹⁴ Air District Regulation 9, Rule 2: Hydrogen Sulfide. <https://www.baaqmd.gov/rules-and-compliance/rules/reg-9-rule-2-hydrogen-sulfide>

¹⁵ EPA Sulfur Dioxide Basics: <https://www.epa.gov/so2-pollution/sulfur-dioxide-basics>

¹⁶ NAAQS for Sulfur Dioxide: <https://www.epa.gov/so2-pollution/primary-national-ambient-air-quality-standard-naaqs-sulfur-dioxide>

occurring predominantly when winds are from the southwest. There are multiple possible SO₂ sources nearby to the southwest of the Chevron Castro monitor, including the Chemtrade facility and the Chevron bioreactor. The above information on SO₂ measurements at and near the refinery can help inform *Fuel Refining Strategy 5: Reduce Exposure and Public Health Impacts from Particulate Matter and Other Criteria Air Pollutants Emitted by the Fuel Refining Sector*. This data could be evaluated further for possible attribution to specific flaring events to inform *Fuel Refining 2: Reduce Persistent Flaring and Improve Incident Response*.

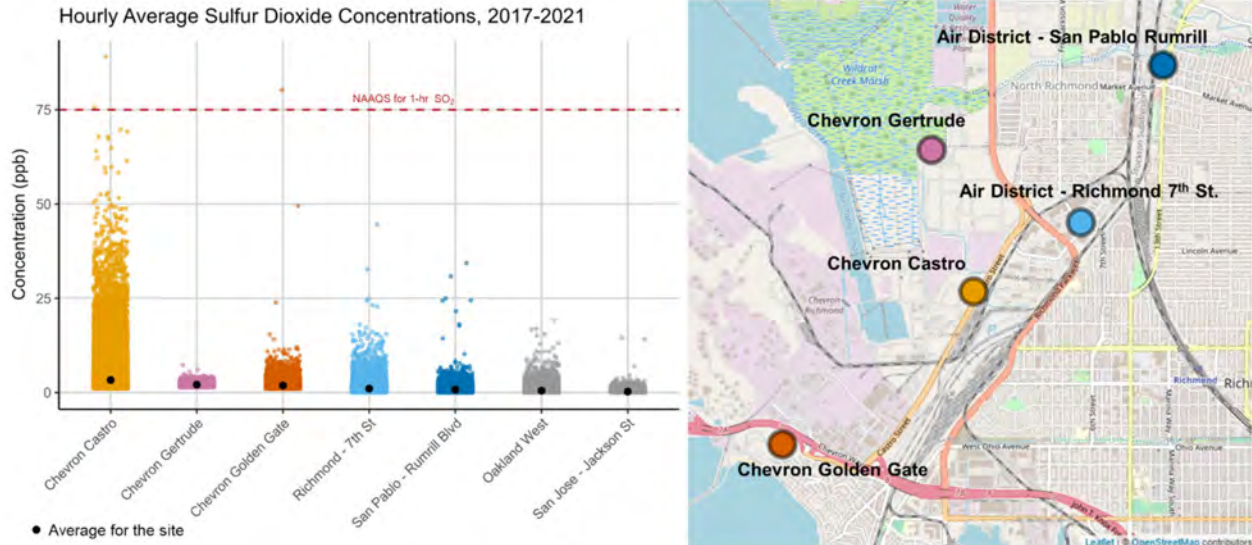


Figure 1. Hourly average SO₂ concentrations at Chevron ground-level monitors and selected Air District monitoring sites for the period 2017-2021 (left) and map of monitoring site locations (right).

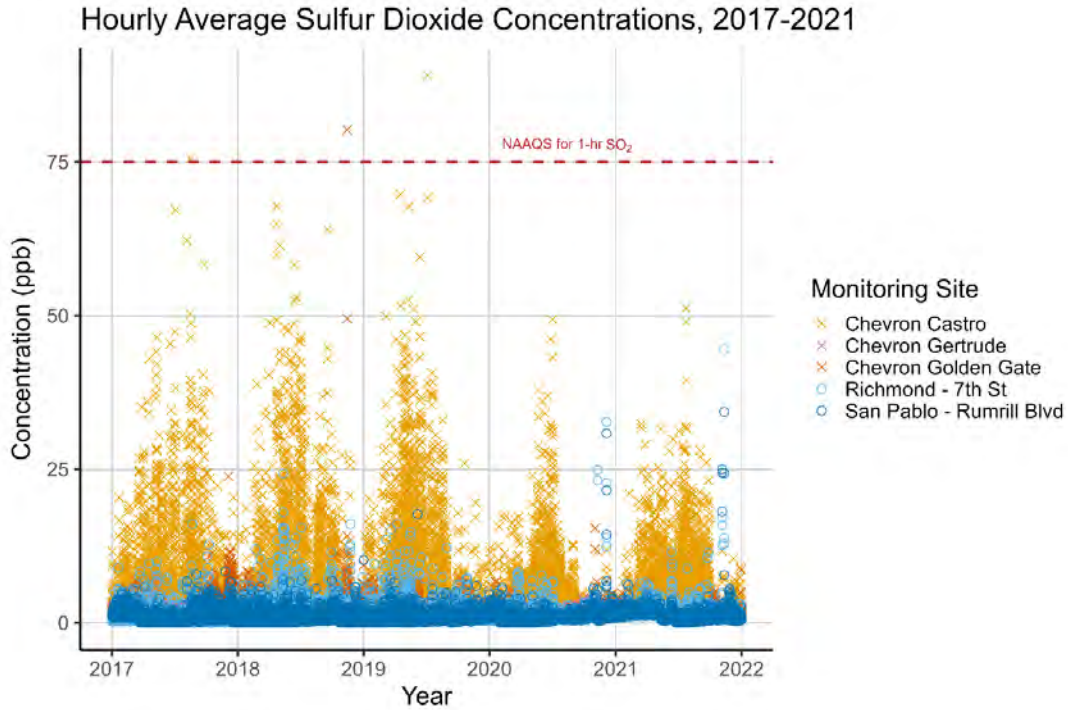


Figure 2. Time-series plot of hourly average SO₂ concentrations at Chevron ground-level monitors and nearby Air District monitors for the period 2017-2021.

SO₂ Concentrations at Chevron Castro by Wind Speed and Direction, 2017-2021

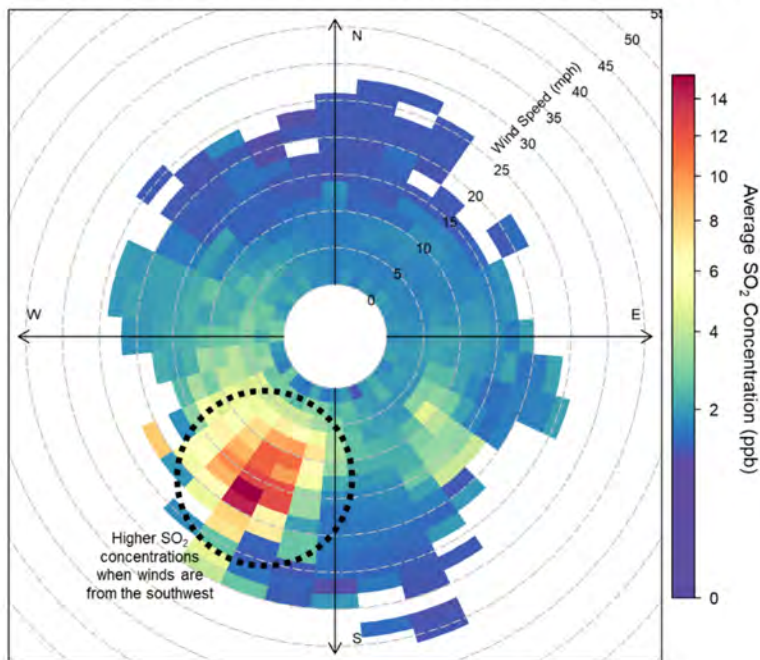


Figure 3. Polar frequency plot of hourly SO₂ concentrations from the Chevron Castro ground-level monitor and wind measurements from the Chevron Gertrude ground-level monitor. Warmer colors (yellow, orange, red) indicate higher levels of SO₂. In this case, SO₂ concentrations are higher on average when winds are from the southwest, indicating a source or sources of SO₂ in that direction.

H₂S data from the refinery ground-level monitoring sites and Air District monitoring sites are shown in Figure 4. While H₂S is not a criteria pollutant regulated under the Clean Air Act, CARB has established a California Ambient Air Quality Standard (CAAQS) for 1-hr hydrogen sulfide of 30 ppb for the purpose of odor control, though some people may detect odors at lower concentrations.¹⁷ H₂S data from the refinery ground-level monitors and Air District monitoring sites were mostly below 30 ppb, though there have been isolated occurrences of higher concentrations near or exceeding 30 ppb.

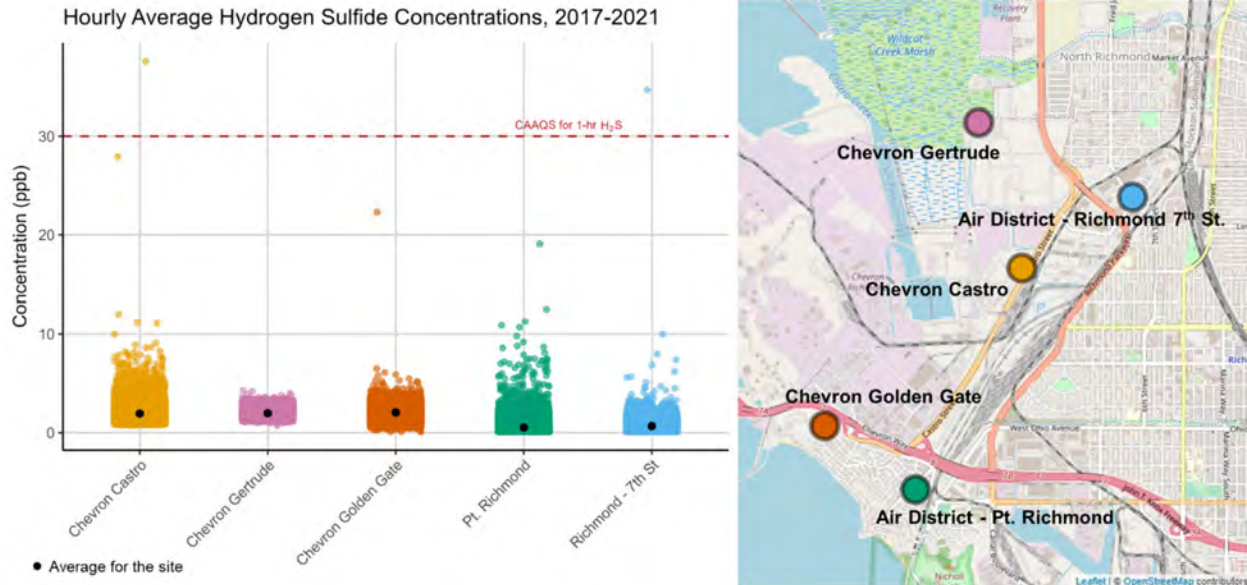


Figure 4. Hourly average H₂S concentrations at Chevron ground-level monitors and selected Air District monitoring sites for the period 2017-2021 (left) and map of monitoring site locations (right).

Chevron operates fenceline air monitoring systems for compliance with Air District Regulation 12, Rule 15 (Rule 12-15)¹⁸ as well as the U.S. EPA’s Refinery Maximum Achievable Control Technology (MACT) Rules.^{19,20} These air monitoring systems are intended to provide information about refinery emissions that cross the refinery fenceline into neighboring communities. Under an agreement with the City of Richmond, Chevron also operates three community air monitoring sites that provide measurements for several pollutants, including PM_{2.5} and selected VOCs. Real-time data from Chevron’s SO₂ and H₂S ground-level monitors, fenceline monitors, and community monitors are available on Chevron’s Richmond Air Monitoring website.²¹ SO₂, H₂S, and meteorological data from Chevron’s GLMs that were used in analyses for the Plan were retrieved from Air District database systems. Chevron transmits this data to the Air District at

¹⁷ CARB Hydrogen Sulfide & Health webpage. <https://ww2.arb.ca.gov/resources/hydrogen-sulfide-and-health>

¹⁸ Air District Regulation 12 Rule 15. <http://www.baaqmd.gov/rules-and-compliance/rules/regulation-12-rule-15-petroleum-refining-emissions-tracking>

¹⁹ U.S. EPA Petroleum Refinery Sector Rule. <https://www.epa.gov/stationary-sources-air-pollution/petroleum-refinery-sector-rule-risk-and-technology-review-and-new>

²⁰ U.S. EPA Petroleum Refinery Fenceline Monitoring Data. <https://www.epa.gov/stationary-sources-air-pollution/slides-petroleum-refinery-fenceline-monitoring-data>

²¹ Chevron’s Richmond Air Monitoring Website. <https://richmondairmonitoring.org/>

regular intervals as required by Air District Rules 9-1²² and 9-2²³ and can be made available by submitting a public records request to the Air District.²⁴ *Fuel Refining Strategy 3: Hold Chevron and Other Emitters Accountable for Reducing Pollution and Negative Public Health Impacts from their Operations* includes actions to improve refinery air monitoring programs, in part through improving reporting and accessibility of refinery-related monitoring data.

Petroleum refineries and supporting facilities have many individual sources and operations that produce VOCs, including refining and processing of crude oil as well as storage and transport of products like fuels and chemicals. The air toxics monitoring study under the PTCA CAMP also found occurrences of relatively higher concentrations of different VOCs near and downwind of the Chevron refinery (Figure 5), tank terminals that support refinery operations (Figure 6 and Figure 7), and a gas station (Figure 8). In these example, concentrations of combustion indicators like carbon monoxide were comparatively low, likely indicating non-combustion sources of these VOCs. These examples of findings from the CAMP air toxics monitoring study can help inform *Fuel Refining Strategy 4: Reduce Exposure and Public Health Impacts from Toxic Air Contaminants Emitted by the Fuel Refining Sector*.



Figure 5. Map view of measured a) 1,3-butadiene concentrations along Ohio Ave. on 1/31/2022 and b) toluene concentrations near the Chevron Refinery on 2/02/2022.

²² Air District Regulation 9, Rule 1: Sulfur Dioxide. <https://www.baaqmd.gov/rules-and-compliance/rules/reg-9-rule-1-sulfur-dioxide>

²³ Air District Regulation 9, Rule 2: Hydrogen Sulfide. <https://www.baaqmd.gov/rules-and-compliance/rules/reg-9-rule-2-hydrogen-sulfide>

²⁴ Air District Public Records Request website: <https://www.baaqmd.gov/contact-us/request-public-records>



Figure 6. Relatively higher levels of styrene were measured along Wright Ave. near and downwind of the Transmontaigne tank terminal, 3/29/2022.



Figure 7. Relatively higher levels of trimethylbenzene were measured along Cutting Blvd. near and downwind of tank terminals and marine-related operations and facilities, 1/31/2022.



Figure 8. Relatively higher levels of benzene were measured outside the Top Gas station at Rumrill Blvd. and Pine Ave., 2/8/2022. Relatively higher levels of other VOCs were also measured at this location.

Commercial and Industrial

Data from community-operated air sensor networks, such as from the project led by Groundwork Richmond and Ramboll described in Chapter 5, can be useful in detecting localized, short-term variability in fine particulate matter that is not readily apparent in longer-term averages. Figure 9 shows examples when certain locations measured frequent occurrences of much higher PM_{2.5} concentrations compared to nearby locations, possibly indicating contributions from localized, intermittent pollution sources. In both examples shown, there are several possible sources of PM_{2.5} in the immediate vicinity. Both examples are also in the immediate vicinity of residences. The occurrences of higher concentrations of PM_{2.5} in San Pablo near Rumrill Boulevard and Market Avenue are likely due to nearby food cooking operations or restaurants given the proximity of those operations to the PM_{2.5} sensor and air quality complaints for food operations in that location (see *C&I Strategy 3: Reduce Exposure from Food Preparation*).

In the Carlson Boulevard example, there are several small industrial and commercial facilities in the immediate vicinity, as well as a partially unpaved roadway (see *C&I Strategy 1: Control Fugitive Dust*), and a rail line with piles of dirt in the right of way. In this example, the occurrences of higher PM_{2.5} concentrations were no longer prevalent after summer 2020, possibly indicating a temporary source of PM_{2.5}.

The PTCA CAMP air toxics monitoring study also found several examples of occurrences of relatively higher concentrations of VOCs near specific commercial and industrial facilities and operations, including a plastics manufacturing facility (Figure 10), auto body shops (Figure 11), and baking operations (Figure 12). VOCs can enter the air through evaporation of certain products like gasoline and other fuels, chemicals, paints, solvents, and cleaners. VOCs may also be released as byproducts of industrial processes. These findings can inform *C&I Strategy 3: Reduce Exposure from Food Preparation* (e.g., bakeries), *C&I Strategy 4: Large Industrial Sources*, and *C&I Strategy 5: Commercial and Smaller Industrial Facilities* (e.g., autobody shops and other small businesses).

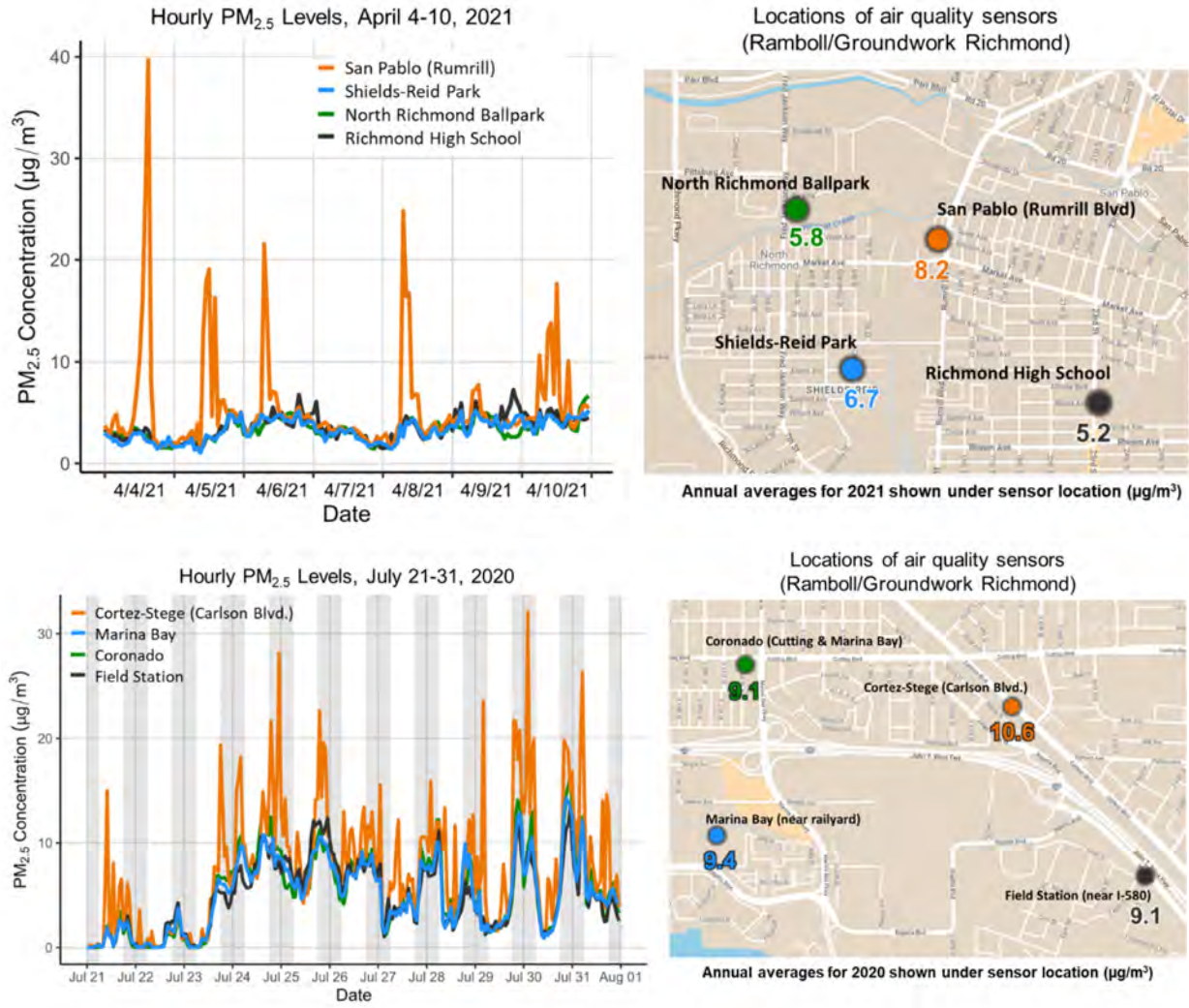


Figure 9. Examples of occurrences of short-term higher PM_{2.5} concentrations measured at lower-cost sensors, San Pablo and North Richmond (top) and the vicinity of Carlson Blvd. (bottom).



Figure 10. Relatively higher levels of styrene were measured near and downwind of ATS Products, a plastics manufacturing facility, on a) 2/10/2022, b) 3/17/2022, and c) 4/1/2022.



Figure 11. Relatively higher levels of toluene were measured near and downwind of autobody shops along a) Giant Hwy. on 3/17/2022, b) Giant Hwy. on 4/1/2022, and c) Market Ave. on 4/1/2022.



Figure 12. Relatively higher levels of acetaldehyde were measured near and downwind of the Safeway Bread Plant, as shown in a) 1/31/2022, b) 2/18/2022, and c) 3/29/2022.

Some commercial and industrial operations and activities can be sources of odors. Generally, outdoor odors have many sources, including natural sources and human activities. Examples of natural sources of odors include wetlands and shorelines where organic matter may be decaying. Examples of odors associated with human activities include refinery operations, including chemical transport and storage; waste management facilities such as landfills, recyclers, and compost sites; sewers and wastewater and sewage treatment plants; smaller commercial and industrial operations like printers, dry cleaners, restaurants, gas stations, and auto body shops; and remediation efforts for contaminated soils. One example of an ongoing soil remediation effort is at the Zeneca Site in Richmond.²⁵

Different people have different sensitivities to odors, can detect odors at different thresholds, and have different responses to odors. Even if an odor is not associated with high levels of a pollutant, odors can still affect health and well-being. Odors may indicate the presence of one or more pollutants. Odors can also indicate the presence of pollutants that don't have odors but are being emitted at the same time.

Odors typically occur in short-term, intermittent episodes. Measuring pollutants associated with odors can be difficult and typically requires specialized studies with specific equipment. H₂S,

²⁵ California Department of Toxic Substances Control website for the Zeneca Richmond Ag Products site cleanup and remediation: <https://dtsc.ca.gov/smrp-projects/zeneca-richmond-ag-products/>

commonly referred to as sewer gas, is one pollutant that the Air District and Chevron conduct continuous air monitoring for at locations in the PTCA area. These monitors are described in more detail in the Fuel Refining key issue since H₂S emissions are also associated with refinery operations. In addition, the City of Richmond operates an H₂S monitoring program at the Point Richmond Wastewater Treatment Plant, with data available to the public in real-time.²⁶

Mobile Sources and Logistics

Measurement data from Air District air monitoring sites and numerous studies of air monitoring data show that levels of several traffic-related air pollutants, such as nitrogen oxides (NO_x), carbon monoxide (CO), black carbon (soot), ultrafine particles, fine particulate matter (PM_{2.5}), and volatile organic compounds (VOCs), are often higher near busy roadways. Pollutant levels along roadways are typically higher when traffic is worse, such as during daily commute periods.

The Air District operates four near-road air monitoring sites in the Bay Area, part of a national network of near-road monitors required by U.S. EPA.²⁷ Figure 13 shows the locations of the Air District's near-road air monitoring sites and a photo of the general siting of the San Jose-Knox Ave. near-road monitoring site, to illustrate the proximity of these monitoring sites to the freeway. These sites are located alongside freeways with high traffic counts where maximum impacts from on-road pollution sources are expected and monitor for pollutants that are commonly associated with traffic, such as nitrogen dioxide (NO₂), CO, and PM_{2.5}. While the Air District's near-road air monitoring sites are located outside the PTCA area, they are sited in locations that are expected to be representative of impacts near freeways in the PTCA area. Table 1 describes several pollutants that are associated with mobile sources of air pollution that are measured at different Air District air monitoring sites but note that these pollutants also have other sources.



Figure 13. Locations of the Air District's near-road air monitoring sites (left) and photo of the San Jose-Knox St. near-road air monitoring site along the US-101/I-680 interchange (right).

²⁶ City of Richmond H₂S Monitoring at the Wastewater Treatment Plant: <https://richmondwpcp-h2s.org/>

²⁷ U.S. EPA Near Road Monitoring website: <https://www.epa.gov/amtic/near-road-monitoring>

Table 1. Summary of pollutants associated with mobile sources of air pollution and are measured at different Air District air monitoring sites. Note that these pollutants also have other sources.

Pollutant	Description / Examples	Main Sources on Roadways	Notable / Example Health Impacts
Fine particulate matter (PM_{2.5})	Smaller than 2.5 µm (1/20 th the thickness of a human hair). Smaller size makes it easier to inhale & be deposited in lungs.	Exhaust from gasoline, diesel fuel, etc., being burned in engines Brakes & tires wearing down Road dust being kicked back up	Asthma development, asthma attacks, difficulty breathing, bronchitis, heart disease, heart attacks, strokes, neurological (brain) disease, lung cancer, low birth weight, lost days of work and/or school. Increased emergency room visits, medicine usage, hospital admissions, and premature deaths / years of life lost.
Black carbon	Soot; a component of PM _{2.5} ; correlated with diesel particulate matter (DPM)	Exhaust from gasoline, diesel fuel, etc., being burned in engines Road dust being kicked back up	Asthma development, asthma attacks, difficulty breathing, bronchitis, heart disease, heart attacks, strokes, neurological (brain) disease, lung cancer, low birth weight, lost days of work and/or school. Increased emergency room visits, medicine usage, hospital admissions, and premature deaths / years of life lost.
Ultrafine particles	Diameter smaller than 0.1 µm.	Exhaust from gasoline, diesel fuel, etc., being burned in engines Brakes & tires wearing down Road dust being kicked back up	Asthma development, asthma attacks, difficulty breathing, bronchitis, heart disease, heart attacks, strokes, neurological (brain) disease, lung cancer, low birth weight, lost days of work and/or school. Increased emergency room visits, medicine usage, hospital admissions, and premature deaths / years of life lost.
Volatile organic compounds (VOCs)	Gases such as benzene, toluene, ethylbenzene, xylene, formaldehyde. Some are odorless, some not.	Exhaust Fuel evaporation	Some VOCs cause cancer. Many can cause irritation of the eyes, nose, and throat; headaches, rashes, nausea, or disorientation, depending on how much is inhaled.

Pollutant	Description / Examples	Main Sources on Roadways	Notable / Example Health Impacts
Nitrogen oxides (NO_x)	Family of reactive gases; contributes to formation of PM _{2.5} in outdoor air	Exhaust	Coughing, wheezing, difficulty breathing, increased asthma & allergy attacks.
Carbon monoxide (CO)	Colorless, odorless gas	Exhaust	Harder for blood to carry oxygen; at high levels (about 100,000 ppb), poisoning

Figure 14 shows average concentrations of several pollutants by time of day over the period 2016-2020 at Air District monitoring sites, categorized by general siting location (near-road, urban/suburban, and rural). Concentrations of NO₂, CO, black carbon, and ultrafine particles were generally higher at the near-road monitoring sites (red lines) compared to other monitoring sites (blue and green lines). For PM_{2.5}, average concentrations at the near-road monitoring sites (red lines) were higher than many of the other sites, though concentrations at some of the non-near road urban/suburban sites (blue lines) were very similar to concentrations at near-road sites. Average peak concentrations of black carbon and ultrafine particles at the near-road monitoring sites were about twice as high as compared to other monitoring sites. The higher black carbon concentrations observed at the near-road monitoring sites may indicate a greater contribution from diesel truck exhaust.

Average Pollutant Concentrations at Air District Monitoring Sites by Hour of Day, 2016-2020

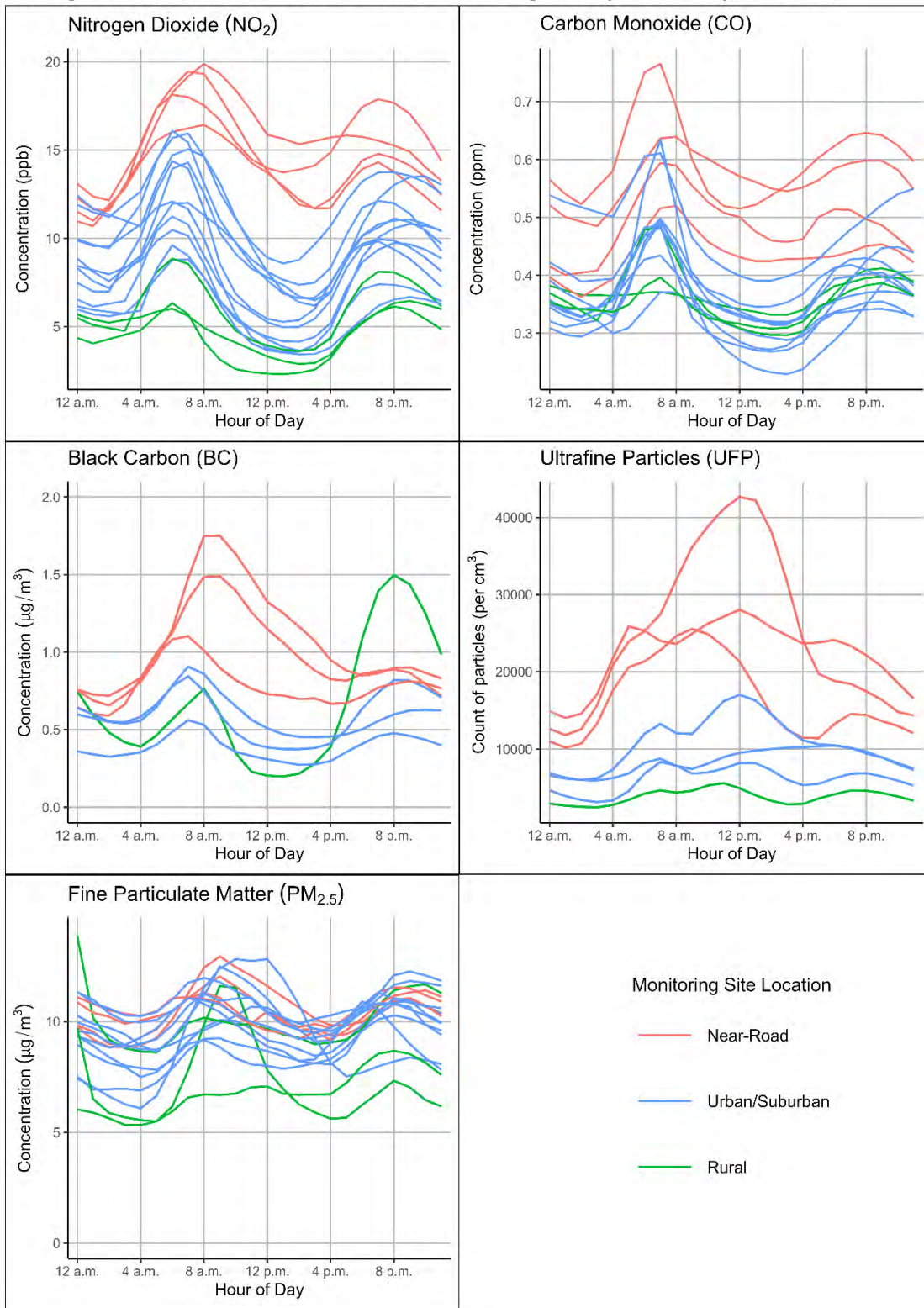


Figure 14. Average concentrations of nitrogen dioxide (NO₂), carbon monoxide (CO), black carbon (BC), ultrafine particles (UFP), and fine particulate matter (PM_{2.5}) by hour of day at Air District monitoring sites, 2016-2020. Each line represents data from one monitoring site.

Concentrations of these pollutants fluctuate throughout the day due to changes in emissions, meteorology, and chemical reactions in the atmosphere. Pollutant concentrations generally increase during the morning commute period, due in part to increased emissions from traffic at that time. The rural monitoring site that shows higher concentrations of black carbon in the evening hours is in a valley where residential wood burning is a dominant source of air pollution. On any given day, the fluctuations and patterns in pollutant concentrations may be substantially different than the average concentrations shown in Figure 14.

Numerous studies on characterizing near-road air quality have found higher measured concentrations of traffic-related air pollutants near roadways.^{28,29,30} While these specific studies took place outside the PTCA area, their findings can be applicable to near-road environments more broadly. Within the Bay Area, a mobile monitoring project conducted by Aclima found higher levels of traffic-related pollutants along several freeway corridors, including I-80 and I-580 through the PTCA area.³¹

Physicians, Scientists, and Engineers for Healthy Energy (PSE), in partnership with the Asian Pacific Environmental Network (APEN), operated a sensor network in the PTCA area with measurements of PM_{2.5}, NO₂, and ozone, in addition to periodic measurements of black carbon. Their analyses found that traffic was an important source of PM_{2.5}, NO₂, and black carbon in the study area, highlighted spatial variability in PM_{2.5} levels across neighborhoods, and found higher levels of NO₂ near major roadways, among other insights.³²

The PTCA air toxics monitoring study, a project in the PTCA CAMP, found relatively high correlations of several VOCs (notably, the BTEX compounds) with CO and NO_x, which are signatures of fuel combustion. Some VOCs are air toxics that are associated with significant health effects. Combustion-related sources of VOCs, such as traffic, are prevalent throughout the PTCA area.

Marine and Rail

Air monitoring to attribute air pollution to marine and rail operations typically requires specialized studies since there are often many contributing sources of the same air pollutants in the immediate vicinity of a port or railyard. An example of an air monitoring study that focuses on rail operations is the Roseville Railyard Aerosol Monitoring Project (RRAMP)³³. In RRAMP, levels of several pollutants were notably higher near the railyard, including aerosols associated with diesel emissions, NO and NO₂, very fine sulfur, and black carbon, among others. In 2019, CARB awarded a Community Air Grant to a project to assess air pollution impacts from coal and

²⁸ Baldauf, R., Thoma, E., Hays, M. et al., *Traffic and Meteorological Impacts on Near-Road Air Quality: Summary of Methods and Trends from the Raleigh Near-Road Study*, Journal of the Air & Waste Management Association, 58:7, 865-878 (2008). <https://doi.org/10.3155/1047-3289.58.7.865>

²⁹ Baldauf, R., Watkins, N., Heist, D. et al. *Near-road air quality monitoring: Factors affecting network design and interpretation of data*. Air Qual Atmos Health 2, 1–9 (2009). <https://doi.org/10.1007/s11869-009-0028-0>

³⁰ Polidori A., Fine P. M. *Ambient Concentrations of Criteria and Air Toxic Pollutants in Close Proximity to a Freeway with Heavy-Duty Diesel Traffic*. Final report prepared by the South Coast Air Quality Management District (2012). <http://www.aqmd.gov/docs/default-source/air-quality/air-quality-monitoring-studies/near-roadway-study.pdf>

³¹ Aclima's Air.Health website: <https://air.health/>

³² Final report on PSE's Richmond Air Monitoring Network, 2022: <https://www.psehealthyenergy.org/our-work/publications/archive/understanding-air-quality-trends-in-richmond-san-pablo/>

³³ Placer County APCD Final Report on the Roseville Railyard Aerosol Monitoring Project: <https://ca-placercounty.civicplus.com/AgendaCenter/ViewFile/Item/188?fileID=504>

petroleum coke operations in Richmond. An update on this project, called the Assessment of Coal Air Pollution Project (ACAPP), was included in a quarterly update on implementation of the PTCA CAMP.³⁴

During the PTCA CAMP air toxics monitoring study, the Air District's air monitoring van collected data on roadways near railyards and along the harbor and found several occurrences of higher levels of different TACs. Higher levels of 1,3-butadiene, a TAC and known carcinogen, were detected along Ohio Avenue immediately downwind of the Burlington Northern-Santa Fe railyard, but also downwind of Chevron refinery operations (see Figure 5). Occurrences of higher levels of several TACs were also detected in the vicinity of several facilities along the harbor area in the vicinity of tank terminals and marine repair facilities (see Figure 7).

Health

Smoke from wildfires caused periods of unhealthy air quality in the PTCA area and throughout the Bay Area in recent years. Figure 15 shows 24-hour average (midnight to midnight) PM_{2.5} concentrations at the Air District's San Pablo monitoring site from 2018 to 2022. The bold blue line indicates data from 2022 to highlight the variability in PM_{2.5} concentrations over a year, and the gray shaded area represents the range of daily PM_{2.5} concentrations that were measured during the 2018-2022 period. The fluctuations in PM_{2.5} concentrations from day to day are driven largely by changes in meteorology (wind patterns, mixing and ventilation) and in emissions. The highest PM_{2.5} concentrations occurred during wildfire periods, during which the NAAQS for daily average PM_{2.5} of 35 µg/m³ was exceeded on numerous occasions. Wildfire smoke also contains numerous other pollutants, including CO, NO_x, and various TACs. The highest levels of benzene, a carcinogen, measured in recent years at the Air District's air monitoring sites in Richmond and San Pablo occurred during periods of wildfire smoke (see Figure 5-10 in Chapter 5). The U.S. EPA's AirNow program³⁵, CARB³⁶, and the Air District³⁷ have websites with information and resources on wildfire smoke and steps to take to reduce exposure to wildfire smoke (see *Health Strategy 2: Reduce Air Pollution at Home*). The AirNow Fire and Smoke Map website displays real-time PM_{2.5} data from air quality agencies (such as the Air District) as well as data from PurpleAir lower-cost sensors (whose data are adjusted by an EPA-developed algorithm that compensates for some of the inaccuracies of the sensors).³⁸

³⁴ Update on Implementation of the PTCA CAMP, Q3 2021: https://www.baaqmd.gov/~media/files/ab617-community-health/richmond/quarterly-report-documents/2021_10_05-update-on-monitoring-projects-q3-2021-pdf.pdf?la=en&rev=fe34f8920c5241cb8734c4aa7fff6e1d

³⁵ U.S. EPA AirNow Wildfire website: <https://www.airnow.gov/wildfires/>

³⁶ CARB's Protecting Yourself from Wildfire Smoke website: <https://ww2.arb.ca.gov/protecting-yourself-wildfire-smoke>

³⁷ The Air District's Wildfire Safety website: <https://www.baaqmd.gov/about-air-quality/wildfire-air-quality-response-program/wildfire-safety>

³⁸ U.S. EPA AirNow Fire and Smoke Map for real-time PM_{2.5} data: <https://fire.airnow.gov/>

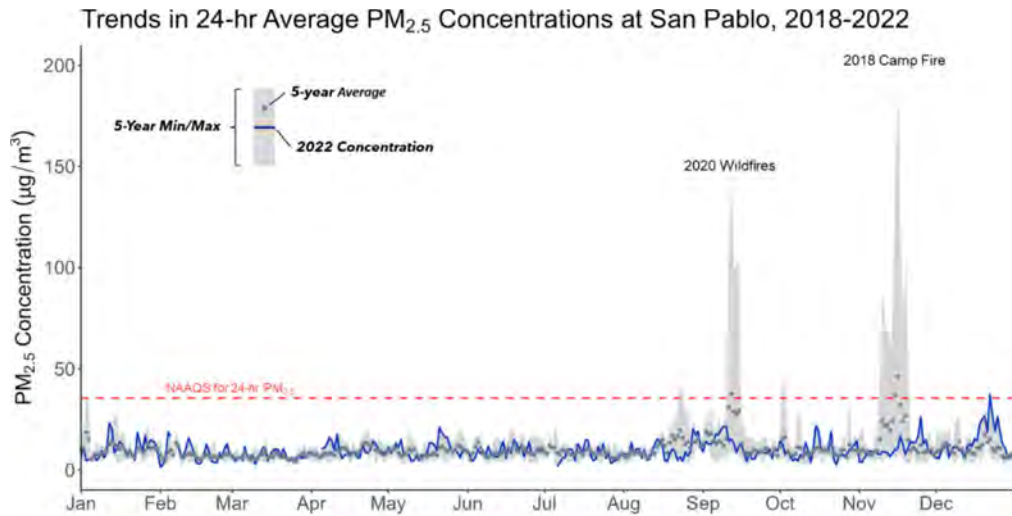


Figure 15. 24-hour average PM_{2.5} concentrations at the San Pablo monitoring site, 2018-2022. PM_{2.5} concentrations typically vary considerably over a year. Some of the highest concentrations occurred during periods of wildfire smoke.

Other factors can also cause periods of higher concentrations of PM_{2.5} and other pollutants, such as during wintertime pollution episodes when weather conditions allow for pollution to build-up (stagnation) and bring pollution from other regions into the local area. In fact, the highest 24-hour average PM_{2.5} concentrations measured in 2022 at the San Pablo monitoring site occurred in December during a wintertime pollution episode, when the NAAQS for 24-hour PM_{2.5} was exceeded on one day. Smoke from fireplaces and wood stoves can be large contributors to PM_{2.5} concentrations during these wintertime events (see *Health Strategy 2: Reduce Air Pollution at Home*), but PM_{2.5} from all sources, including industries and traffic, also contribute and build-up during these events.

Real-time air quality data can help inform the public in making decisions about reducing exposure to unhealthy air quality, such as choosing to reschedule outdoor activities like exercise when air quality is or is expected to be unhealthy. The Air District’s website provides real-time air quality monitoring data from Air District air monitoring sites on its website, and the air monitoring data reference guide for the PTCA area contains links to real-time air monitoring data from additional air monitoring programs and networks specific to the PTCA area, including refinery-related monitoring and sensor networks. Air quality meteorologists at the Air District also issue daily air quality forecasts for the Bay Area, as well as Spare the Air Alerts when air quality levels are expected to be unhealthy compared to the NAAQS. The public can view the daily air quality forecast and subscribe to receive forecasts and alerts by text and e-mail, and can download the Spare the Air mobile app, on the Spare the Air program website.³⁹ The Air District also issues Air Quality Advisories when air quality is expected to be poor in some areas for a short amount of time but not to the extent a health-based standard (based on a 24-hour average for PM_{2.5}) is exceeded. These Advisories are listed on a banner at the top of the Air District website and are posted on Air District social media pages. This information can support *Health Strategy 5: Pollution & Public Health Education, Outreach, Accountability, and Health Data Tracking*

³⁹ Website for the Air District’s Spare the Air program: <https://www.sparetheair.org/>

Appendix E: Enforcement Overview and Findings

Appendix E provides data that further describe the Air District's enforcement findings in the PTCA Plan area presented in Chapter 6. Unless otherwise stated, all worksheets present data on PTCA Plan area findings between 2019 and 2022. The Worksheets are as follows:

Permitted Facilities: A list of permitted facilities in the PTCA Plan area.

Site Zip Codes + Site #s: Identifies the sites with air quality complaints.

NOVs: Notices of Violations (NOVs) issued in the Plan area from 2019 to 2022.

NOC: Notices to Comply (NOC) issued in the Plan area from 2019 to 2022.

RCA: Reportable Compliance Activities (RCA) in the Plan area from 2019 to 2022. There are four types of RCAs: Excess, Inoperative Monitor, Breakdown, and Pressure Value Release. All RCA are located in the City of Richmond.

Code Sheet

Multiple Sheets

City	Code
Richmond	R
Point Richmond	PR
El Sobrante	ES
Pinole	P
Richmond	R
San Pablo	SP

Site Zip Codes + Site #s

Confirmation Code	Code
Confirmed	C
Unconfirmed	U

NOV

Final Status Codes	Code
Violation Resolved	VR
Pending Final Disposition	PFD

Type of Violation	Code
Administration	A
Monitoring	M
Operational	O
Permits	P

Permitted Facilities

Business Type	Code
Autobody	AB
Bulk Terminal	BT
Construction	C
Chemical Products	CP
Commercial Other	CO
Dry Cleaner	DC
Food Processing	FP
Gas Station (Both Retail & Non Retail)	GS
Industrial Other	IO
LANDFILL	LF
Metal Recycling	MR
Petroleum Refining	PR
Primary Metals	PM
Rail	R
Raw Material Handling	RMH
Wastewater Treatment	WT

Reportable Compliance Activities

Type	Code
Excess	E
Breakdown	B
Inoperative Monitor,	IM
Pressure Value Release	PVR

ID	Name	Business Type	Street	City	Zip	SIC ID	NAICS ID
P10	Chevron Products Company	PR	841 Chevron Way	Richmond	94802	2911	324110
P100034	Dutra Materials	GS	961 Western Dr	Richmond	94801	5039	324121
P100081	Albany Hill Mini Mart	GS	800 San Pablo Ave	Albany	94706	5411	445110
P100091	Xtra Oil Company	GS	1399 San Pablo Ave	Berkeley	94702	5541	447110
P100146	Costco Gasoline #482	GS	4801 Central Ave	Richmond	94804	5399	452311
P100393	City of San Pablo Corporation Yard	GS	1515 Folsom Ave	San Pablo	94806	9199	921190
P10106	Smith & Company	CP	5100 Channel Avenue	Richmond	94804	2891	325520
P101318	Unocal #4296	GS	3160 Carlson Blvd	El Cerrito	94530	5541	447110
P101334	El Cerrito Chevron	GS	11319 San Pablo Ave	El Cerrito	94530	5541	447110
P101665	World Oil Marketing Company #24	GS	13013 San Pablo Ave	Richmond	94805	5541	447110
P105216	Chevron Station #90222	GS	2900 Hilltop Mall Rd	Richmond	94806	5541	447110
P105566	Chevron SS# 9-0103	GS	901 W Cutting Blvd	Richmond	94804	5541	447110
P10588	O K Cleaners	DC	6109 Potrero Ave	El Cerrito	94530	7216	812320
P10603	R&K Industrial Products Inc	IO	1945 N 7th Street	Richmond	94801	3499	332117
P106325	Levin-Richmond Terminal Corporation	GS	402 Wright Ave	Richmond	94804	4412	483111
P1064	Brenntag Pacific	IO	860 Wharf Street	Richmond	94804	5169	424690
P10649	IMTT Richmond CA	BT	100 Cutting Boulevard	Richmond	94804	5171	424710
P107036	Richmond Golf Club	GS	1 MARKOVICH LN	RICHMOND	94806	7992	713910
P107184	Imperial 76 #3713	GS	1503 Carlson Blvd	Richmond	94804	5541	447110
P107215	Alameda Contra Costa Transit District	GS	2016 MacDonald Ave	Richmond	94801	9199	921190
P10760	Fenton MacLaren Ltd	CO	1071 Hensley Street	Richmond	94801	5712	337110
P10803	A-1 Martin's Auto Body Shop	AB	1507 Market Avenue	San Pablo	94806	7532	811121
P108108	Kirby Pinole	GS	2298 Appian Way	Pinole	94564	5541	447110
P108426	United Parcel Service	GS	1600 Atlas Road	Richmond	94806	4215	492110
P10857	San Pablo Auto Body Inc	AB	2031 Rumrill Blvd Ste 11	San Pablo	94806	7532	811121
P108605	Richmond Chevron	GS	4838 MacDonald Ave	Richmond	94805	5541	447110
P108664	West County Wastewater District	GS	2910 Hilltop Dr	Richmond	94806	9199	921190
P108694	Western Contra Costa Transit Authority	GS	601 Walter Ave	Pinole	94564	4111	485119
P108733	Lal's Best Station	GS	695 Harbour Way	Richmond	94801	5541	447110

ID	Name	Business Type	Street	City	Zip	SIC ID	NAICS ID
P108750	ARCO Facility #02128	GS	2230 Barrett Ave	Richmond	94801	5541	447110
P108887	ARCO Facility #02035 - MAJID GHANADAN	GS	1001 San Pablo Ave	Albany	94706	5541	447110
P10889	Keefe Kaplan Maritime Inc	IO	530 W Cutting Blvd	Richmond	94804	3732	336612
P108939	R & R Auto Service	GS	6700 Fairmount Ave	El Cerrito	94530	5541	447110
P109085	Parks Corporation Yard	GS	3201 Leona Ave	Richmond	94804	7033	721211
P109086	Operations Corporation Yard	GS	6 13th St	Richmond	94801	5084	423830
P109179	CC Comm Coll Dist - CONTRA COSTA COLLEGE	GS	2600 Mission Bell Dr	San Pablo	94806	8222	611210
P109183	Burlington Northern & Sta Fe Co	GS	980 Hensley St	Richmond	94801	4011	482111
P109463	Dept of Trans - State of CA	GS	Richmond Bridge Toll Plaza Sn Rafael	Richmond	94801	9199	921190
P109603	City of El Cerrito attn: Public Works	GS	10900 San Pablo Ave	El Cerrito	94530	9199	921190
P109636	City of Pinole-Waste Water Facility	GS	11 Tennent Avenue	Pinole	94564	9199	921190
P109701	Hilltop Foodmart	GS	4251 Hilltop Dr	Richmond	94803	5411	445110
P109783	Contra Costa County Fire Station #69	GS	4640 Appian Way	El Sobrante	94803	9224	922160
P109821	Chevron #4071	GS	2234 MacDonald Ave	Richmond	94801	5541	447110
P109842	University of CA-Richmond Field Station	GS	1301 S 46th St	Richmond	94804	8221	611310
P109990	Chevron Station #20-7010	GS	3411 Blume Dr	Richmond	94806	5541	447110
P11010	European Motor Works	AB	618 San Pablo Ave	Albany	94706	7532	811121
P110351	Golden 7 Quick Stop	GS	575 23rd St	Richmond	94804	5541	447110
P110354	7- Eleven Inc. #37948	GS	12678 San Pablo Ave	Richmond	94805	5411	445110
P110362	San Pablo Valero	GS	16400 San Pablo Ave	San Pablo	94806	5541	447110
P110386	7- Eleven Inc. #37994	GS	2401 Appian Way	Pinole	94564	5411	445110
P110518	Central Valero	GS	5430 Central Ave	Richmond	94804	5541	447110
P110602	Cutting Arco & Food Mart	GS	5001 Cutting Blvd	Richmond	94804	5411	445110
P110603	Richmond Gas & Food Mart	GS	3701 Cutting Blvd	Richmond	94804	5411	445110
P110642	Harbour Way Mart Mobil	GS	1000 Cutting Blvd	Richmond	94804	5411	445110
P110784	Flyers #465	GS	255 Parr Blvd	Richmond	94801	5541	447110
P110869	Best Gas and Car Wash	GS	10602 San Pablo Ave	El Cerrito	94530	5541	447110
P110889	San Pablo Police Dept	GS	13880 San Pablo Ave	San Pablo	94806	9229	922190

ID	Name	Business Type	Street	City	Zip	SIC ID	NAICS ID
P111101	ARCO Facility #00428	GS	12890 San Pablo Ave	Richmond	94805	5541	447110
P111192	San Pablo Chevron	GS	13065 San Pablo Ave	Richmond	94805	5541	447110
P111287	Auto Warehousing Co	GS	1311 Canal Blvd	Richmond	94804	7389	561990
P111298	Stop & Save Gasoline	GS	2221 Cutting Blvd	Richmond	94804	5541	447110
P111312	California Autism Foundation	GS	4075 Lakeside Dr	Richmond	94806	9199	921190
P111333	Mira Vista Golf LLC dba Berkeley Country Club	GS	7901 Cutting Blvd	El Cerrito	94530	7992	713910
P111504	Kay & Appian Express Mart & Gasoline	GS	4917 Appian Way	El Sobrante	94803	5411	445110
P111577	Chevron #1745	GS	1300 San Pablo Ave	Berkeley	94702	5541	447110
P111584	East Bay Municipal Utility District	GS	3999 Lakeside Dr	Richmond	94806	9199	921190
P111674	El Cerrito Valero	GS	11687 SAN PABLO AVE	EL CERRITO	94530	5541	447110
P111733	Albany Shell SS #135037	GS	999 San Pablo Ave	Albany	94706	5541	447110
P111739	Top Food and Gas	GS	1522 Rumrill Blvd	San Pablo	94806	5411	447110
P111813	Shell SS#68133	GS	500 Appian Way	El Sobrante	94803	5541	447110
P111833	Mobil SS#68208	GS	2601 Road 20	San Pablo	94806	5541	447110
P111863	El Sobrante ARCO	GS	3753 San Pablo Dam Rd	El Sobrante	94803	5541	447110
P111865	Cutting Mini Market (ARCO)	GS	1001 Cutting Blvd	Richmond	94804	5411	447110
P111869	Rolling Hills Memorial Park	GS	4100 Hilltop Dr	Richmond	94803	6553	812220
P111872	Smart Stop	GS	1007 San Pablo Ave	Pinole	94564	5541	447110
P111876	East Bay Regional Park Dist	GS	900B Dornan Dr	Richmond	94801	7033	721211
P111911	Shell Gas Station	GS	1401 Fitzgerald Dr	Pinole	94564	5541	447110
P111931	United Gas & Food Mart	GS	850 23rd St	Richmond	94804	5411	445110
P111946	Central Ave Shell	GS	5500 Central Ave	Richmond	94804	5541	447110
P111950	ARCO SS #07127	GS	15531 San Pablo Ave	Richmond	94806	5541	447110
P111959	Quick Gas Mart	GS	4069A SAN PABLO DAM RD	EL SOBRANTE	94803	5411	445110
P111972	ConocoPhillips #2611152	GS	2500 San Pablo Dam Rd	San Pablo	94806	5541	447110
P112063	Energy Gas & Mart	GS	12453 San Pablo Ave	Richmond	94805	5411	445110
P112111	Sunbelt Rental	GS	2800 GOODRICK AVE	RICHMOND	94801	7359	532490
P112144	San Pablo Kwik Serve	GS	2701 El Portal Dr	San Pablo	94806	5541	447110

ID	Name	Business Type	Street	City	Zip	SIC ID	NAICS ID
P112173	Texas Gas	GS	3363 San Pablo Dam Rd	San Pablo	94803	5541	447110
P112253	San Pablo Shell	GS	3621 San Pablo Dam Rd	El Sobrante	94803	5541	447110
P112310	El Portal Shell	GS	2876 El Portal Dr	San Pablo	94806	5541	447110
P112400	One Stop Gas & Mini Mart	GS	938 13th St	Richmond	94801	5411	445110
P112470	Pinole Flyers	GS	1390 San Pablo Ave	Pinole	94564	5541	447110
P112529	City of Richmond Fire Station #6	GS	2904 Hilltop Dr	San Pablo	94806	9224	922160
P11912	101 Auto Body Shop	AB	1223 San Pablo Ave	Berkeley	94706	7532	811121
P12076	State of California	IO	850 Marina Bay Pkwy	Richmond	94804	8733	541380
P12078	SFPP	IO	520 Castro Street	Richmond	94801	4613	486910
P12206	Star One Cleaners	DC	16374 San Pablo Ave	San Pablo	94806	7216	812320
P1271	West County Wastewater District	WT	2377 Garden Tract Rd	Richmond	94801	4952	221320
P12771	Clemes & Clemes Inc	CO	650 San Pablo Ave	Pinole	94564	2521	337211
P12773	ATS Products Inc	IO	2785 Goodrick Avenue	Richmond	94801	3089	326121
P13002	Kinder Morgan Liquids Terminals, LLC	BT	1140 Canal Boulevard	Richmond	94804	5171	424710
P13132	DiCon Fiberoptics Inc	IO	1689 Regatta Blvd	Richmond	94804	3674	334413
P13465	Pacific Bell	CO	4849 Appian Way	El Sobrante	94803	4813	517110
P13510	Pacific Bell	CO	2105 MacDonald Ave	Richmond	94801	4813	517110
P13742	East Bay Municipal Utility Dist	CO	105 Brookside Drive	Richmond	94801	4941	221310
P13771	La Tech Auto Body	AB	2311 Rheem Ave	Richmond	94804	7532	811121
P13773	City of San Pablo Police Dept	CO	13880 San Pablo Ave	San Pablo	94806	9121	921120
P1390	Norge Cleaners	DC	398 San Pablo Ave	Albany	94706	7216	812320
P14078	S F Bay Area Rapid Transit District	CO	6400 Cutting Boulevard	El Cerrito	94530	9621	488111
P14133	Contra Costa County	CO	100 38th Street	Richmond	94804	9199	921190
P14142	Contra Costa County	CO	5555 Giant Highway	Richmond	94804	9199	921190
P14152	West County Wastewater District	CO	2910 Hilltop Drive	Richmond	94806	4952	221320
P14153	West County Wastewater District	CO	1600 Atlas Road	Richmond	94806	4952	221320
P14154	West County Wastewater District	CO	N Parkside & W View	Richmond	94803	4952	221320
P14155	West County Wastewater District	CO	1541 Fitzgerald Dr	Pinole	94564	4952	221320
P14156	West County Wastewater District	CO	W End Atlas Road	Richmond	94801	4952	221320

ID	Name	Business Type	Street	City	Zip	SIC ID	NAICS ID
P14181	State of California Department of Trans	CO	Richmond, San Rafael Bridge Pl	Richmond	94801	9621	488111
P14312	Crocketts Premier Auto Body	AB	900 San Pablo Ave	Pinole	94564	7532	811121
P14368	The Beanery Inc	FP	715 So 33rd Street	Richmond	94804	2095	311920
P14565	West County Wastewater District	CO	Lake Hilltop Center	Richmond	94806	4952	221320
P14575	City of El Cerrito Fire Department	CO	10900 San Pablo Avenue	El Cerrito	94530	9224	922160
P14577	City of El Cerrito Fire Department	CO	10900 San Pablo Avenue	El Cerrito	94530	9224	922160
P14606	West County Wastewater District	CO	NE End of Tara Hills Dr	San Pablo	94806	4952	221320
P14653	Del Monte Fresh Produce	IO	3151 Regatta Blvd, Suite E	Richmond	94804	5148	424480
P14704	BNSF Railway Company	RAIL	980 Hensley Street	Richmond	94801	4011	482111
P14719	Verizon Business	CO	3201 Cutting Blvd	Richmond	94804	4813	517110
P14734	U S Postal Service	CO	2501 Rydin Road	Richmond	94804	4931	221112
P14737	Micronized Ultra Tech Inc	WR	740 Market Avenue	Richmond	94801	3295	212324
P14995	Pacific Racing Association	CO	1100 Eastshore Hwy	Albany	94706	7948	711212
P15145	T K Auto Repair & Body Shop	AB	10551 San Pablo Ave	El Cerrito	94530	7532	811121
P15153	Sangamo BioSciences	CP	501 Canal Blvd, Suite A100	Richmond	94804	2836	325414
P15174	Continental Auto Body & Paint Works	AB	1011 San Pablo Ave	Albany	94706	7532	811121
P15310	Kleen N Brite Cleaners	DC	3800 San Pablo Dam Rd Ste D	El Sobrante	94803	7216	812320
P15465	Kaiser Permanente - Regional Lab Annex	CO	914 Marina Way South	Richmond	94804	8062	622110
P15507	Point Richmond R & D Associates	CO	1001 W Cutting Blvd	Richmond	94804	8062	622110
P15508	Wareham Property Group - EPA Lab	CO	1337 So 46th St, Bldg 201	Richmond	94804	8062	622110
P15548	City of El Cerrito - Community Center	CO	7007 Moeser Lane	El Cerrito	94530	8062	622110
P15755	Wholesome Harvest Baking	FP	3200 Regatta Blvd, Suite G	Richmond	94804	2051	311812

ID	Name	Business Type	Street	City	Zip	SIC ID	NAICS ID
P15756	City of Richmond/Public Works	CO	440 Civic Center Plaza	Richmond	94804	4911	221119
P15815	Brickyard Cove Marina	IO	1120 Brickyard Cove Rd	Richmond	94801	3731	336611
P15908	Trade Lithography	CO	720 Harbour Way So	Richmond	94804	2752	323110
P15923	Target Corporation T1926	CO	1057 Eastshore Hwy	Albany	94706	5311	452111
P15930	Europa Cars	AB	835 Gilman St	Berkeley	94710	7532	811121
P16039	Comcast of Contra Costa, Inc	CO	720 Belmont Way	Pinole	94564	4931	221112
P16197	Global Power Group, Inc	C	1330 Fitzgerald Dr, ToysRUs 5804	Pinole	94564	1731	238210
P16261	Macy's Hilltop	CO	2500 Hilltop Mall	Richmond	94806	4931	221112
P16304	Verizon Wireless - 814973 (Hilltop)	CO	3135 Hilltop	Richmond	94806	4812	517210
P16394	JC Penny Company c/o PSI	CO	1000 Hilltop Mall	Richmond	94806	4931	221112
P16415	Verizon Wireless (Pinole Valley)	CO	1617 Canyon Drive	Pinole	94564	4812	517210
P16461	Catahoula Coffee Company	FP	12472 San Pablo Ave	Richmond	94805	2095	311920
P16545	Ecology Control Industries Inc	CO	255 Parr Boulevard	Richmond	94801	8999	541620
P16792	Star Martindale Inc	DC	3819 San Pablo Dam Rd	El Sobrante	94803	7216	812320
P16811	Albany High School	CO	603 Key Route Blvd	Albany	94706	8211	611110
P16897	Allied Body & Frame Shop	AB	1375 San Pablo Ave	Berkeley	94702	7532	811121
P16998	UC Berkeley Richmond Field Station Campus	CO	1301 So 46th Street	Richmond	94804	8221	611310
P17029	Verizon Wireless (Richmond)	CO	So 27th St & Pierson Ave	Richmond	94804	4812	517210
P17254	Professional Finishing Inc	IO	770 Market Avenue	Richmond	94801	3479	332812
P17256	Verizon Wireless (Brickyard Cove)	CO	351 Brickyard Cove Rd	Richmond	94807	4812	517210
P17290	City of Richmond (McDonald Ave Sta)	CO	McDonald Avenue	Richmond	94804	9229	922190
P17292	City of Richmond (Sunset Pointe Sta)	CO	Peninsula Drive	Richmond	94804	9229	922190
P17294	City of Richmond (Marina Bay PS)	CO	Schooner Court	Richmond	94804	9229	922190
P17295	City of Richmond	CO	Wildcat Dr, Canyon States PS1	Richmond	94803	9229	922190
P17297	City of Richmond /Accts Payable	CO	37th & Ohio	Richmond	94804	9229	922190

ID	Name	Business Type	Street	City	Zip	SIC ID	NAICS ID
P17298	City of Richmond (Brickyard Booster Sta)	CO	Sea Cliff Drive	Richmond	94804	9229	922190
P17299	City of Richmond (Keller Beach Sta)	CO	Keller Beach	Richmond	94801	9229	922190
P17300	City of Richmond (Nevin & A St Sta)	CO	A Street & Nevin	Richmond	94801	9229	922190
P17301	City of Richmond (Enterprise Sta)	CO	Enterprise Avenue	Richmond	94801	9229	922190
P17302	City of Richmond - Barrett Ave Lift Station	CO	2600 Barrett Avenue	Richmond	94804	9229	922190
P17303	City of Richmond (Marina & Ohio Sta)	CO	Marina & Ohio	Richmond	94804	9229	922190
P17304	City of Richmond (Port Sta)	CO	Canal Boulevard	Richmond	94804	9229	922190
P17331	McCarty's Bike Auto & RV	AB	3131 San Pablo Dam Rd	San Pablo	94803	7532	811121
P17380	Savy Autobody	AB	12920 San Pablo Ave	Richmond	94805	7532	811121
P17395	Dream's Auto Body Collision Center	AB	720D San Pablo Ave	Pinole	94564	7532	811121
P17433	Social Security Administration	CO	1221 Nevin Avenue	Richmond	94801	9199	921190
P17434	Target Store T-0737	CO	1400 Fitzgerald Dr	Pinole	94564	5311	452112
P17605	City of Richmond (23rd St & Carlson Ave)	CO	23rd St & Carlson Ave	Richmond	94804	9229	922190
P17644	Tran Auto Body Shop	AB	1052 13th Street	Richmond	94801	7532	811121
P17700	PALECEK	CO	601 Parr Boulevard	Richmond	94801	2531	337127
P17811	United Parcel Service	CO	1601 Atlas Road	Richmond	94806	4215	492110
P17921	Terra Millennium Corporation	C	1060 Hensley Street	Richmond	94801	1741	238140
P17985	Eagle Rock Aggregate Inc	IO	700 Wright Avenue	Richmond	94804	5032	423320
P18024	Verizon Wireless (Golden Gate Fields)	CO	1100 Eastshore Hwy	Albany	94710	4812	517210
P18029	Cleaning Concepts	DC	1741 Manzanilla Drive	San Pablo	94806	7217	561740
P18086	Restoration Auto Body	AB	4012 San Pablo Dam Rd	El Sobrante	94803	7532	811121
P18190	Corodata	CO	740 National Court	Richmond	94804	4225	493110
P18290	Thomas Swan Sign Company	CO	2717 Goodrick Avenue	Richmond	94801	7312	541850

ID	Name	Business Type	Street	City	Zip	SIC ID	NAICS ID
P18331	Lucky #742	CO	1530 Fitzgerald Dr	Pinole	94564	5411	445110
P18349	Lucky #709	CO	1000 El Cerrito Plaza	El Cerrito	94530	5411	445110
P1836	Parker Hannifin Corp, Veriflo Div	IO	250 Canal Boulevard	Richmond	94804	3494	332919
P1840	West Contra Costa County Landfill	LF	1 Parr Boulevard	Richmond	94801	4953	562211
P18480	Maroc Painting Inc	C	1200 So Harbour Way, Ste 115	Richmond	94804	1721	238320
P19063	San Pablo Cleaners	DC	610 San Pablo Ave Ste J	Pinole	94564	7216	812320
P19097	Target Corporation Store #1507	CO	4500 MacDonald Ave	Richmond	94805	5311	452111
P19098	CCS Auto Body	AB	1868 Rumrill Blvd	San Pablo	94806	7532	811121
P19110	Richmond Hall of Justice (City of Richmond)	CO	1689 Regatta Blvd	Richmond	94804	9211	922110
P19645	Bio-Rad Laboratories	IO	2500 Atlas Road	Richmond	94806	8731	541715
P20015	Qualawash Holdings LLC	IO	2750 Goodrick Avenue	Richmond	94801	5171	424710
P200229	El Sobrante Cleaners	DC	3650 SAN PABLO DAM RD	EL SOBRANTE	94803	7216	812320
P200267	Central Gas Richmond	GS	1825 CUTTING BLVD	RICHMOND	94804	5541	447110
P200288	Safeway Richmond Beverage Plant	FP	1921 SAN JOAQUIN ST	RICHMOND	94804	2086	312111
P200312	Claymore Auto Body & Repair	AB	10781 SAN PABLO AVE	EL CERRITO	94530	7532	811121
P200326	Accurate Auto Body	AB	3001 RICHMOND PKWY	RICHMOND	94806	7532	811121
P200413	United States Coast Guard	CO	Pt San Pablo Peninsula	Richmond	94801	9621	926120
P200526	7-Eleven #37536	GS	925 CUTTING BLVD	RICHMOND	94804	5541	447110
P20073	101 Auto Body	AB	5327 Jacuzzi St, Suite 3A	Richmond	94804	7532	811121
P200789	Reyes Body & Frame	AB	999 W CUTTING BLVD	RICHMOND	94804	7532	811121
P201179	MNCVAD-IND Richmond CA LLC	CO	2589 GOODRICK AVE	RICHMOND	94801	6512	531120
P20144	Picon FRP, Inc	IO	1025 Broadway	San Pablo	94806	3089	326199
P201495	Weatherford Collision North	AB	1255 EASTSHORE HIGHWAY	BERKELEY	94710	7532	811121
P20510	Safeway Store #2940	IO	11450 San Pablo Avenue	El Cerrito	94530	5141	445110
P20513	Zygo Corporation	IO	3900 Lakeside Drive	Richmond	94806	3851	339113

ID	Name	Business Type	Street	City	Zip	SIC ID	NAICS ID
P20669	San Francisco BART District (BART) R60	CO	1700 Nevin Avenue	Richmond	94801	4911	221112
P20910	Contra Costa County	CO	13601 San Pablo Ave	San Pablo	94806	9223	922140
P20930	Contra Costa County	CO	End of Mnt Crsta Ave	Richmond	94806	9199	921190
P210047	goodbye dents	AB	835 9th St	Richmond	94801	7532	811121
P210065	Rims to go	AB	5436 Modoc Ave	Richmond	94804	7532	811121
P210066	Rims To Go	AB	525 Clayton Ave	El Cerrito	94530	7532	811121
P210599	Adhesive Products Inc	IO	Adhesive Products	Berkeley	94710	5169	424690
P21062	860 Harbour Way LLC/Richmond Health	CO	860 Harbour Way South	Richmond	94804	8661	813110
P210933	Pyramid Breweries	FP	901 Gilman St	Berkeley	94710	2082	312120
P21114	Design Vevronique	IO	999 Marina Way South	Richmond	94804	5047	423450
P211332	Done Wright Customs	AB	4808 Nevin Ave	Richmond	94805	7532	811121
P21220	Verizon Wireless (McDonald Ave)	CO	50 W Ohio Avenue	Richmond	94804	4812	517210
P21227	Phillips 66 Company	BT	1300 Canal Boulevard	Richmond	94804	5171	424710
P2141	El Portal One Hour Cleaners And Laundry	DC	2655 Church Ln	San Pablo	94806	7216	812320
P21479	Ponchos Auto Body Shop and Paint	AB	2025 Rumrill Blvd #9	San Pablo	94806	7532	811121
P21689	Biorichland LLC	IO	2600 Hilltop Drive	Richmond	94806	8731	541720
P21806	Whole Foods Distribution Center	IO	6035 Giant Road	Richmond	94801	5141	445110
P21863	Mike Rose' Auto Body Inc	AB	3230 Auto Plz	Richmond	94806	7532	811121
P21901	B G Auto Body	AB	221 24th St	Richmond	94804	7532	811121
P21926	Tara Hills Drive Limited, CA LP	C	1577 Tara Hills Dr	Pinole	94564	1799	562910
P21927	Brilliant Group, Inc	CP	780 National Court	Richmond	94804	2865	325132
P22027	Verizon Wireless (Richmond Parkway)	CO	385 Pittsburg Avenue	Richmond	94801	4812	517212
P22069	Che Chen Liu & Shu Fen Liu Trust	CO	1350 Fitzgerald Dr	Pinole	94564	4931	221112
P22173	Allegro Coffee Company	FP	1011 Gilman Street	Berkeley	94710	2043	311920
P22294	Professional Auto Body Shop	AB	2323 Barrett Ave	Richmond	94804	7532	811121
P22522	UC Berkeley	CP	3300 Regatta Blvd	Richmond	94804	2836	325414
P22563	Whole Foods Market	IO	1025 Gilman Street	Berkeley	94710	5141	445110

ID	Name	Business Type	Street	City	Zip	SIC ID	NAICS ID
P22682	MAACO Collision Repair & Auto Painting	AB	1041 Hensley St	Richmond	94801	7532	811121
P22744	City of Richmond WPC (Ferry Point Lift Station)	CO	Dornan Dr at Brickyard Cove Rd	Richmond	94804	4952	221320
P22752	City of Richmond Water Pollution Control	CO	49th St & Seaport Ave	Richmond	94804	4952	221320
P22753	City of Richmond Water Pollution Control	CO	Marina Bay Pkwy & Spinnaker Way	Richmond	94804	4952	221320
P22754	City of Richmond water Pollution Control	CO	Burlingame Ave & Monterey St	Richmond	94804	4952	221320
P22758	City of Richmond	CO	1100 So 27th St, near	Richmond	94804	4952	221320
P23	Chemtrade West US LLC	CP	525 Castro Street	Richmond	94801	2819	325998
P23273	Dome Print & Marketing Solutions	CO	506 W Ohio Avenue	Richmond	94804	2759	323113
P23438	Richmond Products Terminal	BT	1306 Canal Street	Richmond	94804	5171	424710
P23482	Coherent Inc - IOS	IO	4040 Lakeside Drive	Richmond	94806	3827	333314
P2352	SF Bay Area Rapid Transit District	CO	1101 13th Street	Richmond	94801	4111	485111
P23619	Pick-n-pull Auto Dismantlers-Richmond#12	MR	1015 Market Avenue	Richmond	94806	5093	423930
P23629	Belmont Village Albany	CO	1100 San Pablo Ave	Albany	94706	8361	623312
P2368	Central Concrete Pinole Plant	RMH	800 San Pablo Ave	Pinole	94564	3273	327320
P23725	AAK USA Richmond Corp	FP	1145 Harbour Way, South	Richmond	94804	2076	311223
P23817	Matheson Tri-Gas, Inc	CP	1100 Hensley Street	Richmond	94801	2813	325120
P23822	Sims Metal Management	MR	600 So 4th Street	Richmond	94804	5093	423930
P24129	TransMontaigne Operating Company LP	BT	488 Wright Avenue	Richmond	94804	4226	493190
P24544	523Rods	AB	251 24th Street	Richmond	94804	7532	811121
P2482	City of Richmond Water Pollution Control District	WT	601 Canal Boulevard	Richmond	94804	4952	221320
P2503	Poly Engineering	IO	701 Juliga Woods	Richmond	94804	3479	332812
P2820	Nor-Cal Perlite, Inc	RMH	2605 Goodrick Avenue	Richmond	94801	3295	212324
P2912	California Casting, Inc	PM	530 So 11th Street	Richmond	94804	3363	331521
P2946	Allied Propane Service	CO	5000 Seaport Blvd	Richmond	94804	5984	454312

ID	Name	Business Type	Street	City	Zip	SIC ID	NAICS ID
P3027	Richmond Metal Painting	IO	1143 Marina Way South	Richmond	94804	3479	332812
P3060	One Hour Solano Cleaners	DC	1275 Solano Ave	Albany	94706	7216	812320
P3167	Pacific Gas and Electric Company	CO	1100 So 27th Street	Richmond	94804	4939	221112
P3218	Albany Body Shop	AB	702 San Pablo Ave	Albany	94706	7532	811121
P3679	Sciarroni Auto Body	AB	628 23rd St	Richmond	94804	7532	811121
P3970	Stewart's Body Shop Inc	AB	12540 San Pablo Ave	Richmond	94805	7532	811121
P4193	AC Transit	CO	2016 MacDonald Ave	Richmond	94801	4173	488490
P423	Chevron Richmond Technology Center	IO	100 Chevron Way	Richmond	94802	8731	541720
P4302	Royal Cleaners	DC	814 San Pablo Ave	Albany	94706	7216	812320
P4538	WRE Colortech	CO	1225 6th Street	Berkeley	94710	2796	323122
P4560	Appian 80 Express Cleaners	DC	1577 Tara Hills Dr	Pinole	94564	7216	812320
P4604	M & P One Hour Cleaner	DC	10579 San Pablo Ave	El Cerrito	94530	7216	812320
P4788	Cemex	CO	401 Wright Ave, Pier A	Richmond	94804	4491	488310
P4790	Five Star Cleaners	DC	2145 Rumrill Blvd, Suite B	San Pablo	94806	7216	812320
P4833	Contra Costa College	CO	2600 Mission Bell Dr	San Pablo	94806	8222	611210
P5191	Ventura's Body Shop	AB	2013 23rd St	San Pablo	94806	7532	811121
P5462	Bio-Rad Laboratories	IO	3110 Regatta Blvd	Richmond	94804	8731	541715
P5610	Letcher Brothers VW Restoration And Repair	AB	730 San Pblo Avnu #9	Pinole	94564	7532	811121
P6054	East Bay Municipal Utility District	WT	2755 Isabel Street	Richmond	94804	4952	221320
P6108	Karber's Auto Body	AB	405 24th St	Richmond	94804	7532	811121
P6176	Great American Dry Cleaning	DC	215 El Cerrito Plz	El Cerrito	94530	7216	812320
P6316	West County Resource Recovery Inc	CO	101 Pittsburg Avenue	Richmond	94801	4953	562211
P6402	East Bay Municipal Utility District	WT	Brookside & Central	Richmond	94806	4941	221310
P6945	BAF Complete Auto Care	AB	2218 Market Street	San Pablo	94806	7532	811121
P6998	Richmond Clean Xpress	DC	12817 San Pablo Ave	Richmond	94805	7216	812320
P7031	City of Richmond /City Managers Office	C	Castro St, Pumping Station	Richmond	94804	1623	237110

ID	Name	Business Type	Street	City	Zip	SIC ID	NAICS ID
P7053	Dutra Materials/San Rafael Rock Quarry Inc	RMH	961 Western Drive	Richmond	94801	2951	324121
P706	New NGC, Inc	RMH	1040 Canal Boulevard	Richmond	94804	3275	327420
P7075	Andy's Auto Body	AB	135 24th Street	Richmond	94804	7532	811121
P72	Chevron Inc (Americas OE/HES)	BT	155 Castro Street	Richmond	94801	5171	424710
P7471	Classic Autobody	AB	1239 5th St	Berkeley	94710	7532	811121
P7668	Dahl-Beck Electric	IO	2775 Goodrick Street	Richmond	94801	5063	423610
P7674	Green Products Company	CP	810 Market Avenue	Richmond	94801	2851	325510
P7847	Bay Marine Boatworks, Inc	IO	310 W Cutting Blvd	Richmond	94804	3732	336612
P8175	The Home Depot - 0643	CO	11939 San Pablo Avenue	El Cerrito	94530	5211	444130
P8232	East Bay Batch	IO	200 So 1st Street	Richmond	94804	3952	325998
P8467	Graham Packaging Company	IO	2600 Goodrick Avenue	Richmond	94801	3089	326121
P8679	Kaiser Permanente	CO	901 Nevin Avenue	Richmond	94801	8062	622110
P8774	Bay Woodworks	CO	124 Florida Avenue	Richmond	94804	2519	337125
P9137	D & M Auto Body	AB	1085 Eastshore Hwy	Albany	94710	7532	811121
P93	Safeway Stores Inc, Bakery Plant	FP	905 So 34th Street	Richmond	94804	2051	311812
P935	Levin Richmond Terminal Corporation	BT	402 Wright Avenue	Richmond	94804	4491	488310
P9737	California Advanced Environmental Technology Corp	CO	1125 Hensley Street	Richmond	94801	8999	541620

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
239576	Odor	spray paint	3/25/2019	Z5989	Fernando's Auto Body	842 13th St	R	94801	U
241109	Odor	emissions	9/8/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245064	Dust		12/2/2020	U8432	National Gypsum	1040 Canal Blvd	R	94801	U
239261	Other	flaring	2/27/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247371	Odor	feces	8/6/2021	P0414	NONE	NONE	PR	94801	U
241105	Odor	oil	9/7/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245696	Odor	compost/g arbage	2/5/2021	P0414	NONE	NONE	PR	94801	U
241769	Odor	petroleum smell	10/25/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241516	Odor	heavy petroleum	10/4/2019	A0072	Chevron Inc (Americas OE/HES)	155 Castro Street	R	94801	U
242990	Odor	raw oil	3/25/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247420	Odor	flaring	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244065	Odor	petroleum	8/15/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247368	Odor	Crude Oil	8/6/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241160	Odor	nasty	9/12/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247062	Odor	crude oil	7/9/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
243417	Odor	chemicals	6/2/2020	Z7578	Carlson Designs	143 Tewksbury Ave	R	94801	U
246760	Fire Out	Flaring	6/16/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
241216	Odor		9/16/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
246659	Smoke		5/27/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
243366	Odor	petroleum vapors	5/28/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245819	Odor	acidic	2/17/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241521	Odor	ozone	10/6/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
246658	Smoke	flares and dark smok	5/27/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
240154	Odor	gas/chemical	6/1/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
246657	Smoke	a lot of smoke	5/27/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
241964	Odor	petroleum	11/9/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
246638	Odor		5/30/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239362	Smoke	flaring	3/8/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245737	Odor	chemical	2/7/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244037	Smoke	flaring	8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
245736	Odor	benzene	2/7/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244040	Smoke	smoke	8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
246622	Smoke	Flaring	5/27/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
244183	Odor	crude oil	8/29/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249258	Odor	chemical	2/16/2022	FA033	NONE	NONE	PR	94801	U
239817	Odor	TOXIC	4/22/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
251568	Smoke	flaring	11/23/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239090	Smoke		2/4/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245632	Other	flaring	1/29/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
240652	Smoke		7/27/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
251360	Odor	burning rubber/gas	10/18/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
243388	Odor	petroleum	5/31/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
251347	Odor	chemical	10/18/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241526	Odor	toxic burnt plastic	10/7/2019	Z6790	NONE	Western & Ocean Ave	R	94801	U
250111	Odor	trash	6/10/2022	FA003	NONE	NONE	R	94801	U
243189	Odor	oil	4/29/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249108	Odor	garbage	2/3/2022	FA003	NONE	NONE	R	94801	U
242996	Odor	garbage	3/25/2020	Z7395	SFD	3019 De Anza Dr	R	94801	U
250668	Odor	gasoline	9/6/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244184	Other	flaring	8/30/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249981	Other	flaring	5/23/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
241524	Odor	noxious	10/7/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
250490	Odor	rotting garbage	8/10/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
243599	Odor	petroleum/crude oil	6/27/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249926	Odor	acostic oil	5/12/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
243274	Fire Out	white / chemical	5/12/2020	Z7508	NONE	2205 Lincoln Ave	R	94801	U
249895	Odor	rotten egg	5/6/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248121	Odor	putrid	10/15/2021	Z9795	None	None	R	94801	U
249894	Other	plume and odor	5/6/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247202	Odor	Chemicals / Tar	7/20/2021	Z9429	NONE	W Macdonald Ave & Barrett Ave	R	94801	U
249795	Dust		4/20/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
243950	Odor	crude oil smell	8/10/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249781	Other	flaring	4/14/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241522	Odor	noxious filth	10/6/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249776	Other	flaring	4/14/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244025	Smoke	billowing black	8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
249775	Smoke	flaring	4/14/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U

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240025	Other	off gassing	5/11/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249774	Other	flaring	4/14/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
243808	Smoke	spewing stuff	7/28/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249773	Other	flaring	4/14/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244103	Odor	pure petroleum	8/19/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245471	Odor	oily & sour	1/14/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244032	Smoke	smoke	8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
245350	Odor	Oil	1/5/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
242984	Odor	toxic oil	3/23/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
251750	Fire Out	burning trash	12/28/2022	FB454	Pick-A-Lock	812 Market Ave	R	94801	U
243844	Odor	oil	8/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
251612	Odor	manure	11/29/2022	FB397	NONE	4th St & Market Ave	R	94801	U
242544	Smoke		2/10/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249769	Other	flaring	4/14/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241359	Odor	emissions	9/25/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249768	Other	flaring	4/14/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U

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243172	Odor	crude oil	4/25/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249766	Other	flaring	4/14/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239337	Smoke	flaring	3/7/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249765	Smoke	flaring	4/14/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239313	Other	flare	3/6/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249764	Other	flaring	4/14/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241407	Odor	emissions	9/27/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249763	Other	flaring	4/14/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
243636	Odor	crude oil	7/5/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249760	Smoke	flaring	4/14/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244225	Odor	strong	9/5/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249759	Smoke	flaring	4/14/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244378	Fire Out	burning in backyard	9/29/2020	Z7987	SFD	2205 Esmond Ave	R	94801	U
245008	Smoke	flaring	11/25/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
242725	Other	flaring	2/22/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249758	Smoke	flaring	4/14/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U

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242064	Odor	crude oil	11/19/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249652	Odor	rotten/rancid	4/4/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	C
249588	Other	catalyst release	3/27/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244867	Odor	heavy oil	11/8/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249599	Odor	rotten garbage	3/28/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
249262	Odor	toxic chemical	2/16/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
249286	Odor	oily	2/18/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248920	Odor	smoke/exhaust	1/20/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248873	Other	flaring	1/14/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
249907	Idling Commercial Vehicle	idling and odor	5/9/2022	FA684	Yellow Food Truck	Duboce Ave btw York and Battery	R	94801	U
245951	Odor	dump	3/1/2021	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
248471	Odor	Oily	11/23/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248461	Odor	oily putrid	11/22/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248445	Odor	chemical	11/21/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248303	Odor	rotten egg	11/6/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
245353	Odor	Acetic Acid	1/5/2021	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U

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248276	Odor	chemical	11/3/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248263	Odor	strong crude oil	11/2/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248249	Odor	oily	11/2/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248209	Odor	oily /petroleum	10/28/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248201	Odor	Burning Chemicals	10/27/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248185	Odor	propane	10/25/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249265	Odor	sweet and chemically	2/16/2022	FA319	None	None	R	94801	U
248161	Other	flaring	10/24/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248160	Other	flare	10/24/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248154	Other	flaring	10/24/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248147	Other	flaring	10/24/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248146	Other	flaring	10/24/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248133	Odor	fumes	10/20/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247999	Odor	strong	10/2/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247984	Odor	petroieum	10/1/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247983	Odor		9/30/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U

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247729	Odor	emissions	9/7/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247694	Odor	Raw Oil	9/1/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247564	Odor	crude oil	8/21/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244432	Odor	toxic oil fields	10/4/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244419	Odor	oil / gas	10/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239176	Odor	Rotten Compost	2/19/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
247423	Smoke	black smoke	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244231	Odor	oil fields	9/6/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
242340	Odor	acetone	1/8/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247421	Other	flaring	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
241095	Odor	bad	9/5/2019	N8859	NONE	NONE	R	94801	U
243811	Smoke	black diesel	7/29/2020	Z7747	Dredging Barge Tugs	Sanderling Island	R	94801	U
248118	Odor	compost	10/15/2021	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
242420	Odor	dump	1/22/2020	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
249299	Odor	chemical	2/19/2022	FA333	NONE	NONE	PR	94801	U
249948	Odor	burning coal/sulfur	5/16/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249803	Odor	sulfuric	4/20/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U

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249586	Other	flaring	3/26/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
238767	Odor	petrol	1/3/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
238871	Odor	acid	1/19/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
244036	Smoke	flaring	8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
245624	Smoke	black smoke	1/29/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249644	Odor	sewer smell	4/2/2022	FA528	NONE	NONE	R	94801	U
251534	Odor	oil and diesel	11/18/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248685	Other	flaring	12/17/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249645	Odor	sewer	3/31/2022	FA529	NONE	NONE	R	94801	U
244732	Other	flaring	11/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244224	Odor	sour garbage	9/5/2020	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
247439	Smoke	flaring	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
240650	Other	flaring	7/27/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
239443	Smoke	black smoke	3/17/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247561	Smoke	grilling	8/20/2021	Z9556	SFD	238 Garrard Blvd	R	94801	U
242237	Other	vapors	12/19/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
238748	Odor	compost	1/2/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U

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241589	Odor	oily/industrial	10/11/2019	Z6820	NONE	NONE	PR	94801	U
248099	Odor	petroleum	10/15/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239445	Odor		3/15/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244545	Odor	heavy diesel	10/17/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244556	Odor	tar/mechanic	10/17/2020	Z8057	NONE	NONE	R	94801	U
245449	Odor	garbage	1/13/2021	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
248958	Dust	oil particulates	1/21/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241701	Odor	burned rubber	10/21/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239107	Smoke	flaring	2/6/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
239117	Smoke	flaring	2/7/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
238752	Odor	compost	1/2/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
244518	Odor	acid / rotten	10/15/2020	P0195	NONE	NONE	R	94801	U
243386	Odor	sewage	5/30/2020	Z7566	NONE	NONE	PR	94801	U
249914	Odor	rotten egg	5/11/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
243174	Smoke	wood oven	4/25/2020	Z7456	NONE	NONE	R	94801	U
242226	Odor	burning metal	12/18/2019	N8859	NONE	NONE	R	94801	U
243170	Odor	chemical	4/24/2020	Z7454	NONE	NONE	R	94801	U

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246377	Smoke	smoke	4/30/2021	N8859	NONE	NONE	R	94801	U
248223	Other	flaring	10/24/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
249526	Odor	chemical	3/20/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
249284	Odor	none	2/18/2022	FA003	NONE	NONE	R	94801	U
242806	Odor		2/27/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239628	Other	flaring	4/4/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
240644	Other	flaring	7/27/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
238750	Odor	compost	1/2/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
245797	Odor	rancid cooking oil	2/14/2021	Z8650	AA Tang Restaurant	South Harbor Blvd and Wright Ave	R	94801	U
249716	Odor	compost	4/10/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
245594	Odor	Bad	1/21/2021	Z1020	NONE	Canal Blvd	R	94801	U
249680	Odor	rotten compost	4/6/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
244391	Odor	Rancid cooking oil	9/30/2020	N0568	NONE	NONE	R	94801	U
249415	Odor	rotten compost	3/4/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
249396	Odor	rotten compost	3/2/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
250608	Odor	sulfer and trash	8/31/2022	FB082	NONE	NONE	R	94801	U
245018	Odor	sick sweet rotten	11/29/2020	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U

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242479	Odor	sweet acrid	1/30/2020	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
246728	Odor	cooking oil/paint	6/12/2021	N8859	NONE	NONE	R	94801	U
240506	Odor	sewage	7/11/2019	Z6408	NONE	Cutting to Seacliff	R	94801	U
239020	Odor	garbage	1/27/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
241406	Odor	refinery	9/26/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245332	Odor	foul	1/3/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244744	Odor	petro/chemical	11/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247689	Odor	Chlorine / Burning	9/1/2021	P0414	NONE	NONE	PR	94801	U
248293	Odor	Bad Fart	11/5/2021	N8859	NONE	NONE	R	94801	U
239412	Odor	acrid	3/14/2019	Z5926	NONE	NONE	PR	94801	U
241697	Smoke		10/21/2019	Z6844	NONE	NONE	R	94801	U
240087	Odor	sweet	5/21/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
244100	Odor	chemical	8/17/2020	Z7841	NONE	NONE	R	94801	U
239355	Odor	gas	3/10/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249648	Odor	rotten compost	4/4/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
249343	Odor	compost	2/24/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
238967	Odor	Acrid	1/25/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
248300	Odor	rotten egg	11/6/2021	Z9873	NONE	NONE	R	94801	U
249650	Odor	sewage	4/4/2022	A1271	West County Wastewater District	2377 Garden Tract Rd	R	94801	C

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249730	Odor	rotten compost	4/11/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	C
249690	Odor	rotten compost	4/7/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	C
249311	Odor	rotten compost	2/21/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
249237	Odor	rotten compost	2/14/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
249199	Odor	rotting compost	2/11/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
242394	Odor	sweet/rotten	1/17/2020	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
240511	Odor		7/12/2019	Z6410	NONE	NONE	R	94801	U
239338	Smoke	flaring	3/7/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
238895	Odor	manure	1/21/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
238819	Odor	manure	1/10/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
242309	Odor	strong manure	1/3/2020	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
242275	Odor	sour/rotten	12/27/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
239021	Odor	compost	1/28/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
238981	Odor	Putrid	1/26/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
242036	Odor	noxious	11/17/2019	Z6989	NONE	NONE	PR	94801	U
242718	Odor	diesel	2/21/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241960	Odor	garbage	11/12/2019	Z6957	NONE	NONE	R	94801	U
241877	Odor	sewage	11/3/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
248358	Odor	sulphuric	11/12/2021	P0414	NONE	NONE	PR	94801	U
249525	Odor	compost	3/20/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
244497	Odor	septic compost	10/14/2020	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
249312	Odor	garbage	2/21/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
245827	Odor	rotting food	2/18/2021	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
238792	Odor	petroleum	1/4/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248542	Odor	Fertilizer	11/30/2021	P0414	NONE	NONE	PR	94801	U
248813	Odor	trash	1/11/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
239708	Other	flaring	4/10/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
249138	Odor	septic/com post	2/6/2022	FA265	NONE	NONE	R	94801	U
239095	Smoke	flares	2/5/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
238933	Odor	compost	1/24/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
239084	Smoke	flaring	2/4/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245623	Smoke	black smoke	1/29/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249176	Odor	compost	2/9/2022	A6316	West County Resource Recovery In	101 Pittsburg Avenue	R	94801	U
245306	Odor	foul	12/27/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249658	Odor	compost	4/5/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
239015	Odor	septic	1/28/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
238992	Odor	septic	1/24/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
251685	Smoke	black	12/15/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241532	Odor	sour/acrid	10/7/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
241698	Smoke	SMOKEY	10/21/2019	Z6845	NONE	NONE	R	94801	U
244031	Smoke	smoke	8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
249355	Odor	garbage	2/26/2022	FA356	NONE	NONE	PR	94801	U
238811	Odor	noxious	1/10/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
238964	Odor	garbage	1/28/2019	P0414	NONE	NONE	PR	94801	U
242032	Odor	sickeningly sweet	11/17/2019	Z6986	NONE	NONE	PR	94801	U
242422	Odor	pepper/ch emical	1/22/2020	Z7163	NONE	NONE	PR	94801	U
238867	Odor	septic compost	1/18/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
238751	Odor	compost	1/2/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
245454	Odor	septic/garbage	1/13/2021	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
245405	Odor	Septic Compost	1/11/2021	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
244482	Odor	Septic / Compost	10/13/2020	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
242424	Odor	obnoxious	1/22/2020	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
242311	Odor	sour acrid	1/3/2020	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
250851	Odor	rotting garbage	9/21/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
239365	Smoke	flaring	3/8/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
242543	Odor	ACIDIC	2/10/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239627	Other	flares	4/4/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
239709	Other	flaring	4/10/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
249079	Odor	heady oil smell	2/1/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244226	Odor	very bad	9/5/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
238810	Odor	diesel	1/10/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
246444	Odor	sulfur	5/8/2021	Z9037	NONE	NONE	R	94801	U
238997	Odor	rotting/fermenting	1/27/2019	E4037	Green Waste Recycle Yard	2550 Garden Trait Rd	R	94801	U
245404	Odor	gas	1/11/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244505	Odor	gas	10/15/2020	Z8044	None	None	PR	94801	U
242278	Odor	chemically	12/27/2019	N8859	NONE	NONE	R	94801	U
242499	Odor	chemical	2/1/2020	Z7185	NONE	NONE	R	94801	U
241868	Odor	chemical	11/2/2019	Z6925	NONE	NONE	R	94801	U
241724	Odor	chemical/sulfur	10/23/2019	Z6859	NONE	NONE	PR	94801	U
241702	Odor	sour	10/21/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
238960	Odor	VERY BAD	1/25/2019	N0568	NONE	NONE	R	94801	U
238999	Odor	pungent/putrid	1/28/2019	Z5718	NONE	NONE	R	94801	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
239057	Odor	compost	1/3/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
247425	Other	black smoke	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244727	Other	flaring	11/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244491	Odor	sulfur	10/13/2020	Z8040	NONE	NONE	PR	94801	U
242142	Odor	bad oil	11/30/2019	T2045	Refinery	NONE	PR	94801	U
241447	Odor	sooty	10/1/2019	Z6771	NONE	NONE	PR	94801	U
242038	Odor	sweet oil	11/17/2019	Z6990	NONE	NONE	R	94801	U
248964	Odor	rotten	1/23/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
238763	Other	trains	1/3/2019	Z5639	BNSF Railroad Yard	303 South Garrard Blvd.	R	94801	C
248070	Odor	Metalic	10/13/2021	P0195	NONE	NONE	R	94801	U
242104	Odor	diesel chemical	11/23/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244532	Odor	gas	10/16/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244503	Odor	gas/sulfur	10/15/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241931	Odor	sulfur	11/5/2019	Z6942	NONE	NONE	R	94801	U
242037	Odor	oily smell	11/17/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
238822	Odor	fertilizer	1/10/2019	Z5657	NONE	NONE	PR	94801	U
240212	Odor	sour/acrid	6/7/2019	Z6277	NONE	NONE	PR	94801	U
242108	Odor	nasty oil	11/24/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241768	Odor	horrible	10/24/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239447	Odor	tarry odor	3/16/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U

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244066	Odor	tar	8/16/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241475	Odor	oily	10/2/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244513	Odor		10/15/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239376	Odor	tar/oily	3/11/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
243226	Odor	chlorine	5/5/2020	N8859	NONE	NONE	R	94801	U
241443	Odor	compost	10/1/2019	Z6770	NONE	NONE	R	94801	U
241711	Odor	compost	10/22/2019	E4037	Green Waste Recycle Yard	2550 Garden Trait Rd	R	94801	U
245834	Odor	compost	2/19/2021	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
241977	Odor	waste water	11/12/2019	P0414	NONE	NONE	PR	94801	U
247989	Odor	sweet acrid	10/1/2021	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
238736	Odor	compost	1/2/2019	Z5631	NONE	NONE	R	94801	U
238737	Odor	compost	1/2/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
238749	Odor	skunk/sulfur	1/2/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
238791	Odor	oil and chemical	1/3/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
238854	Odor	noxious/chemical	1/14/2019	Z5681	NONE	NONE	R	94801	U
241671	Odor		10/18/2019	Z6837	NONE	NONE	R	94801	U
238897	Odor	compost	1/21/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
249829	Odor	rotting compost	4/27/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
242472	Odor	dump	1/29/2020	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
242339	Odor	stinky	1/8/2020	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
239707	Odor	Garbage	4/10/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
239124	Odor	rotten compost	2/10/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
238919	Odor	Burning Rubber	1/23/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
242803	Odor	noxious gas	2/27/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
238932	Odor	sewage	1/24/2019	N8859	NONE	NONE	R	94801	U
238938	Odor	ammonia	1/25/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
244758	Odor	Toxic Chemical	11/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
238982	Odor	obnoxious, sweet	1/28/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
239006	Odor		1/27/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239009	Odor	rotting vegetables	1/27/2019	N8859	NONE	NONE	R	94801	U
239018	Odor		1/27/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239019	Odor	sewer	1/27/2019	N8859	NONE	NONE	R	94801	U
241696	Odor	unpleasant	10/21/2019	Z6843	NONE	NONE	PR	94801	U
241225	Odor	NATURAL GAS	9/17/2019	P0414	NONE	NONE	PR	94801	U
242212	Odor	gas	12/16/2019	Z7087	NONE	NONE	PR	94801	U
239022	Odor	gas/rotten eggs	1/28/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239023	Odor	Chemical	1/25/2019	N0568	NONE	NONE	R	94801	U

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239024	Odor	Compost	1/28/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
239036	Odor	sewage	1/29/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
248596	Odor	pungent rotten sour	12/2/2021	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
239070	Odor	compost	1/31/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
239085	Smoke	flaring	2/4/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
243651	Odor	flaring smell	7/6/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239638	Other	flaring	4/7/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
239086	Smoke	flaring	2/4/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244756	Other	toxic flare ups	11/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
239316	Other	flaring	3/6/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239088	Smoke	flaring and odor	2/4/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
240550	Smoke	black plume & flair	7/17/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
239640	Other	flaring	4/7/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
243015	Smoke	black	3/29/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239089	Smoke	flaring	2/4/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
239091	Odor	SMK, flames, odor	2/4/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239093	Odor	heavy/oily	2/5/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239096	Smoke	flaring	2/5/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244914	Odor	oil	11/12/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239446	Odor		3/15/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
240223	Odor	oily	6/10/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239106	Odor	heavy oil	2/6/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
242808	Odor		2/27/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239360	Odor	oil	3/10/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244019	Odor	tar and oil	8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244232	Odor	heavy oil	9/7/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239177	Odor	landfill	2/19/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
239308	Other	flare	3/6/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239309	Other	flaring	3/6/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239310	Other	flaring	3/6/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239311	Other	flare	3/6/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
239312	Other	flaring	3/6/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239314	Other	flare	3/6/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239315	Other	flaring	3/6/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239318	Other	flaring	3/6/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239328	Odor	sulfur	3/7/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
239329	Odor	sulfur	3/7/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
239330	Odor	sulfur	3/7/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
239331	Odor	sulfur	3/7/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
239334	Odor	sulfur	3/7/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
239335	Smoke	flaring	3/7/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239336	Smoke	flaring	3/7/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239342	Odor	rotten eggs	3/7/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
239346	Odor	toxic	3/7/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239351	Odor	plastic/chemical	3/8/2019	N0568	NONE	NONE	R	94801	U
239358	Odor	burning plastic	3/10/2019	Z5915	NONE	NONE	PR	94801	U
242035	Odor	heavy oil	11/17/2019	Z6988	NONE	NONE	PR	94801	U
248581	Odor	heavy oil	12/1/2021	FA033	NONE	NONE	PR	94801	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
239359	Odor	motor oil	3/10/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248102	Odor	gas oily	10/15/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239363	Smoke	flaring	3/8/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239364	Smoke	flaring	3/8/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239441	Smoke	flaring	3/17/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239442	Smoke		3/17/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239444	Smoke		3/17/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239458	Odor	gasoline	3/18/2019	Z5938	NONE	S.GARRARD BLVD & CREST AVE	PR	94801	U
239546	Smoke	visible emissions	3/26/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239582	Odor	burning plastic	3/30/2019	N3161	NONE	scenic place/washing ton	R	94801	U
239584	Odor	bad	3/30/2019	P0414	NONE	NONE	PR	94801	U
239629	Smoke	black	4/4/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
245622	Smoke	black smoke	1/29/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239630	Odor	flaring	4/4/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244726	Smoke	thick black smoke	11/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
239631	Other	flaring	4/4/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C

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239632	Other	flare	4/4/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
239634	Odor	GASOLINE/ STRONG	4/5/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239637	Other	flaring	4/7/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
239639	Other	flaring	4/7/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
239646	Other	flaring	4/6/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
239647	Odor	chemically oil	4/6/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239671	Odor	chemical	4/9/2019	N8859	NONE	NONE	R	94801	U
239652	Odor	Chemical	4/8/2019	N8859	NONE	NONE	R	94801	U
239710	Other	flaring	4/10/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239711	Other	flare	4/10/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
239712	Other	flaring	4/10/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239713	Other	flaring	4/10/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
239716	Other	flaring	4/10/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
239729	Odor		4/14/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
239945	Smoke	thick white	5/2/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
240251	Odor	ammonia	6/12/2019	Z6296	NONE	NONE	R	94801	U
240312	Smoke	flairing	6/18/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
240366	Dust	not watering	6/26/2019	Z5074	Rocks Unlimited	1160 Fred Jackson Way	R	94801	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
240466	Other	no permit	7/5/2019	Z6399	Brothers Auto Body Shop	506 De Carlo Ave	R	94801	C
240507	Odor	rotten egg	7/11/2019	N8859	NONE	NONE	R	94801	U
240518	Odor	burnt charcoal	7/14/2019	Z6411	NONE	NONE	R	94801	U
240528	Odor	acrid	7/15/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
240549	Smoke	black smoke	7/17/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
240568	Odor	burning metal/plastic	7/20/2019	Z6433	NONE	NONE	PR	94801	U
240578	Odor	bad	7/19/2019	Z6437	Honeybucket	900 Brookside Dr	R	94801	U
240602	Odor	sulfer	7/23/2019	P0414	NONE	NONE	PR	94801	U
246625	Smoke	flaring	5/27/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
245533	Other	flaring	1/16/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
240645	Other	flaring	7/27/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248285	Other	flaring	11/4/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244087	Other	flaring	8/17/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244024	Smoke	flaring	8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244124	Other	flaring	8/20/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
240646	Other	flare	7/27/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
240647	Other	flaring	7/27/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
242542	Other	Flaring	2/10/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
240648	Smoke	large amount	7/27/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
240649	Smoke		7/27/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
240653	Other	flaring	7/27/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
240660	Other	flare	7/27/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
240786	Odor	chemical	8/14/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
240978	Odor	sulfur	8/25/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241043	Odor	rotten eggs	8/31/2019	Z6628	NONE	NONE	PR	94801	U
241273	Smoke	black smoke	9/20/2019	Z6719	NONE	1900 Stenmark Drive	R	94801	U
241362	Odor	chemical	9/25/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244343	Odor	petroleum	9/25/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241367	Odor	burning	9/25/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241369	Odor	chemical smell	9/25/2019	P0414	NONE	NONE	PR	94801	U
241523	Odor	gas-ish	10/7/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241527	Odor	heavy oil, chemical	10/7/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241531	Smoke	orange cloud	10/7/2019	U1793	Refinery	NONE	R	94801	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
244728	Smoke	thick black smoke	11/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
241575	Odor	noxious	10/10/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241585	Odor	old oil rags	10/11/2019	P0414	NONE	NONE	PR	94801	U
241594	Odor	Burnt Rubber	10/11/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241665	Odor	burnt rubber	10/15/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241699	Smoke	smokey smell	10/21/2019	Z6846	NONE	NONE	PR	94801	U
248703	Odor	tar like	12/22/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241710	Odor	TAR	10/22/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241730	Odor	metallic/ch emical	10/23/2019	P0414	NONE	NONE	PR	94801	U
241776	Odor	metallic	10/25/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241779	Odor	acid chemical gas	10/24/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248101	Odor	petroleum	10/15/2021	Z9782	NONE	NONE	R	94801	U
241824	Odor	Gasoline	10/31/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241835	Odor	chemical	10/31/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241856	Odor		11/1/2019	Z6924	NONE	NONE	PR	94801	U
246163	Odor	plasticky chemical	3/30/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241866	Odor	gas/oil	11/2/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241873	Odor		11/2/2019	Z6926	NONE	NONE	R	94801	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
249377	Odor	chemical	2/28/2022	FA373	NONE	NONE	R	94801	U
242072	Odor	burning plastic	11/21/2019	Z7007	NONE	NONE	R	94801	U
242070	Odor	rank	11/20/2019	Z7005	NONE	NONE	R	94801	U
242421	Odor	chemical	1/22/2020	Z7162	NONE	NONE	R	94801	U
241874	Odor	chemical	11/2/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241884	Odor		11/3/2019	Z6927	NONE	NONE	PR	94801	U
244548	Odor	exhaust	10/17/2020	Z8055	NONE	NONE	R	94801	U
241889	Odor	chemical	11/4/2019	Z6929	NONE	NONE	PR	94801	U
241915	Odor	poop	11/5/2019	P0414	NONE	NONE	PR	94801	C
248882	Odor	chemical	1/14/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241930	Odor	sewage	11/5/2019	Z6941	NONE	NONE	PR	94801	U
241954	Odor	gas	11/8/2019	Z6955	NONE	NONE	PR	94801	U
241965	Smoke		11/10/2019	Z6959	NONE	NONE	PR	94801	U
241971	Odor		11/11/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241972	Odor		11/11/2019	Z6962	NONE	NONE	PR	94801	U
241989	Odor	methane	11/12/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
241993	Odor	bad	11/12/2019	Z6971	NONE	48 Washington Ave	PR	94801	U
242033	Odor	chemical	11/17/2019	Z6987	NONE	NONE	R	94801	U
242039	Odor	oil	11/17/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
242040	Odor	compost/t oxic	11/17/2019	Z6991	NONE	NONE	PR	94801	U
242085	Odor	metal	11/22/2019	N8859	NONE	NONE	R	94801	U
242101	Odor		11/22/2019	Z7019	NONE	NONE	PR	94801	U
242106	Odor	bad oil	11/24/2019	Z7020	NONE	NONE	PR	94801	U
250503	Other	flaring	8/13/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U

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248625	Other	flaring	12/7/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248503	Odor	ammonia	11/28/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
242266	Odor	gasoline	12/26/2019	P0414	NONE	NONE	PR	94801	U
242270	Odor	sour/acrid	12/27/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
242281	Smoke	dirty	12/27/2019	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
242285	Odor	strong garbage	12/28/2019	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
242315	Odor	dump	1/5/2020	Z7119	NONE	Visalia St & 23rd Ave	R	94801	U
242323	Odor	acrid/putrid/sweet	1/6/2020	Z7121	NONE	NONE	PR	94801	U
244022	Odor	gas	8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
246159	Odor	chemical	3/30/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
242628	Odor	refinery	2/18/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249084	Odor	chemical	2/1/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248839	Odor	exhaust sweet	1/12/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248315	Odor	rotten eggs	11/7/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244067	Odor	petroleum	8/16/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244553	Odor		10/18/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
242324	Odor	fertilizer/petroleum	1/6/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U

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242327	Odor	sour / sulfur	1/7/2020	P0414	NONE	NONE	PR	94801	U
242337	Odor	acidic/acrid	1/8/2020	A0023	Chemtrade West US LLC	525 Castro Street	R	94801	U
242336	Odor	rotting onion	1/8/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
242344	Smoke	white	1/10/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
242382	Odor	gasoline	1/15/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
242390	Odor	gas	1/17/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
242423	Odor	burning plastic	1/22/2020	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
242426	Dust	coal	1/22/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
242437	Odor	compost	1/23/2020	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
242438	Odor	compost	1/23/2020	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
242445	Odor	strong	1/24/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
242473	Odor	noxious	1/29/2020	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
242492	Odor		1/31/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
242525	Odor	oily	2/6/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
242529	Odor		2/6/2020	P3325	Pacific East Mall	3288 pierce street	R	94801	U
242541	Smoke	flaring	2/10/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
242545	Smoke	flaring	2/10/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C

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246624	Odor	Flaring	5/27/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
246175	Smoke	black	4/1/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245531	Odor	Flaring	1/16/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
249421	Other	flaring	3/4/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
242558	Other	flaring	2/10/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244230	Smoke	flaring and smoke	9/6/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
242559	Smoke	flaring	2/10/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
242560	Odor	toxic oil	2/11/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
242719	Odor	burnt plastic smell	2/21/2020	Z7275	NONE	NONE	PR	94801	U
242784	Odor	tar	2/26/2020	Z7295	NONE	NONE	PR	94801	U
242804	Odor	diesel fuel/chemical	2/27/2020	Z7302	NONE	NONE	PR	94801	C
242805	Odor	toxic	2/27/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
242912	Other	flaring	3/9/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
243041	Odor		3/28/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
243106	Odor	gas/skunk	4/14/2020	Z7431	NONE	NONE	R	94801	U
243111	Smoke	visible odor	4/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U

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243124	Odor	burnt rubber/plastic	4/16/2020	Z7439	None	None	R	94801	C
243213	Odor	foul	5/4/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
243221	Smoke	grey ash-like	5/4/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
243324	Odor	spray paint	5/20/2020	Z7538	SFD	152 12th St	R	94801	U
243332	Odor	acid	5/23/2020	Z7543	NONE	NONE	R	94801	U
243338	Odor	chemical/toxic	5/25/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
243339	Odor		5/25/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
243340	Odor	odd gasoline smell	5/25/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
243403	Other	flaring	6/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
243565	Dust		6/22/2020	A2820	Nor-Cal Perlite, Inc	2605 Goodrick Avenue	R	94801	U
243638	Odor		7/5/2020	Z7669	NONE	NONE	PR	94801	U
244023	Smoke	flume of black smoke	8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244026	Smoke	black smoke	8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244027	Smoke	flaring	8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244028	Smoke	massive flaring	8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244029	Smoke	black smoke	8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C

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244030	Smoke	flaring	8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244033	Smoke	black smoke	8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244034	Smoke	smoke	8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244035	Smoke	flaring	8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244731	Smoke	black	11/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244038	Smoke		8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244039	Smoke	flaring	8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244041	Smoke	black smoke	8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244042	Smoke	black	8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244043	Smoke	smoke	8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244044	Smoke	flaring	8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244053	Smoke	oily black	8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244068	Odor	petroleum	8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244070	Odor		8/14/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244123	Other	flaring	8/20/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244125	Other	flaring	8/20/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
244126	Other	flaring	8/20/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244127	Other	flaring	8/20/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
250051	Odor	unprocessed oil	6/1/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244128	Other	flaring	8/20/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244129	Other	flaring	8/20/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244130	Other	flaring	8/20/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
249184	Odor	chemical	2/10/2022	FA286	None	None	R	94801	U
244156	Odor	feces	8/26/2020	N8859	NONE	NONE	R	94801	U
248296	Odor	rotten eggs	11/5/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244228	Odor	tar	9/6/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244249	Smoke		9/9/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244285	Odor	sulfur	9/17/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244736	Odor		11/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244547	Odor	exhaust	10/17/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248502	Odor	petrochemical	11/27/2021	FA008	NONE	NONE	R	94801	U
248486	Odor	petrochemical	11/26/2021	FA004	NONE	NONE	R	94801	U
244392	Odor	gasoline	10/1/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244400	Odor	Petroleum	10/1/2020	P0414	NONE	NONE	PR	94801	U

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244416	Odor	petroleum	10/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244401	Odor	Burning Plastic	10/1/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244413	Odor	tar/oily	10/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244474	Odor	sewage	10/11/2020	Z8034	NONE	NONE	PR	94801	U
244508	Odor	sulfur	10/15/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244519	Odor	Burning rubber	10/15/2020	P0414	NONE	NONE	PR	94801	U
244538	Odor	skunk-like	10/17/2020	Z8049	NONE	NONE	R	94801	U
249251	Odor	sweet stench	2/16/2022	FA033	NONE	NONE	PR	94801	U
244542	Odor	rotten eggs/sulfur	10/17/2020	Z8052	NONE	NONE	PR	94801	U
246757	Odor	Water Waste	6/16/2021	N8859	NONE	NONE	R	94801	U
244597	Odor		10/20/2020	Z8067	NONE	NONE	PR	94801	U
244598	Odor	sewage	10/20/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244641	Odor	exhaust	10/25/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244649	Odor	Chemical Smoke	10/26/2020	P0414	NONE	NONE	PR	94801	U
244725	Smoke	black smoke	11/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244729	Smoke	dark smoke	11/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244730	Smoke	black	11/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244735	Smoke	black smoke	11/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C

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244737	Odor	crude oil	11/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245728	Odor	oily	2/6/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244739	Odor	Burnt Plastic	11/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248736	Odor	oily	1/2/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248734	Odor	oily	1/1/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248686	Odor	oily	12/17/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248612	Odor	oily smell	12/5/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248580	Odor	oily	12/1/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245523	Odor	Oily	1/17/2021	P5819	NONE	NONE	R	94801	U
250267	Odor	petroleum	7/2/2022	FA879	Richmond Bridge	Richmond bridge	R	94801	U
244742	Odor	chemical	11/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244940	Odor	plastic	11/16/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244743	Odor	rotten egg	11/2/2020	Z8107	NONE	NONE	PR	94801	C
244745	Smoke	black	11/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244747	Smoke	flaring	11/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244753	Odor	Heavy Smoke	11/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244755	Other	Flaring	11/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
244757	Other	explosion	11/2/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
244817	Odor		11/5/2020	N8859	NONE	NONE	R	94801	U
244966	Odor	plastic chemical	11/20/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
244984	Fire In	burning	11/23/2020	Z8237	SFD	754 Western Dr	PR	94801	U
251629	Smoke	visible emissions	12/7/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245006	Smoke	flaring	11/25/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
247424	Other	explosion	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
245007	Smoke	flaring	11/25/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
245017	Odor	foul	11/29/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245150	Odor	Thick Gas	12/9/2020	N8859	NONE	NONE	R	94801	U
245178	Odor	Sulfur	12/15/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
251748	Other	flaring	12/28/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
245213	Odor	burning plastic	12/17/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248286	Other	flaring	11/4/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248237	Other	flaring	10/30/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245759	Odor	chemical	2/9/2021	Z8625	NONE	NONE	R	94801	U
245339	Odor	Burnt crayons	1/5/2021	N8859	NONE	NONE	R	94801	U
245453	Odor	burning crayons	1/13/2021	Z8498	NONE	NONE	R	94801	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
245820	Odor	Burnt plastic / chem	2/17/2021	Z8659	NONE	Piedmont Pl	R	94801	U
245480	Odor	Smells Foul	1/14/2021	P0195	NONE	NONE	R	94801	U
245382	Odor	compost rotting	1/8/2021	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
245362	Odor		1/6/2021	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
245407	Odor	Sour smell	1/11/2021	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
245408	Odor		1/11/2021	P0414	NONE	NONE	PR	94801	U
245451	Odor	Garbage	1/13/2021	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	C
245460	Odor	rotten/pungent	1/14/2021	Z8501	None	None	R	94801	U
245472	Odor	roof tar	1/14/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245473	Odor	sour and acidic	1/14/2021	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
245476	Odor		1/14/2021	P0195	NONE	NONE	R	94801	U
246623	Smoke	Black	5/27/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
245508	Other	large plume	1/16/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
245557	Odor	Burnt Tires	1/20/2021	P0414	NONE	NONE	PR	94801	U
245513	Odor	none	1/16/2021	P0414	NONE	NONE	PR	94801	U
245516	Odor	Petroleum Jelly	1/15/2021	P0414	NONE	NONE	PR	94801	U
245639	Odor	petroleum jelly	1/31/2021	Z8563	NONE	NONE	R	94801	U
245520	Odor	Rubber	1/17/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
245525	Odor	Gigantic Flare	1/16/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
245526	Other	Flaring	1/16/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
245527	Odor	Large Flaring	1/16/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
245528	Fire Out	Flaring	1/16/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
245529	Other	Flaring	1/16/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
245530	Fire Out	Flaring	1/16/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245532	Other	flaring	1/16/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
245544	Odor	frying	1/20/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245545	Odor	Sour / Chemical	1/20/2021	P0414	NONE	NONE	PR	94801	U
251412	Odor		10/23/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245958	Odor	Yeasty	3/2/2021	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
245625	Smoke	black smoke	1/29/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245626	Smoke	black smoke	1/29/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245660	Odor	toxic green waste	2/2/2021	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
245692	Odor	bad	2/5/2021	Z8606	REPUBLIC / RICHMOND REFINERY	NONE	PR	94801	U
245732	Odor	chemical	2/6/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
249215	Odor	chemical	2/12/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249182	Odor	diesel	2/10/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245735	Odor	sour water	2/7/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245739	Odor	chemically	2/8/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245751	Odor	chemical	2/9/2021	Z8622	NONE	NONE	R	94801	U
245757	Odor	petrol like	2/9/2021	Z8624	NONE	NONE	PR	94801	U
245760	Odor	metallic	2/9/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
247988	Odor	sulfur	10/1/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245764	Odor	lead	2/9/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245798	Other	trouble breathing	2/10/2020	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245817	Odor	gasoline	2/17/2021	Z0159	COM	2925 Technology Court	R	94801	U
245846	Smoke	black	2/22/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
245847	Smoke	flaring	2/22/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
245852	Odor	Chemical / Rubber	2/22/2021	Z8678	NONE	NONE	PR	94801	U
245857	Odor	Sewage / Rotting	2/23/2021	U5302	NONE	NONE	R	94801	U
245892	Odor	gas	2/23/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
246145	Odor	bad	3/26/2021	Z8832	NONE	2775 Goodrick Ave	R	94801	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
246562	Smoke	black smoke	5/24/2021	Z9106	NONE	NONE	R	94801	C
246626	Smoke	Large Flaring	5/27/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
246627	Fire Out	Flaring	5/27/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247432	Smoke	black smoke	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
247258	Other	flaring	7/25/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
249420	Other	flaring	3/4/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247261	Odor		7/25/2021	Z9457	NONE	NONE	PR	94801	U
247309	Odor	Chemical / Fire	7/28/2021	N8859	NONE	NONE	R	94801	U
247418	Other	flaring	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
247419	Other	flaring	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
247422	Other	flaring	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
247426	Other		8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
247427	Other	flaring/smoke	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
247428	Smoke	flaring	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
247429	Other	black cloud	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
247430	Other	flaring	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
247431	Smoke	flaring	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
247434	Other	fire / smoke	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
247435	Odor	wildfire smell	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
247436	Smoke	black	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
247438	Smoke	black	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
247440	Odor	chemical	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
247441	Other	flaring	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
247442	Other	fire/flaring	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247443	Other	flaring	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
247444	Odor	smokey smell	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
247445	Smoke	black	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247446	Other	flaring	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247447	Smoke	dark smoke	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247448	Other	flaring	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247449	Smoke	black smoke	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247450	Smoke	smoke	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247451	Smoke	black smoke	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C

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247452	Odor		8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
247466	Other	flaring	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
247471	Smoke	black smoke	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247473	Other	flaring	8/10/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247474	Odor	burning chemical	8/11/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247545	Odor	sewage	8/17/2021	Z9549	NONE	NONE	R	94801	U
247686	Odor	Gasoline	9/1/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247886	Odor	Roofing Tar	9/20/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
247990	Odor	tarry	10/1/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248098	Odor	chemical	10/15/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248082	Odor	Chemical fumes	10/14/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248809	Odor	chemical	1/10/2022	FA151	NONE	NONE	R	94801	U
248487	Odor	sour chemical	11/26/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248381	Odor	sour chemical	11/14/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248092	Odor	paint	10/15/2021	N8859	NONE	NONE	R	94801	U
248103	Odor		10/15/2021	Z9783	NONE	NONE	PR	94801	U
248109	Odor	sour/comp ost/paint	10/16/2021	Z9787	NONE	NONE	R	94801	U
248111	Odor	horrid	10/15/2021	Z9789	NONE	NONE	R	94801	U
248112	Odor		10/15/2021	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U

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248145	Smoke	dirty brown	10/24/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248148	Other	flare	10/24/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248151	Other	flaring	10/24/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248152	Odor		10/24/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248153	Odor	bad oil / toxic	10/24/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248155	Other	flare	10/24/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248156	Other	strong	10/24/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248157	Other	flaring	10/24/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248158	Other	flaring	10/24/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248159	Other	flaring	10/24/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248163	Odor	gasoline	10/25/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248165	Odor	gasoline	10/24/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248167	Odor	gasoline	10/24/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248168	Odor	gasoline	10/24/2021	Z9817	None	None	R	94801	U
248169	Odor	oil or gas	10/25/2021	Z9818	None	None	R	94801	U
248171	Odor	fresh or burnt gas	10/24/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248172	Odor	chemical/gas	10/25/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
248175	Odor	gas	10/24/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248179	Odor	chemical	10/25/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248180	Other	flaring	10/25/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248182	Other	flaring	10/25/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248183	Odor	gas	10/25/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248190	Other	flaring	10/26/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248184	Other	flaring	10/25/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248187	Other	flaring	10/25/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248188	Other	flaring	10/26/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248191	Odor	toxic	10/24/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248193	Odor	diesel	10/26/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248194	Other	flaring	10/26/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248206	Odor	petrol oily	10/28/2021	Z9828	NONE	NONE	PR	94801	U
248207	Smoke		10/28/2021	Z9829	NONE	NONE	PR	94801	U
248219	Other	flaring	10/29/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248236	Other	flare	10/30/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
250869	Odor	black smoke/odor	9/23/2022	FB185	Tanker Ship	Richmond Harbor	R	94801	U

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248248	Odor	eyes burning	11/1/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248294	Odor	rotten egg	11/5/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248302	Odor	sulfur	11/6/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248304	Odor		11/6/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248305	Odor		11/6/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248306	Odor		11/6/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248308	Odor		11/6/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248309	Odor		11/6/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248310	Odor		11/6/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248311	Odor		11/6/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248312	Odor		11/6/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248313	Odor		11/6/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248314	Odor	rotten eggs	11/6/2021	Z9876	NONE	NONE	R	94801	U
248320	Smoke	black smoke	11/8/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248324	Odor	paint thinner	11/9/2021	Z9882	NONE	NONE	R	94801	U
249081	Dust	no mitigation	2/1/2022	Z9886	NONE	1 Barrett ave	R	94801	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
248333	Odor	exhaust/dust	11/10/2021	Z9886	NONE	1 Barrett ave	R	94801	U
248347	Odor		11/11/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248355	Odor	raw seafood	11/12/2021	N8859	NONE	NONE	R	94801	C
248357	Odor	burning	11/12/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248824	Odor	chemical	1/11/2022	FA156	NONE	NONE	PR	94801	U
250954	Odor	chemical	10/3/2022	FB206	NONE	NONE	PR	94801	U
248364	Odor	chemical	11/12/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248366	Odor	smoke	11/12/2021	Z9898	NONE	NONE	R	94801	U
248369	Odor	gasoline	11/13/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248392	Smoke	burning plastic	11/15/2021	Z9907	NONE	NONE	R	94801	U
248394	Odor	chemical	11/15/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248420	Odor	rotten egg	11/17/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249112	Odor	gasoline	2/3/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248435	Other	gasoline	11/19/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248475	Odor	burnt rubber	11/23/2021	Z9938	NONE	NONE	R	94801	U
248485	Odor	Petrochemical	11/26/2021	FA003	NONE	NONE	R	94801	U
248554	Odor	oil	11/30/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248574	Odor	Sour Compost	12/1/2021	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
248585	Odor	fertilizer/co mpost	12/2/2021	FA035	None	None	PR	94801	U
248595	Odor	compost	12/2/2021	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
248719	Smoke	Black smoke	12/30/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248721	Smoke	flaring	12/30/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248725	Smoke	Flaring	12/30/2021	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
248918	Odor	Gasoline	1/20/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
248960	Odor	rotten eggs	1/22/2022	FA194	NONE	NONE	R	94801	U
249470	Dust	huge black plume	3/11/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249018	Odor	chemical	1/27/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249098	Odor	petroleum	2/3/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249087	Odor	petroleum	2/2/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249094	Odor	chemical	2/2/2022	FA253	NONE	NONE	R	94801	U
249319	Odor	toilet	2/22/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
249107	Odor	chemical	2/3/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
249140	Odor	acid	2/6/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249147	Odor		2/7/2022	FA269	NONE	NONE	R	94801	U
249163	Odor	compost	2/8/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
249173	Odor	old rr ties	2/9/2022	FA282	Richmond Pacific Railroad	Washington Ave and Tewksbury Ave	R	94801	U
249177	Odor	toilet	2/9/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
249179	Odor	armpit	2/9/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249188	Odor	bad smell	2/9/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249193	Odor	compost	2/10/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
249206	Odor	burning plastic	2/11/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249210	Odor		2/11/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249211	Odor	garbage	2/11/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
249226	Odor	chemicals	2/12/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249231	Odor	unrefined diesel	2/13/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249232	Odor	chemical	2/13/2022	FA033	NONE	NONE	PR	94801	U
249250	Odor	chemical	2/16/2022	FA033	NONE	NONE	PR	94801	C
250173	Odor	gasoline	6/21/2022	FA824	NONE	Morgan Ave	R	94801	U
249696	Odor	sweet chemically	4/7/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
249297	Odor	sweet/chemical	2/18/2022	FA332	NONE	NONE	R	94801	U
249256	Odor	chemically /sweet	2/16/2022	FA317	None	None	R	94801	C
249264	Odor	strong/chemical	2/16/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U

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249287	Odor	chemical	2/18/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
249288	Odor	acid	2/18/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
249293	Odor	acetone	2/18/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249305	Odor		2/19/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249349	Odor	acid	2/25/2022	FA353	NONE	NONE	R	94801	U
249353	Odor	burning plastic	2/26/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249364	Odor	sour rotten egg	2/27/2022	FA357	NONE	NONE	R	94801	U
249383	Odor	poop and sewage	3/1/2022	Y9601	Acapulco Rock & Soil	3251 Jacuzzi Street	R	94801	U
249977	Smoke		5/21/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
249404	Other	flaring	3/2/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249422	Other	flaring	3/4/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249423	Odor		3/5/2022	FA406	NONE	NONE	R	94801	U
249424	Other	flaring	3/4/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249434	Odor	garbage	3/7/2022	FA415	NONE	NONE	R	94801	U
249442	Odor	bad	3/8/2022	FA419	NONE	NONE	R	94801	U
249454	Odor	burning rubber	3/8/2022	FA425	NONE	NONE	R	94801	U
249480	Smoke	black	3/9/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249483	Odor	compost	3/14/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U

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249527	Odor	chemical	3/20/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
249529	Odor	industrial	3/20/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
249530	Odor	rotting sewage	3/20/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
249531	Odor	fermented/rotting	3/20/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
249532	Odor	toilet	3/21/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
249550	Other	flaring	3/22/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
249551	Other	flaring	3/22/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249560	Other	flaring	3/23/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249573	Smoke	smoke	2/25/2022	Z8237	SFD	754 Western Dr	PR	94801	U
249601	Odor	rotting compost	3/28/2022	FA494	NONE	NONE	R	94801	U
249604	Odor	feces	3/28/2022	FA497	NONE	NONE	R	94801	U
249607	Odor	rotting trash	3/28/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
249659	Odor	burned plastic	4/5/2022	FA541	None	None	R	94801	U
249665	Odor	odor and smoke	4/5/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249669	Odor	sour	4/6/2022	FA548	NONE	NONE	PR	94801	U
249671	Odor	dirty sock	4/6/2022	FA549	NONE	NONE	R	94801	C
249679	Odor	rotten egg	4/6/2022	FA553	NONE	NONE	PR	94801	U
249682	Odor	compost	4/6/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
249689	Odor	strong compost	4/7/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U

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249691	Odor	rotten garbage	4/7/2022	FA003	NONE	NONE	R	94801	U
249692	Odor	raw garbage	4/7/2022	FA003	NONE	NONE	R	94801	U
249718	Smoke		4/10/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249719	Odor	sulfur	4/10/2022	FA576	NONE	NONE	R	94801	U
249734	Odor	burning toilet paper	4/11/2022	FA588	NONE	NONE	R	94801	U
249736	Odor	garbage	4/11/2022	FA590	NONE	NONE	R	94801	U
249761	Other	flaring	4/14/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
249762	Smoke	flaring	4/14/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
249767	Other	flaring	4/14/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249770	Other	flaring	4/14/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
249771	Other	flaring	4/14/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
249772	Other	flaring	4/14/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249777	Other	flaring	4/14/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249792	Odor	sewage/landfill	4/19/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
249818	Dust	emissions	3/27/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249819	Odor	horrid	4/1/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
249855	Other	odor and flaring	5/2/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	C

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
249888	Other	flaring	5/5/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249889	Other	flaring	5/5/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249920	Dust	not watering	5/11/2022	FA688	Pallet Lot	25 18th St	R	94801	C
249980	Other	flaring	5/23/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
249941	Smoke		5/13/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
249942	Smoke		5/13/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
249975	Other	ground level fire	5/21/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
249976	Smoke	black	5/21/2022	FA711	NONE	NONE	R	94801	C
250095	Other	flaring/smoke	6/7/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
250129	Odor	gasoline	6/13/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
250180	Odor	dead animal	6/21/2022	V6345	NONE	NONE	PR	94801	U
250252	Odor	Venting	6/17/2022	FA867	COM	1170 Hensley St	R	94801	U
250265	Other	flaring	7/1/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
250273	Odor	tarry odor	7/5/2022	FA889	NONE	NONE	R	94801	U
250280	Odor	landfill/sulfur	7/6/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	C
250425	Odor	compost	8/1/2022	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	U
250534	Odor	gasoline	8/18/2022	V6345	NONE	NONE	PR	94801	U
250598	Odor	chemical/sunk	8/30/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
250660	Odor	sulphur	9/6/2022	FA003	NONE	NONE	R	94801	C

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250662	Odor	strong	9/5/2022	FB107	NONE	NONE	R	94801	U
250665	Other	flaring	9/5/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	C
250830	Odor	chemical	9/19/2022	FB172	NONE	NONE	R	94801	U
251433	Other	flaring	10/26/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
250844	Other	flaring	9/20/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
250884	Odor	oil	9/24/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
251302	Odor	chemical	10/18/2022	FB258	NONE	NONE	R	94801	U
251358	Odor	burned charcoal	10/19/2022	FB263	NONE	NONE	R	94801	U
251380	Odor	fishy	10/19/2022	FB271	NONE	NONE	R	94801	U
251381	Odor	dead fish	10/19/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
251508	Odor	sewage	11/15/2022	FB341	NONE	NONE	R	94801	U
251535	Odor	burnt oil	11/18/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
251538	Odor	diesel	11/20/2022	FB354	NONE	NONE	R	94801	U
251552	Odor	chemical	11/21/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
251686	Odor	natural gas	12/15/2022	FA003	NONE	NONE	R	94801	U
251694	Odor	rotten eggs	12/15/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
251700	Odor	gas	12/16/2022	FB429	NONE	NONE	R	94801	U
251707	Odor	gas	12/16/2022	FB431	NONE	NONE	R	94801	U
251708	Odor	chemical	12/16/2022	A0010	Chevron Products Company	841 Chevron Way	R	94801	U
251733	Odor	burning plastic	12/22/2022	FA033	NONE	NONE	PR	94801	U
251740	Odor	gas/burnt chemicals	12/24/2022	V5904	NONE	NONE	PR	94801	U

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239357	Odor	gasoline, chemical	3/10/2019	Z5914	NONE	NONE	R	94802	U
241916	Odor	sewage and oil mix	11/5/2019	N3281	NONE	NONE	R	94802	C
243518	Dust	unpaved lot	6/16/2020	Z7615	Hello Fresh	2041 Factory St	R	94802	U
248414	Fire Out	Backyard burning	11/17/2021	Z9926	SFD	5050 Buckboard Way	ES	94803	U
245397	Asbestos	fraud & removal	1/11/2021	Z8488	COM	435 Valley View Rd	ES	94803	U
247967	Fire In	burning garbage	9/29/2021	Z9720	SFD	312 Ponderosa Ct	ES	94803	U
240233	Dust	not watering	6/11/2019	Z6284	Construction	4577 Appian Way	ES	94803	U
246049	Fire Out		3/9/2021	Z8661	SFD	772 Alhambra Rd	ES	94803	U
250153	Odor	chemical type smell	6/16/2022	FA811	Up & Under 2nd Pitch	5216 Sobrante Ave	ES	94803	U
243953	Odor	sewage	8/10/2020	Z7805	NONE	NONE	ES	94803	U
241312	Odor		9/23/2019	A4556	East Bay Municipal Utility District	5500 Amend Road	ES	94803	U
240218	Odor	burning plastic	6/8/2019	Z6279	NONE	NONE	ES	94803	U
240627	Dust	CONSTRUCTION	7/26/2019	Z6460	SFD	5265 AMEND RD	ES	94803	U
241088	Fire Out	burning garbage	9/2/2019	Z6653	SFD	3975 La Crescenta Rd	ES	94803	U
243815	Odor	Sewage	7/29/2020	Z7749	NONE	Hilltop Dr	ES	94803	U
245071	Odor	chemical	12/3/2020	Z8287	NONE	NONE	ES	94803	U
245860	Odor	Sewage	2/23/2021	Z8683	SFD	491 Sunny Ln	ES	94803	U
246847	Odor	shit	6/22/2021	Z9268	SFD	4414 Utah Dr	ES	94803	U

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247556	Dust	dust	8/19/2021	Y1351	MFD	3535 El Portal Dr	ES	94803	C
248176	Odor	gas	10/25/2021	Z0361	NONE	NONE	ES	94803	U
248458	Fire In	burning trash	11/22/2021	Z9720	SFD	312 Ponderosa Ct	ES	94803	U
249076	Fire Out	smoke	1/31/2022	FA234	NONE	Clark road and Elmwood Rd	ES	94803	U
249161	Odor	burnt plastic	2/8/2022	FA276	NONE	NONE	ES	94803	U
250199	Smoke	cooking	6/23/2022	FA811	Up & Under 2nd Pitch	5216 Sobrante Ave	ES	94803	C
250501	Dust	construction	8/12/2022	FB031	NONE	4935 San Pablo Dam Rd	ES	94803	U
250539	Odor	chemical	8/20/2022	FB047	SFD	4418 Meadowbrook Dr	ES	94803	U
250945	Odor	foul	10/3/2022	FB202	NONE	NONE	ES	94803	U
249458	Odor	burning waste	3/7/2022	B5465	Kaiser Permanente - Regional Lab Annex	914 Marina Way South	R	94804	U
249413	Odor	extra sour	3/3/2022	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241763	Odor	Burning Tires	10/23/2019	Z6879	DC Tires	629 23rd St	R	94804	U
244406	Odor	sewage	10/1/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244412	Odor	Sewage	10/2/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U

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249697	Odor	paint thinner & pee	4/7/2022	FA560	None	26th St and Roosevelt Ave	R	94804	C
243637	Odor	foul	7/5/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244398	Odor	Sewage	10/1/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
247859	Odor	Smog	9/17/2021	Z9676	NONE	Marina Bay Parkway and Regatta Blvd	R	94804	U
243146	Odor	odorous fumes	4/5/2020	A0093	Safeway Stores Inc, Bakery Plant	905 So 34th Street	R	94804	U
243778	Odor	burning	7/24/2020	B5465	Kaiser Permanente - Regional Lab Annex	914 Marina Way South	R	94804	U
243147	Odor	wastewater	4/1/2020	A0093	Safeway Stores Inc, Bakery Plant	905 So 34th Street	R	94804	U
239878	Odor	sewage	4/24/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
243145	Odor	waste water	4/20/2020	A0093	Safeway Stores Inc, Bakery Plant	905 So 34th Street	R	94804	U
242076	Gas Station	pump #8, 2, 6	11/21/2019	C0146	Costco Wholesale	4801 Central Avenue	R	94804	U
243776	Smoke	BLACK SMOKE	7/24/2020	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	U
245108	Odor	human poop	12/4/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
243471	Odor	dog poop	6/10/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U

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246697	Odor	paint	6/7/2021	Z9195	COM	1126 Cutting Blvd	R	94804	U
251453	Smoke	diesel	10/31/2022	FB308	Hon Henry Jackman	1414 Harbour Way S	R	94804	U
250411	Odor	portable generator	7/28/2022	P3052	Pacific East Mall	3288 Pierce Street	R	94804	U
248395	Odor	fertilizer/amonia	11/15/2021	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
251696	Odor	gasoline	12/15/2022	FA108	NONE	NONE	R	94804	U
244298	Odor	Metal	9/18/2020	W7218	NONE	NONE	R	94804	U
241927	Odor	foul	11/5/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241935	Odor	sewer	11/5/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
241897	Odor	Sewer	11/4/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
248995	Odor	manure	1/26/2022	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
238855	Odor	pungent, burnt tire	1/15/2019	Z5682	NONE	S 47th St & Montgomery Ave	R	94804	U
241918	Odor	putrid sewage	11/5/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
248204	Odor	waste/gas	10/27/2021	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U

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241821	Odor	sweet sewage	10/30/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
245154	Odor		12/10/2020	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
244370	Odor	sulfur & sewage	9/28/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244633	Odor	foul	10/22/2020	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
244656	Odor	noxious odors	10/28/2020	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
245235	Odor		12/20/2020	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
244580	Odor		10/19/2020	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
244819	Odor	Toxic	11/5/2020	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
241925	Odor	hydrogen sulfide	11/5/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
245928	Dust		2/26/2021	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	U
243523	Dust	dust piles	6/5/2020	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	U
244137	Dust	high winds	8/16/2020	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	U
244368	Odor		9/28/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244352	Odor	feces/skunk	9/27/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C

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244520	Odor	TOXIC COOKING	10/16/2020	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
245964	Odor	Cooking / Auto	3/2/2021	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
242102	Odor	sewage	11/23/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241839	Odor	Sewage	11/1/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
239950	Odor	burning	5/2/2019	E3822	Sims Metal Management	600 So 4th Street	R	94804	U
249709	Odor	strong sewage	4/9/2022	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
240452	Odor		7/7/2019	E3822	Sims Metal Management	600 So 4th Street	R	94804	U
244355	Odor	terrible	9/27/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
250679	Odor	sewage	9/6/2022	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
243841	Odor	sewage	8/1/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
243840	Odor	rancid cooking oil	8/1/2020	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
243874	Odor	sewage	8/5/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
241750	Odor	sulfur	10/23/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
242027	Odor	sewage	11/16/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
247906	Odor		9/22/2021	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
251587	Odor		11/25/2022	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241783	Odor	rancid cooking oil	10/26/2019	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
245796	Odor	sewage	2/14/2021	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241852	Odor	sewage	11/1/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
245125	Odor	sewage	12/6/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
239939	Odor	cooking oil	5/1/2019	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
241778	Odor	sewage	10/25/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
243875	Odor	burnt cooking oil	8/5/2020	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
244502	Odor	sewage	10/15/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
241902	Odor	sewage	11/4/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241075	Odor	sewage	9/4/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
242498	Odor	rancid oil	2/1/2020	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
240959	Odor	sewer	8/25/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
239987	Odor	Sweage	5/7/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241514	Odor	rancid cooking oil	10/5/2019	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
241932	Odor	sewage	11/5/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
242153	Odor	rancid cooking oil	12/2/2019	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
243786	Odor	sewage	7/26/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241246	Odor	rancid cooking oil	9/19/2019	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
245517	Odor		1/17/2021	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
239838	Odor		4/22/2019	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
241784	Odor	sewage	10/26/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
242635	Odor		2/17/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241045	Odor		9/1/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244227	Odor	rancid cooking oil	9/5/2020	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
239802	Odor	rancid cooking oil	4/21/2019	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
249944	Odor	cooking oil	5/15/2022	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
241867	Odor	sewage	11/2/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
241749	Odor		10/23/2019	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
240756	Odor	sewage	8/11/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244351	Odor	hydrogen sulphide	9/27/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
243895	Odor	sewage	8/6/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241042	Odor		8/31/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241826	Odor	Oil	10/31/2019	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	C
249925	Odor	rancid cooking oil	5/11/2022	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U

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245851	Odor	Cooking oil	2/22/2021	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
238843	Odor		1/13/2019	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
243781	Odor	sewage	7/25/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
246650	Odor	sewage	6/1/2021	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
246169	Odor	sewage	3/30/2021	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
245148	Odor	rancid cooking oil	12/9/2020	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
242105	Odor	sewage	11/23/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
243610	Odor	sewer	6/29/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244705	Odor	rancid cooking oil	11/1/2020	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
239752	Odor	burnt cooking oil	4/18/2019	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
243896	Odor	Rancid Cooking Oil	8/6/2020	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
241822	Odor	sewage	10/30/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241345	Odor	racind cooking oil	9/24/2019	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U

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244291	Odor	rancid cooking oil	9/17/2020	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
244292	Odor	sweet/sickly	9/17/2020	Z7947	The Lumber Baron	1097 Harbour Way	R	94804	C
249812	Odor	fecal matter	4/2/2022	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
245844	Odor	cooking oil	2/21/2021	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
242204	Odor	rancid cooking oil	12/13/2019	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
249180	Odor	sewage	2/9/2022	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
247331	Odor	sewage	7/31/2021	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
238920	Odor	chemical	1/23/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241663	Odor	sewage	10/17/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
247735	Odor	sewage	9/8/2021	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
238804	Odor	burnt cooking oil	1/8/2019	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
248104	Odor	rancid oil	10/15/2021	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
247664	Odor	paint and oil	8/28/2021	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U

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241678	Odor	sewage	10/20/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244381	Odor	sewage	9/29/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
240153	Odor	rancid cooking oil	5/31/2019	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
239398	Odor	burnt cooking oil	3/13/2019	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
240462	Odor	sulfur	7/8/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
240024	Odor		5/11/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
239970	Odor	sewage	5/4/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
239991	Odor	rancid cooking oil	5/7/2019	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
239917	Odor		4/27/2019	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
242391	Odor	acidic	1/17/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
242415	Odor	burned trash	1/22/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244535	Odor	sewer	10/17/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U

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244501	Odor		10/15/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
244390	Odor	sewage	9/30/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244366	Odor	sewage	9/28/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241890	Odor	livestock pen	11/4/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244354	Odor	waste water treatment	9/27/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
238833	Odor	raw sewage	1/10/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241854	Odor	rotten egg	11/1/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
242049	Odor	strong oil	11/18/2019	Z6994	NONE	near Harbour Way S	R	94804	U
239264	Odor	oily	2/28/2019	Z5618	NONE	1200 Harbour Way South	R	94804	U
238936	Odor		1/24/2019	W7218	NONE	NONE	R	94804	U
241772	Odor	oily	10/25/2019	Z6847	NONE	NONE	R	94804	U
243232	Odor	rancid oily smell	5/6/2020	X8010	NONE	NONE	R	94804	U
238908	Odor	oily	1/23/2019	W7218	NONE	NONE	R	94804	U
239402	Odor	oily	3/13/2019	P8877	California Oils Corp	1145 Harbour Way South	R	94804	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
244478	Odor	sulfur/sour	10/12/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
242162	Odor	really bad	12/3/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
242107	Odor	strong	11/24/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
245035	Other		12/1/2020	Z8236	SFD	754 Western Ave	R	94804	U
244983	Fire In	burning	11/23/2020	Z8236	SFD	754 Western Ave	R	94804	U
241880	Odor	sewage	11/3/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
239142	Odor	rancid cooking oil	2/13/2019	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
241688	Odor	sweage	10/21/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241370	Odor	sewage	9/25/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
240641	Odor	sewage	7/27/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
240375	Odor	Rancid Cooking Oil	6/26/2019	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
240114	Odor	Rancid cooking oil	5/28/2019	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U

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240303	Odor	sewage	6/17/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
242048	Odor	methane gas	11/18/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
242100	Odor		11/22/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244444	Odor	outhouse	10/5/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
238816	Odor	old poop	1/10/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
238820	Odor	waste	1/10/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
238821	Odor	rotten compost/feces	1/10/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
238954	Odor	unpleasant	1/25/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
238988	Odor	oily	1/28/2019	W7218	NONE	NONE	R	94804	U
239214	Odor	gas	2/23/2019	Z5826	NONE	NONE	R	94804	U
239216	Odor	gas	2/23/2019	Z5827	NONE	NONE	R	94804	U
239323	Odor	rotten egg	3/7/2019	Z5904	NONE	NONE	R	94804	C
239332	Odor	plastic, chemical	3/7/2019	Z5909	NONE	NONE	R	94804	U
239343	Odor	sulfur	3/7/2019	Z5910	NONE	NONE	R	94804	C
239350	Odor	toxic	3/7/2019	Z5912	NONE	NONE	R	94804	U

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245015	Odor	burning metal	11/28/2020	E3822	Sims Metal Management	600 So 4th Street	R	94804	U
239827	Odor	spray paint	4/22/2019	Z6073	SFD	1131 Bayview Ave	R	94804	U
239951	Odor	toxic	5/2/2019	E3822	Sims Metal Management	600 So 4th Street	R	94804	U
239960	Odor	Feces	5/3/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
239981	Odor	chemical	5/6/2019	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
240019	Odor	aerosol	5/10/2019	W7218	NONE	NONE	R	94804	U
240022	Odor	chemical	5/10/2019	Z6174	Construction	912 Harbour Way	R	94804	U
240232	Odor	poop	6/10/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
240300	Asbestos	demolition	6/17/2019	Z6320	SFD	3301 Barrett Ave	R	94804	U
240311	Odor	Burning Plastic	6/18/2019	W7218	NONE	NONE	R	94804	U
240500	Smoke	white	7/11/2019	A0061	Phillips 66 Company	1300 Canal Boulevard	R	94804	U
240512	Smoke		7/13/2019	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	U
240553	Dust	dust	7/18/2019	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	C
240596	Odor	exhaust	7/23/2019	Z6449	NONE	San Jose & Santa Clara St	R	94804	U
240617	Odor	foul	7/24/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
240757	Odor		8/11/2019	Z6525	Point Isabel Park	2701 Isabel St	R	94804	U

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243900	Dust	construction	8/6/2020	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	U
246883	Dust	dust	6/29/2021	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	C
247601	Dust	uncontained dust	8/26/2021	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	U
240827	Dust		8/15/2019	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	U
240945	Odor	cat poop	8/23/2019	Z6601	SFD	337 South 25th St	R	94804	U
244403	Odor	Burning Poop	10/1/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241700	Smoke	smoky outside	10/21/2019	Z6847	NONE	NONE	R	94804	U
241751	Odor	sewage	10/23/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241840	Odor	sewage	11/1/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241848	Odor	paint/solvent	11/1/2019	Z6918	NONE	26 20TH ST BLDG 18	R	94804	U
241853	Odor	rotten eggs	11/1/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241855	Odor	hydrogen sulfide	11/1/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241859	Odor	toxic/foul	11/2/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U

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241860	Odor		11/2/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
241863	Odor		11/2/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
241864	Odor		11/2/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241865	Odor	sewage	11/2/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
241869	Odor	rotten eggs	11/2/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241870	Odor	waste water	11/2/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241871	Odor	sewage/natural gas	11/2/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241872	Odor	rotting	11/2/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241876	Odor	chemical	11/4/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
241879	Odor	sulfer	11/2/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241881	Odor		11/3/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U

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241882	Odor		11/3/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
241883	Odor	garbage/r otten eggs	11/3/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241885	Odor		11/3/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
242034	Odor	sewage	11/17/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
250652	Odor	sewage	9/4/2022	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
250631	Odor		9/1/2022	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244311	Odor	rancid cooking oil	9/20/2020	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
241886	Odor		11/3/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241887	Odor	sewer	11/3/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244158	Odor	sewage	8/26/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241919	Odor	sewage	11/5/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C

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241921	Odor	SEWAGE	11/5/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
241922	Odor	poop	11/5/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
241923	Odor	sewage	11/5/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
241924	Odor	poop	11/5/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
241926	Odor		11/5/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
242055	Odor	oily	11/18/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
242058	Odor		11/18/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
242073	Odor	HEAVY OIL/PETROLEUM	11/21/2019	A0061	Phillips 66 Company	1300 Canal Boulevard	R	94804	U
242103	Odor	bad	11/23/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
242109	Odor	sewage	11/23/2019	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
242138	Odor	burning plastic	11/22/2019	Z7044	NONE	NONE	R	94804	U
242246	Odor	compost	12/20/2019	Z7101	NONE	NONE	R	94804	U

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243469	Odor	sewage	6/9/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
242307	Odor	sewage	1/3/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
247955	Odor	Gassy	9/28/2021	Z9711	NONE	Seaport Ave & S 49th St	R	94804	U
242696	Odor	smoke/plastic	2/20/2020	W7218	NONE	NONE	R	94804	U
242697	Odor	smoke	2/20/2020	W7218	NONE	NONE	R	94804	U
242787	Odor	acrid	2/27/2020	Z7297	NONE	South 1st St & Florida Ave	R	94804	U
242919	Odor	heavy oil	3/10/2020	Z5618	NONE	1200 Harbour Way South	R	94804	U
243033	Smoke	burn pit	4/1/2020	Z7407	SFD	2836 Clinton Ave	R	94804	U
243233	Odor	spraying chemicals	5/6/2020	Z7485	Salesian College Preparatory	2851 Salesian Ave	R	94804	U
243269	Smoke	constant harmful	5/11/2020	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
243272	Odor		5/12/2020	Z7506	Aziyo Biologics Inc	880 harbour Way South Ste 100	R	94804	U
243411	Odor	sewage	6/3/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
243452	Odor	toxic	6/7/2020	Z7589	NONE	NONE	R	94804	U
243689	Dust	gypsum dust	7/13/2020	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	C
243768	Odor	FOUL SMOKE	7/24/2020	B5465	Kaiser Permanente - Regional Lab Annex	914 Marina Way South	R	94804	C

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
243774	Odor	burning biohazar	7/24/2020	B5465	Kaiser Permanente - Regional Lab Annex	914 Marina Way South	R	94804	U
243769	Odor	Acrid	7/24/2020	B5465	Kaiser Permanente - Regional Lab Annex	914 Marina Way South	R	94804	U
243773	Odor	BURNING	7/24/2020	B5465	Kaiser Permanente - Regional Lab Annex	914 Marina Way South	R	94804	U
244386	Odor		9/30/2020	B5465	Kaiser Permanente - Regional Lab Annex	914 Marina Way South	R	94804	U
243775	Odor	burning material	7/24/2020	B5465	Kaiser Permanente - Regional Lab Annex	914 Marina Way South	R	94804	U
243777	Smoke	blue	7/24/2020	B5465	Kaiser Permanente - Regional Lab Annex	914 Marina Way South	R	94804	U
243842	Odor		8/1/2020	B5465	Kaiser Permanente - Regional Lab Annex	914 Marina Way South	R	94804	U
244105	Odor	incinerator	8/18/2020	B5465	Kaiser Permanente - Regional Lab Annex	914 Marina Way South	R	94804	U
243948	Odor	biohazard waste	8/10/2020	B5465	Kaiser Permanente - Regional Lab Annex	914 Marina Way South	R	94804	U
244005	Odor	Rotten Eggs	8/13/2020	B5465	Kaiser Permanente - Regional Lab Annex	914 Marina Way South	R	94804	U
243951	Odor	bio hazard	8/10/2020	B5465	Kaiser Permanente - Regional Lab Annex	914 Marina Way South	R	94804	U
244099	Dust	black clouds	8/18/2020	Z0199	NONE	NONE	R	94804	U
243964	Smoke	smoke stack	8/11/2020	Z0199	NONE	NONE	R	94804	U
250426	Smoke	smoke	8/1/2022	FA986	Freighter 'African Freedom'	Port of Richmond	R	94804	U
244348	Odor	rotten eggs	9/27/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
244380	Odor	sewer	9/29/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244349	Odor	sewage	9/27/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244353	Odor	stinky burning	9/27/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
244357	Odor	noxious	9/27/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
244367	Odor	strong sewage	9/28/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244473	Odor	h2s	10/11/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244429	Odor		10/4/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244427	Odor	hydrogen sulfide	10/3/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244383	Odor	human waste	9/30/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244395	Odor	strong	10/1/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244397	Odor	Sewage	10/1/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U

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244417	Odor	Raw Sewage	10/2/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244423	Odor	sewage	9/28/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244433	Odor	sewage	10/5/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244654	Odor	Rancid Cooking Oil	10/27/2020	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
244472	Odor	rancid cooking oil	10/11/2020	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
244906	Odor	rancid cooking oil	11/10/2020	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
244490	Odor	sewage	10/13/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244515	Odor	sulfur	10/15/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244521	Odor	feces	10/16/2020	Z6525	Point Isabel Park	2701 Isabel St	R	94804	U
244528	Odor	Hydrogen Sulfide	10/16/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
246788	Odor	Waste Water	6/17/2021	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244749	Odor	hydrogen sulfide	11/2/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U

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244698	Odor	H2S	10/30/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244581	Odor	h2s & waterwaste	10/19/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
244543	Odor	h2s	10/17/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244554	Odor	sewage	10/18/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244587	Odor	sewage	10/20/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
244558	Odor	sewage	10/18/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244565	Smoke		10/18/2020	B0649	IMTT Richmond CA	100 Cutting Boulevard	R	94804	U
244575	Dust	huge dust cloud	10/19/2020	Z8200	Construction Site	Richmond Parkway and Parr Blvd	R	94804	U
244576	Odor	smelly	10/19/2020	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
244594	Odor	poop	10/20/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
247712	Odor	Sewage	9/5/2021	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U

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244741	Odor	porta potty	11/2/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
244803	Odor	crap	11/4/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
244978	Fire In	burning	11/23/2020	Z8233	SFD	112 Waterview Dr	R	94804	U
245016	Odor	burning metal/plastic	11/28/2020	Z8247	NONE	NONE	R	94804	U
245144	Dust		12/8/2020	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	U
245304	Odor	sour vegetal	12/27/2020	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
245729	Odor	strong	2/6/2021	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
245826	Odor	gas	2/18/2021	Z0199	NONE	NONE	R	94804	U
245957	Fire Out	Flames	3/1/2021	Z8724	SFD	1901 Florida Ave	R	94804	U
246005	Smoke	diesel generator	3/2/2021	Z8753	NONE	350 Carlson Blvd #C	R	94804	U
246182	Odor	Smog	4/1/2021	Z8857	Ford Point	1414 Harbour Way South	R	94804	U
250431	Odor	rotten egg/sulfur	8/2/2022	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	U
246560	Dust	uncontained	5/24/2021	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	U
246293	Dust	Huge piles	4/15/2021	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	U

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246285	Dust	dust	4/14/2021	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	U
246260	Dust	dust	4/12/2021	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	C
247118	Odor	diesel	7/15/2021	Z9409	SFD	2422 San Luis St	R	94804	U
247151	Other	train idling	7/17/2021	Z9421	Train	NONE	R	94804	U
247364	Dust	gypsum	8/5/2021	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	U
247366	Dust	Semi trailers	8/5/2021	Z9511	All Terrain Inc	660 S 13th St	R	94804	U
247587	Other	plastic burning	8/25/2021	Z9581	SFD	2735 Ohio Ave	R	94804	U
247780	Odor	Sewage	9/10/2021	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	C
247848	Odor	sour compost	9/15/2021	Z9669	None	None	R	94804	C
247953	Dust		9/28/2021	Z9711	NONE	Seaport Ave & S 49th St	R	94804	C
248063	Dust	conveyors	10/12/2021	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	C
249266	Odor	putrid sour	2/16/2022	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
248174	Odor	gas	10/25/2021	Z9820	None	None	R	94804	U
248181	Odor	diesel gas	10/25/2021	Z9821	NONE	NONE	R	94804	U
248210	Odor	natural gas	10/28/2021	W7218	NONE	NONE	R	94804	U
248295	Odor		11/5/2021	Z9871	NONE	NONE	R	94804	U
248297	Odor		11/5/2021	Z9872	NONE	NONE	R	94804	U
248307	Odor		11/6/2021	Z9875	NONE	NONE	R	94804	U
248370	Odor	tire fire	11/13/2021	Z9900	NONE	NONE	R	94804	U
248389	Odor	chemical	11/15/2021	Z9906	NONE	NONE	R	94804	U
248714	Odor	gasoline	12/25/2020	FA108	NONE	NONE	R	94804	U

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249059	Odor	toilet ice	1/30/2022	FA228	NONE	NONE	R	94804	U
249158	Odor	plastic burning	2/8/2022	FA108	NONE	NONE	R	94804	C
249195	Odor	toxic	2/10/2022	A0935	Levin Richmond Terminal Corporation	402 Wright Avenue	R	94804	U
249249	Dust		2/11/2022	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	C
249382	Odor	vomit and feces	2/27/2022	B5465	Kaiser Permanente - Regional Lab Annex	914 Marina Way South	R	94804	U
249412	Odor	rotten	2/26/2022	B5465	Kaiser Permanente - Regional Lab Annex	914 Marina Way South	R	94804	U
249436	Odor		3/7/2022	FA416	NONE	NONE	R	94804	U
249438	Dust	sheet rock	3/7/2022	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	C
249451	Odor		3/8/2022	B5465	Kaiser Permanente - Regional Lab Annex	914 Marina Way South	R	94804	U
249675	Odor	sewage	4/6/2022	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
249475	Odor	sewage	1/12/2022	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
249506	Dust	gypsum	3/17/2022	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	U
249597	Odor	rotten	3/28/2022	FA491	NONE	NONE	R	94804	U
249598	Odor	rotten trash	3/28/2022	FA492	NONE	NONE	R	94804	U
249600	Odor	dump/sewage	3/28/2022	FA493	NONE	NONE	R	94804	U
249602	Odor	chemical	3/28/2022	FA495	NONE	NONE	R	94804	U
249603	Odor	gross	3/28/2022	FA496	NONE	NONE	R	94804	U
249606	Odor	rotten eggs	3/28/2022	FA499	NONE	NONE	R	94804	U
249731	Odor	feces	4/10/2022	FA587	NONE	NONE	R	94804	U

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249735	Odor	diarhea	4/11/2022	FA589	NONE	NONE	R	94804	U
249836	Odor	chemical	4/28/2022	FA108	NONE	NONE	R	94804	C
249892	Odor	poop	5/6/2022	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
249880	Odor	poop	5/5/2022	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	U
250109	Odor	cooking	6/10/2022	FA777	Richmond Farmers Market	Barrett Ave & 25th St	R	94804	U
250174	Odor	dead animal	6/21/2022	FA825	NONE	Sandpoint Dr	R	94804	U
250342	Smoke	black	7/15/2022	FA932	Argent Daisy	1413 Harbour Way S	R	94804	C
250381	Odor	fishy	7/21/2022	FA952	NONE	NONE	R	94804	U
250394	Asbestos	improper removal	7/26/2022	FA956	MFD	443 S 22nd St	R	94804	U
250421	Asbestos	improper removal	7/30/2022	FA982	SFD	444 S 22nd St	R	94804	U
250445	Odor	dead fumes	8/4/2022	FA108	NONE	NONE	R	94804	C
250473	Odor	sewage	8/8/2022	FB010	NONE	16th St and Florida St	R	94804	U
250520	Odor	garbage and urine	8/16/2022	FB040	SFD	601 25th St	R	94804	C
250525	Dust	gritty black dust	8/14/2022	FB042	None	None	R	94804	U
250567	Odor	pungent	8/26/2022	FB062	United Granite and Cabinets	5225 Central Ave	R	94804	U
250638	Odor	toxic	9/2/2022	FA108	NONE	NONE	R	94804	U
250648	Odor	gas	9/6/2022	Z9906	NONE	NONE	R	94804	U
250657	Odor	burning trash	9/4/2022	FB106	NONE	NONE	R	94804	U

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251442	Odor	sewage	10/27/2022	FB302	NONE	NONE	R	94804	U
251444	Odor	fishy/chemical	10/28/2022	A5462	Bio-Rad Laboratories	3110 Regatta Blvd	R	94804	C
251455	Odor	bad fish	10/31/2022	A5462	Bio-Rad Laboratories	3110 Regatta Blvd	R	94804	C
251668	Odor	burnt plastic	12/13/2022	FB417	Richmond Wholesale	2920 Regatta Blvd	R	94804	U
251697	Odor	gas	12/15/2022	FB426	NONE	NONE	R	94804	U
251704	Odor	gas	12/15/2022	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	U
251712	Odor	gas	12/17/2022	B5465	Kaiser Permanente - Regional Lab Annex	914 Marina Way South	R	94804	U
249726	Odor	gas	4/10/2022	FA583	NONE	NONE	R	94805	U
250160	Idling Commercial Vehicle	idling diesel truck	6/20/2022	FA817	NONE	819 Lassen St	R	94805	U
244192	Fire Out	front yard	8/31/2020	Z7888	SFD	5828 Ralston Ave	R	94805	U
239624	Odor	chemical	4/4/2019	Z6008	NONE	Kensington Ave	R	94805	U
239324	Odor	eggy	3/7/2019	Z5905	NONE	NONE	R	94805	C
239325	Odor	sulfur	3/7/2019	Z5906	NONE	NONE	R	94805	C
239326	Odor		3/7/2019	Z5907	NONE	NONE	R	94805	C
239327	Odor	strong sulfur	3/7/2019	Z5908	NONE	NONE	R	94805	C
246029	Odor	toxic chemical	3/8/2021	Z8765	None	None	R	94805	U
239345	Odor	sulfur	3/7/2019	R1046	NONE	NONE	R	94805	U
239618	Odor	Propane from BBQ	4/4/2019	Z6004	Familias Unidas	205 39th Street	R	94805	U
239761	Asbestos		4/18/2019	Z6048	SFD	3301 Barrett Ave	R	94805	U

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240299	Asbestos	improper removal	6/17/2019	Z6048	SFD	3301 Barrett Ave	R	94805	C
240338	Asbestos	improper removal	6/21/2019	Z6048	SFD	3301 Barrett Ave	R	94805	U
240445	Dust	construction	7/5/2019	Z6261	Wilson Elementary School	629 42nd St	R	94805	U
241032	Dust	rebuilding school	8/30/2019	Z6261	Wilson Elementary School	629 42nd St	R	94805	U
243333	Odor	burnt chemical	5/24/2020	Z7544	NONE	NONE	R	94805	U
243714	Dust	construction/brick	7/17/2020	Z7710	SFD	5917 Arlington Blvd	R	94805	U
246633	Odor		5/27/2021	Z7730	NONE	35th and Esmond	R	94805	U
243753	Odor	burned rubber	7/23/2020	Z7730	NONE	35th and Esmond	R	94805	U
248054	Odor	burnt plastic	10/10/2021	Z9756	NONE	NONE	R	94805	U
243806	Odor	burnt rubber	7/28/2020	R1046	NONE	NONE	R	94805	U
244346	Odor	garbage	9/26/2020	Z7970	NONE	NONE	R	94805	U
244364	Odor	chemical	9/28/2020	Z7981	None	Amador St and Clinton Ave	R	94805	U
249720	Odor	sulfur	4/10/2022	FA577	NONE	NONE	R	94805	C
245296	Odor	sulfur/garbage	12/23/2020	Z8420	NONE	NONE	R	94805	U
245607	Odor	chemical	1/25/2021	Z8540	None	None	R	94805	U
248048	Odor	metallic	10/8/2021	Z9753	None	None	R	94805	U
248301	Odor	sulfur	11/5/2021	Z9874	NONE	NONE	R	94805	U
248400	Odor	gassy	11/15/2021	Z9909	NONE	NONE	R	94805	U
249845	Odor	strong	4/29/2022	FA646	NONE	NONE	R	94805	U
249810	Odor		4/22/2022	FA628	NONE	NONE	R	94805	U

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249594	Odor	sickly sweet	3/28/2022	FA488	None	None	R	94805	U
249596	Odor	rotten milk	3/28/2022	FA490	NONE	NONE	R	94805	U
249712	Odor	dead animal	4/9/2022	FA572	NONE	NONE	R	94805	U
249721	Odor	sulfur	4/10/2022	FA578	NONE	NONE	R	94805	U
249722	Odor	sulfer	4/10/2022	FA579	NONE	NONE	R	94805	U
249723	Odor	sulfur	4/10/2022	FA580	NONE	NONE	R	94805	U
249724	Odor	sulfur	4/10/2022	FA581	NONE	NONE	R	94805	U
249725	Odor	none	4/10/2022	FA582	NONE	NONE	R	94805	U
249733	Odor	sickening sweet	4/11/2022	FA488	None	None	R	94805	U
244169	Gas Station	pump 11	8/27/2020	Z7884	Chevron	3411 Blume Dr	R	94806	U
246879	Odor	paint	6/2/2021	Z9293	Hanlees Nissan	3277 Auto Plaza	R	94806	U
248166	Odor	refinery odor	10/24/2021	Z9816	None	None	SP	94806	U
240877	Asbestos	improper removal	8/19/2019	Z6569	Spectrum Center School	16330 San Pablo Ave	SP	94806	U
247030	Odor	oily	7/6/2021	Z9351	SFD	Greenwood Dr	SP	94806	U
250274	Odor	rotten eggs	7/6/2022	FA890	NONE	NONE	R	94806	U
245177	Odor	foul	12/15/2020	R0829	NONE	NONE	R	94806	U
242333	Odor	gassy	1/7/2020	Q5696	NONE	NONE	SP	94806	U
246248	Odor	compost/garbage	4/9/2021	Z8899	NONE	NONE	SP	94806	U
245788	Odor	garbage	2/12/2021	R0829	NONE	NONE	R	94806	U
248066	Odor	greenwaste	10/12/2021	Z9764	NONE	NONE	R	94806	U
239221	Smoke	charcoal bbq	2/24/2019	Z5828	NONE	NONE	R	94806	U
239254	Odor	chlorine	2/26/2019	Z5857	NONE	NONE	R	94806	U

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239333	Odor	sulfur	3/7/2019	Q5696	NONE	NONE	SP	94806	C
239816	Odor	pigeon poop	4/22/2019	Z6071	San Marcos Apartment Complex	2601 Hilltop Dr	R	94806	U
239893	Dust	heavy fog	4/25/2019	Q5696	NONE	NONE	SP	94806	U
241146	Asbestos	improper removal	9/11/2019	Z6569	Spectrum Center School	16330 San Pablo Ave	SP	94806	U
240934	Asbestos	improper removal	8/22/2019	Z6569	Spectrum Center School	16330 San Pablo Ave	SP	94806	U
240940	Smoke	burning garbage	8/22/2019	Z6600	SFD	2570 Kenney Dr	SP	94806	U
241547	Smoke	cooking meats	10/8/2019	W4862	Las Montanas Market	13901 San Pablo Ave	SP	94806	C
241566	Odor	spraypaint	10/9/2019	Z6810	SFD	1939 Costa Ave	R	94806	U
242358	Odor	acetone	1/12/2020	Z7130	NONE	NONE	R	94806	U
242388	Odor	rotten egg	1/16/2020	Q5696	NONE	NONE	SP	94806	U
244159	Odor	garbage	8/26/2020	Z7870	NONE	NONE	R	94806	U
244193	Dust	tree dumping	8/31/2020	Z7889	Fairmead Park	Jo Ann Dr	R	94806	U
244252	Odor	rotten eggs	9/8/2020	Q5696	NONE	NONE	SP	94806	U
245173	Odor	gas	12/14/2020	Q5696	NONE	NONE	SP	94806	U
245602	Odor	vanilla	1/23/2021	Z8536	Point Isabel	2701 Isabel St	R	94806	U
245608	Odor	rotten/dec omposing	1/25/2021	Z8541	None	None	SP	94806	U
247150	Gas Station	spraying	7/17/2021	Z9420	Chevron Station	3411 Blume Dr	R	94806	U
248053	Odor	chlorine	10/10/2021	Z9755	NONE	NONE	R	94806	U
248149	Odor	gas	10/24/2021	Z9815	NONE	NONE	SP	94806	U
248170	Smoke	BBQ smoke	10/25/2021	P7336	Food Barn	1835 Rumrill Blvd	SP	94806	U
248221	Odor	chemically	10/29/2021	R0829	NONE	NONE	R	94806	U
248470	Odor	Petroleum	11/23/2021	Z8899	NONE	NONE	SP	94806	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
249469	Odor	chemical	3/9/2022	Z8899	NONE	NONE	SP	94806	U
249507	Odor	gas	3/17/2022	FA443	NONE	NONE	R	94806	U
249521	Odor	bad	3/19/2022	FA460	NONE	NONE	R	94806	U
249605	Odor	dump	3/28/2022	FA498	NONE	NONE	SP	94806	U
249628	Odor	molasses	3/30/2022	FA509	NONE	NONE	SP	94806	U
249796	Odor	toxic	4/19/2022	FA619	NONE	NONE	SP	94806	U
249849	Odor	garbage	5/1/2022	FA649	NONE	NONE	SP	94806	U
250272	Odor	strong	7/5/2022	FA888	NONE	NONE	SP	94806	U
250278	Odor	sulfur	7/6/2022	FA893	NONE	NONE	SP	94806	U
250316	Odor	burnt smokey	7/12/2022	FA916	NONE	NONE	SP	94806	U
250416	Smoke	bbq	7/29/2022	FA977	SFD	2646 Kavanagh Rd	SP	94806	U
250952	Odor	gas	10/3/2022	FB205	NONE	NONE	SP	94806	U
251362	Odor	sulfur	10/19/2022	FB265	None	None	SP	94806	U
251725	Other	generator	12/20/2022	FB438	West County Wastewater District	McBride St	R	94806	U
242551	Odor	Heavy Sewage	2/10/2020	A1194	Pinole-Hercules Wastewater Treatment Plant	11 Tennent Avenue	P	94564	U
239610	Odor	chemical	4/3/2019	Z6000	Luxury Nails	2810 Pinole Valley Rd	P	94564	C
240441	Odor	toxic/chemical	7/3/2019	Z6391	NONE	NONE	P	94564	U
240630	Odor	FUMES	7/26/2019	J5866	SFD	1616 MICHAEL Drive	P	94564	U
241058	Odor	toxic	9/3/2019	Z6640	NONE	NONE	P	94564	U
243937	Odor		8/9/2020	Z7798	NONE	NONE	P	94564	U
244362	Train	idling	9/22/2020	Z7979	Tracks behind SFD	1140 Hazel St	P	94564	U
244389	Odor	sewage	9/30/2020	N4763	none	none	P	94564	U
249637	Odor	sulfur	3/31/2022	P4463	NONE	NONE	P	94564	U
250281	Odor	sulfur	7/6/2022	FA895	NONE	NONE	P	94564	U

Complaint Number	Complaint Type	Description	Occurrence Date	Site Number	Site Name	Site Address	Site City	Zip	Confirmation Code
250711	Smoke	diesel generator	9/8/2022	FA895	NONE	NONE	P	94564	U
251549	Odor	generator	5/1/2022	FB364	Generator	570 Sunnyview Dr	P	94564	C

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A58679	L3951	SFD	3340 Diablo Cir	P	94564	A58679A	11-2-303.6	O	7/18/2019	VR
A62311	Z5213	Kirby Pinole	2298 Appian Way	P	94564	A62311A	8-7-301.1	O	12/13/2022	PFD
A57781	A0010	Chevron Products Company	841 Chevron Way	R	94801	A57781A	2-1-307	O	9/22/2022	PFD
A57782	A0010	Chevron Products Company	841 Chevron Way	R	94801	A57782A	2-1-307	O	9/22/2022	PFD
A57783	A0010	Chevron Products Company	841 Chevron Way	R	94801	A57783A	2-1-307	O	9/22/2022	PFD
A57784	A0010	Chevron Products Company	841 Chevron Way	R	94801	A57784A	2-6-307	O	10/17/2022	PFD
A57785	A0010	Chevron Products Company	841 Chevron Way	R	94801	A57785A	2-1-307	O	9/29/2022	PFD
A57786	A0010	Chevron Products Company	841 Chevron Way	R	94801	A57786A	2-1-307	O	9/29/2022	PFD
A57787	A0010	Chevron Products Company	841 Chevron Way	R	94801	A57787A	2-1-307	O	7/25/2022	PFD
A57788	A0010	Chevron Products Company	841 Chevron Way	R	94801	A57788A	2-1-307	O	7/25/2022	PFD
A57789	A0010	Chevron Products Company	841 Chevron Way	R	94801	A57789A	2-1-307	O	9/29/2022	PFD
A57790	A0010	Chevron Products Company	841 Chevron Way	R	94801	A57790A	2-1-307	O	9/29/2022	PFD
A57791	A0010	Chevron Products Company	841 Chevron Way	R	94801	A57791A	2-1-307	O	9/29/2022	PFD
A57792	A0010	Chevron Products Company	841 Chevron Way	R	94801	A57792A	2-1-307	O	9/24/2022	PFD
A57793	A0010	Chevron Products Company	841 Chevron Way	R	94801	A57793A	2-1-307	O	9/29/2022	PFD
A57794	A0010	Chevron Products Company	841 Chevron Way	R	94801	A57794A	2-1-307	O	9/29/2022	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A57795	A0010	Chevron Products Company	841 Chevron Way	R	94801	A57795A	2-1-307	O	9/29/2022	PFD
A57796	A0010	Chevron Products Company	841 Chevron Way	R	94801	A57796A	2-1-307	O	9/29/2022	PFD
A57797	A0010	Chevron Products Company	841 Chevron Way	R	94801	A57797A	2-1-307	O	9/29/2022	PFD
A57798	A0010	Chevron Products Company	841 Chevron Way	R	94801	A57798A	2-1-307	O	9/29/2022	PFD
A57799	A0010	Chevron Products Company	841 Chevron Way	R	94801	A57799A	2-1-307	O	9/29/2022	PFD
A57800	A0010	Chevron Products Company	841 Chevron Way	R	94801	A57800A	2-1-307	O	9/29/2022	PFD
A57801	A0010	Chevron Products Company	841 Chevron Way	R	94801	A57801A	2-1-307	O	9/29/2022	PFD
A57802	A0010	Chevron Products Company	841 Chevron Way	R	94801	A57802A	2-1-307	O	9/29/2022	PFD
A57892	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A57892A	8-34-301.2	O	9/12/2019	PFD
A57893	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A57893A	8-34-303	O	9/11/2019	PFD
A57893	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A57893B	CCR	O	9/11/2019	PFD
A57894	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A57894A	8-34-305.1	O	9/11/2019	PFD
A57894	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A57894B	CCR	O	9/11/2019	PFD
A57895	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A57895A	6-1-301	O	9/12/2019	PFD
A57896	B1869	Qualawash Holdings LLC	2750 Goodrick Avenue	R	94801	A57896A	9-7-307.1	O	10/8/2019	PFD
A57897	A7053	Dutra Materials/San Rafael Rock Quarry Inc	961 Western Drive	R	94801	A57897A	2-1-307	O	10/9/2019	VR

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A57898	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A57898A	2-6-307	O	10/15/2019	PFD
A57898	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A57898B	8-34-301.1	O	10/15/2019	PFD
A57899	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A57899A	8-34-301.1	O	10/15/2019	PFD
A57900	A0023	Chemtrade West US LLC	525 Castro Street	R	94801	A57900A	2-6-307	O	12/4/2019	VR
A57901	A0023	Chemtrade West US LLC	525 Castro Street	R	94801	A57901B	1-522.6	M	12/4/2019	VR
A57901	A0023	Chemtrade West US LLC	525 Castro Street	R	94801	A57901A	1-522.6	M	12/4/2019	VR
A57902	A0023	Chemtrade West US LLC	525 Castro Street	R	94801	A57902A	2-6-307	O	12/4/2019	VR
A58352	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58352B	10	O	9/9/2020	PFD
A58352	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58352A	6-1-301	O	9/9/2020	PFD
A58388	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58388A	12-11-502.3.1	M	6/16/2022	PFD
A58389	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58389A	12-11-502.3.1	M	6/17/2022	PFD
A58390	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58390A	12-11-502.3.1	M	6/16/2022	PFD
A58391	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58391A	12-11-502.3.1	M	6/16/2022	PFD
A58392	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58392A	12-11-502.3.1	M	6/16/2022	PFD
A58393	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58393A	12-11-502.3.1	M	6/16/2022	PFD
A58394	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58394A	12-11-502.3.1	M	6/16/2022	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A58395	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58395A	12-11-502.3.1	M	6/16/2022	PFD
A58398	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58398A	12-11-502.3	M	9/29/2022	PFD
A58613	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58613A	1-522.4	M	6/27/2019	VR
A58614	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58614A	8-5-404	A	6/27/2019	VR
A58614	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58614B	2-6-307	O	6/27/2019	VR
A58615	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58615A	10	O	6/27/2019	VR
A58622	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58622A	1-301	O	6/27/2019	VR
A58623	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58623A	2-6-307	O	7/23/2019	VR
A58624	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58624A	12-11-506.1	M	7/23/2019	VR
A58625	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58625A	2-6-307	O	8/6/2019	VR
A58648	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A58648B	2-6-307	O	4/19/2022	PFD
A58648	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A58648A	8-34-301.1	O	4/19/2022	PFD
A58661	Z6663	BNSF Railway Company	980 Hensley Street	R	94801	A58661A	11-2-401.3	A	9/6/2019	VR
A58662	B4704	BNSF Railway Company	980 Hensley Street	R	94801	A58662A	11-2-401.3	A	9/6/2019	VR
A58670	J9290	SFD	1649 First St	R	94801	A58670A	11-2-401.5	A	1/13/2020	VR
A58671	J9290	SFD	1633 First St	R	94801	A58671A	11-2-401.5	A	1/13/2020	VR
A58675	J9290	SFD	1621 N Jade St	R	94801	A58675A	11-2-401.5	A	1/28/2020	VR

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A58707	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58707B	10	O	10/21/2019	VR
A58707	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58707A	8-5-301	O	10/21/2019	VR
A58708	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58708A	8-5-301	O	10/21/2019	PFD
A58708	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58708B	10	O	10/21/2019	PFD
A58714	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58714A	2-1-301	P	12/16/2019	VR
A58714	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58714B	2-1-302	P	12/16/2019	VR
A58714	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58714C	2-6-307	O	12/16/2019	VR
A58715	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58715B	6-1-302	O	12/16/2019	PFD
A58715	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58715A	2-6-307	O	12/16/2019	PFD
A58715	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58715C	10	O	12/16/2019	PFD
A58716	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58716A	12-12-406	A	12/16/2019	PFD
A58719	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58719A	2-6-307	O	4/26/2021	VR
A58720	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58720A	2-6-307	O	4/26/2021	PFD
A58722	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58722A	1-522	M	4/26/2021	PFD
A58930	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58930A	2-6-307	O	1/17/2019	VR
A58931	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58931A	10	O	1/17/2019	VR

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A58932	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58932A	11-10-305	O	1/15/2019	VR
A58933	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58933A	8-8-302	O	1/15/2019	PFD
A58934	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58934A	10	O	4/10/2019	VR
A58935	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58935A	9-1-307	O	4/10/2019	VR
A58936	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58936A	2-6-307	O	4/10/2019	VR
A58937	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58937A	8-18-402.1	A	4/10/2019	VR
A58937	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58937B	10	O	4/10/2019	VR
A58938	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58938A	2-6-307	O	4/10/2019	VR
A58940	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58940A	2-6-307	O	4/10/2019	VR
A58941	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58941A	10	O	4/29/2019	VR
A58942	A0010	Chevron Products Company	841 Chevron Way	R	94801	A58942A	2-6-307	O	4/29/2019	VR
A59004	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A59004A	2-6-307	O	10/1/2019	VR
A59004	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A59004B	8-34-301.1	O	10/1/2019	VR
A59005	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A59005A	2-6-307	O	10/1/2019	VR
A59005	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A59005B	8-34-301.1	O	10/1/2019	VR
A59006	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A59006B	8-34-301.1	O	10/1/2019	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A59006	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A59006A	2-6-307	O	10/1/2019	PFD
A59007	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A59007A	8-34-301.1	O	11/7/2019	VR
A59237	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59237A	10	O	4/20/2020	PFD
A59238	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59238B	2-6-307	O	4/20/2020	PFD
A59238	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59238A	6-1-302	O	4/20/2020	PFD
A59239	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59239A	10	O	4/20/2020	PFD
A59242	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59242B	6-1-301	O	12/14/2020	PFD
A59242	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59242A	2-1-307	O	12/14/2020	PFD
A59243	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59243A	1-301	O	3/1/2021	PFD
A59244	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59244A	1-301	O	4/7/2021	PFD
A59245	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59245A	1-301	O	6/9/2021	PFD
A59246	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59246B	CFR	O	7/13/2021	PFD
A59246	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59246A	2-1-307	O	7/13/2021	PFD
A59247	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59247B	CFR	O	7/13/2021	PFD
A59247	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59247A	2-1-307	O	7/13/2021	PFD
A59248	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59248B	2-1-307	O	7/13/2021	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A59248	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59248A	10	O	7/13/2021	PFD
A59249	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59249B	2-1-307	O	7/13/2021	PFD
A59249	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59249A	10	O	7/13/2021	PFD
A59250	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59250A	2-1-307	O	8/9/2021	PFD
A59251	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59251A	2-1-307	O	8/9/2021	PFD
A59403	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59403A	10	O	9/16/2019	VR
A59404	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59404A	10	O	9/16/2019	VR
A59405	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59405A	10	O	9/16/2019	VR
A59406	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59406A	10	O	9/16/2019	VR
A59407	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59407A	10	O	9/16/2019	VR
A59408	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59408A	10	O	9/16/2019	VR
A59409	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59409A	10	O	9/16/2019	VR
A59410	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59410A	10	O	9/16/2019	VR
A59411	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59411B	6-1-302	O	9/16/2019	VR
A59411	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59411A	2-6-307	O	9/16/2019	VR
A59412	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59412A	2-6-307	O	11/4/2019	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A59413	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59413A	2-6-307	O	11/4/2019	VR
A59414	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59414A	9-1-307	O	11/4/2019	VR
A59415	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59415A	9-1-307	O	11/4/2019	VR
A59416	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59416B	1-523.3	M	2/6/2020	VR
A59416	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59416A	2-6-307	O	2/6/2020	VR
A59417	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59417B	1-523.3	M	2/6/2020	PFD
A59417	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59417A	2-6-307	O	2/6/2020	PFD
A59418	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59418B	1-523.3	M	2/6/2020	PFD
A59418	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59418A	2-6-307	O	2/6/2020	PFD
A59419	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59419A	2-6-307	O	2/6/2020	PFD
A59420	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59420B	1-523.3	M	2/6/2020	PFD
A59420	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59420A	2-6-307	O	2/6/2020	PFD
A59421	Z7321	Chevron Marine Berth 3	841 Chevron Way	R	94801	A59421A	8-44-305	O	2/25/2020	PFD
A59422	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59422A	9-1-307	O	4/20/2020	PFD
A59423	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59423A	2-6-307	O	4/20/2020	PFD
A59424	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59424A	10	O	4/20/2020	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A59425	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59425A	11-10	O	7/6/2020	PFD
A59426	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59426A	11-10	O	7/6/2020	PFD
A59528	A0023	Chemtrade West US LLC	525 Castro Street	R	94801	A59528A	2-6-307	O	12/4/2019	VR
A59529	A0023	Chemtrade West US LLC	525 Castro Street	R	94801	A59529A	2-6-307	O	12/4/2019	VR
A59530	A0023	Chemtrade West US LLC	525 Castro Street	R	94801	A59530A	1-522.5	M	12/4/2019	PFD
A59531	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59531B	6-1-301	O	2/24/2020	PFD
A59531	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59531A	2-6-307	O	2/24/2020	PFD
A59533	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59533A	2-6-307	O	8/19/2020	VR
A59534	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59534A	2-6-307	O	8/18/2020	PFD
A59535	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59535A	2-6-307	O	8/18/2020	PFD
A59536	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59536A	1-301	O	10/1/2020	PFD
A59537	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A59537A	2-6-307	O	11/9/2020	PFD
A59537	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A59537B	8-34-301.1	O	11/9/2020	PFD
A59538	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A59538A	2-6-307	O	11/9/2020	PFD
A59538	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A59538B	8-34-301.1	O	11/9/2020	PFD
A59539	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A59539A	2-6-307	O	11/9/2020	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A59539	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A59539B	8-34-301.1	O	11/9/2020	PFD
A59540	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A59540A	2-6-307	O	11/9/2020	PFD
A59540	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A59540B	8-34-301.1	O	11/9/2020	PFD
A59542	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59542A	2-1-307	O	12/14/2020	PFD
A59543	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59543A	2-1-307	O	12/14/2020	PFD
A59544	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59544A	2-6-307	O	12/14/2020	PFD
A59546	A0023	Chemtrade West US LLC	525 Castro Street	R	94801	A59546A	2-6-307	O	1/26/2021	PFD
A59547	A0023	Chemtrade West US LLC	525 Castro Street	R	94801	A59547B	10	O	6/8/2021	PFD
A59547	A0023	Chemtrade West US LLC	525 Castro Street	R	94801	A59547A	1-522	M	6/8/2021	PFD
A59548	A0023	Chemtrade West US LLC	525 Castro Street	R	94801	A59548A	1-522	M	6/8/2021	PFD
A59548	A0023	Chemtrade West US LLC	525 Castro Street	R	94801	A59548B	10	O	6/8/2021	PFD
A59548	A0023	Chemtrade West US LLC	525 Castro Street	R	94801	A59548C	10	O	6/8/2021	PFD
A59549	A0023	Chemtrade West US LLC	525 Castro Street	R	94801	A59549A	2-6-307	O	6/8/2021	PFD
A59549	A0023	Chemtrade West US LLC	525 Castro Street	R	94801	A59549C	10	O	6/8/2021	PFD
A59549	A0023	Chemtrade West US LLC	525 Castro Street	R	94801	A59549B	2-6-502	M	6/8/2021	PFD
A59550	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A59550A	8-34-301.2	O	8/24/2021	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A59551	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59551A	1-301	O	8/27/2021	PFD
A59552	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59552A	9-1-307	O	11/9/2021	PFD
A59587	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59587A	2-1-307	O	1/11/2022	PFD
A59588	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59588A	2-1-307	O	11/5/2021	PFD
A59589	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59589A	2-1-307	O	1/11/2022	PFD
A59590	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59590A	2-1-307	O	10/6/2021	PFD
A59591	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59591A	2-1-307	O	11/5/2021	PFD
A59592	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59592A	2-1-307	O	1/11/2022	PFD
A59593	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59593A	2-1-307	O	9/28/2021	PFD
A59594	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59594A	2-1-307	O	1/11/2022	PFD
A59595	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59595A	2-1-307	O	9/28/2021	PFD
A59596	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59596A	2-1-307	O	9/28/2021	PFD
A59597	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59597A	2-1-307	O	9/28/2021	PFD
A59598	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59598A	2-1-307	O	9/28/2021	PFD
A59599	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59599A	2-1-307	O	9/28/2021	PFD
A59600	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59600A	2-1-307	O	9/28/2021	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A59601	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59601A	2-1-307	O	9/28/2021	PFD
A59602	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59602A	2-1-307	O	1/11/2022	PFD
A59878	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59878A	8-10-501	M	7/6/2020	PFD
A59878	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59878B	8-10-302	O	7/6/2020	PFD
A59879	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59879A	8-10-501	M	7/6/2020	PFD
A59879	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59879B	8-10-302.1	O	7/6/2020	PFD
A59880	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59880A	10	O	7/6/2020	PFD
A59880	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59880B	10	O	7/6/2020	PFD
A59881	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59881A	2-6-307	O	8/18/2020	PFD
A59881	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59881B	10	O	8/18/2020	PFD
A59882	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59882A	2-1-307	O	8/18/2020	PFD
A59883	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59883A	2-1-307	O	8/18/2020	PFD
A59884	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59884A	2-6-307	O	8/18/2020	PFD
A59885	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59885A	2-1-307	O	8/18/2020	PFD
A59886	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59886A	10	O	4/20/2021	VR
A59887	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59887A	2-6-307	O	4/20/2021	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A59888	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59888A	9-1-307	O	4/20/2021	PFD
A59889	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59889A	12-11-502.3.1	M	4/20/2021	VR
A59890	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59890A	12-11-502.3.1	M	4/20/2021	VR
A59891	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59891A	2-1-307	O	4/27/2021	PFD
A59892	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59892A	2-1-307	O	4/27/2021	PFD
A59893	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59893A	6-1-302	O	5/4/2021	VR
A59893	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59893B	2-6-307	O	5/4/2021	VR
A59894	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59894B	2-6-307	O	5/4/2021	PFD
A59894	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59894A	6-1-302	O	5/4/2021	PFD
A59895	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59895B	2-6-307	O	5/4/2021	PFD
A59895	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59895A	6-1-302	O	5/4/2021	PFD
A59896	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59896B	2-1-307	O	6/1/2021	VR
A59896	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59896A	1-522.7	M	6/1/2021	VR
A59897	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59897A	2-1-307	O	5/26/2021	VR
A59898	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59898A	2-1-307	O	5/26/2021	VR
A59899	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59899A	2-6-307	O	5/26/2021	VR

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A59900	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59900A	2-1-307	O	5/26/2021	VR
A59901	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59901A	2-1-307	O	1/11/2022	PFD
A59902	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59902A	2-1-307	O	1/11/2022	PFD
A59905	A0023	Chemtrade West US LLC	525 Castro Street	R	94801	A59905A	6-1-301	O	1/26/2021	PFD
A59905	A0023	Chemtrade West US LLC	525 Castro Street	R	94801	A59905B	2-6-307	O	1/26/2021	PFD
A59928	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59928A	CCR	O	6/8/2021	PFD
A59929	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59929A	CCR	O	6/8/2021	PFD
A59930	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59930A	CCR	O	6/8/2021	PFD
A59931	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59931A	CCR	O	6/8/2021	PFD
A59932	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59932A	CCR	O	6/8/2021	PFD
A59933	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59933A	CCR	O	6/8/2021	PFD
A59934	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59934A	CCR	O	6/8/2021	PFD
A59935	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59935A	10	O	5/13/2021	PFD
A59936	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59936A	10	O	5/13/2021	PFD
A59937	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59937A	10	O	5/13/2021	PFD
A59938	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59938A	10	O	5/13/2021	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A59939	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59939A	10	O	5/13/2021	PFD
A59940	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59940A	10	O	5/13/2021	PFD
A59941	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59941A	10	O	5/17/2021	PFD
A59942	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59942A	10	O	5/17/2021	PFD
A59943	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59943A	10	O	5/17/2021	PFD
A59944	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59944A	10	O	5/17/2021	PFD
A59945	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59945A	10	O	5/17/2021	PFD
A59949	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59949A	2-6-307	O	9/9/2021	PFD
A59950	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59950A	2-6-307	O	9/9/2021	PFD
A59951	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59951A	2-6-307	O	9/9/2021	PFD
A59955	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59955A	2-1-307	O	11/10/2021	PFD
A59956	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59956A	CFR	O	2/17/2022	PFD
A59957	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59957A	CCR	O	2/17/2022	PFD
A59958	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59958A	CCR	O	2/17/2022	PFD
A59959	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59959A	CCR	O	2/17/2022	PFD
A59960	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59960A	CCR	O	2/17/2022	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A59961	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59961A	CCR	O	2/23/2022	PFD
A59962	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59962A	CFR	O	2/23/2022	PFD
A59963	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59963A	CCR	O	2/23/2022	PFD
A59964	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59964A	CCR	O	3/3/2022	PFD
A59965	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59965A	CCR	O	3/3/2020	PFD
A59966	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59966A	CCR	O	3/3/2022	PFD
A59967	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59967A	CCR	O	3/3/2022	PFD
A59968	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59968A	CCR	O	3/3/2022	PFD
A59969	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59969A	CCR	O	3/3/2022	PFD
A59970	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59970A	CCR	O	3/3/2022	PFD
A59971	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59971A	CCR	O	3/3/2022	PFD
A59978	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59978A	2-1-307	O	8/9/2021	PFD
A59979	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59979A	2-1-307	O	8/9/2021	PFD
A59980	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59980A	2-1-307	O	8/9/2021	PFD
A59981	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59981A	2-1-307	O	8/9/2021	PFD
A59982	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59982A	2-1-307	O	8/9/2021	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A59983	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59983A	2-1-307	O	8/9/2021	PFD
A59984	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59984A	2-1-307	O	8/9/2021	PFD
A59985	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59985A	2-1-307	O	8/9/2021	PFD
A59986	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59986A	2-1-307	O	8/9/2021	PFD
A59987	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59987A	2-1-307	O	8/9/2021	PFD
A59988	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59988A	2-1-307	O	8/9/2021	PFD
A59989	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59989A	2-1-307	O	8/9/2021	PFD
A59990	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59990A	2-1-307	O	8/9/2021	PFD
A59991	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59991A	2-1-307	O	8/9/2021	PFD
A59992	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59992A	2-1-307	O	8/9/2021	PFD
A59993	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59993A	10	O	10/4/2021	PFD
A59994	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59994A	2-6-307	O	10/4/2021	PFD
A59995	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59995A	2-1-307	O	10/4/2021	PFD
A59996	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59996A	10	O	10/4/2021	PFD
A59997	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59997A	2-6-307	O	10/4/2021	PFD
A59998	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59998A	2-1-307	O	10/4/2021	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A59999	A0010	Chevron Products Company	841 Chevron Way	R	94801	A59999A	12-12-406	A	10/12/2021	PFD
A60000	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60000A	12-12-406	A	10/12/2021	PFD
A60001	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60001A	1-301	O	10/24/2021	PFD
A60002	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60002B	6-1-302	O	10/27/2021	PFD
A60002	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60002A	2-6-307	O	10/27/2021	PFD
A60003	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60003A	2-1-307	O	9/22/2022	PFD
A60004	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60004A	2-1-307	O	9/22/2022	PFD
A60005	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60005A	2-1-307	O	9/29/2022	PFD
A60006	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60006A	2-1-307	O	9/22/2022	PFD
A60007	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60007A	2-1-307	O	7/25/2022	PFD
A60008	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60008A	2-1-307	O	9/22/2022	PFD
A60009	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60009A	2-1-307	O	7/25/2022	PFD
A60010	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60010A	2-1-307	O	7/25/2022	PFD
A60011	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60011A	2-1-307	O	7/25/2022	PFD
A60012	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60012A	2-1-307	O	7/25/2022	PFD
A60013	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60013A	2-1-307	O	8/2/2022	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A60014	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60014A	2-1-307	O	8/2/2022	PFD
A60015	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60015A	2-1-307	O	7/25/2022	PFD
A60016	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60016A	2-1-307	O	9/22/2022	PFD
A60017	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60017A	2-1-307	O	8/2/2022	PFD
A60018	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60018A	2-1-307	O	8/2/2022	PFD
A60019	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60019A	2-1-307	O	8/2/2022	PFD
A60020	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60020A	2-1-307	O	8/2/2022	PFD
A60021	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60021A	2-1-307	O	9/22/2022	PFD
A60022	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60022A	2-1-307	O	9/22/2022	PFD
A60023	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60023A	2-1-307	O	9/22/2022	PFD
A60024	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60024A	2-1-307	O	9/22/2022	PFD
A60029	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60029A	2-1-307	O	12/5/2021	PFD
A60030	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60030A	2-6-307	O	10/5/2020	PFD
A60031	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60031A	2-1-307	O	7/25/2022	PFD
A60032	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60032A	2-1-307	O	7/25/2022	PFD
A60033	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60033A	2-1-307	O	7/25/2022	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A60034	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60034A	2-1-307	O	7/25/2022	PFD
A60035	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60035A	2-6-307	O	10/17/2022	PFD
A60036	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60036A	2-1-307	O	9/22/2022	PFD
A60037	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60037A	2-1-307	O	9/22/2022	PFD
A60038	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60038A	2-1-307	O	9/22/2022	PFD
A60039	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60039A	2-1-307	O	10/6/2021	PFD
A60043	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60043A	2-1-307	O	9/29/2022	PFD
A60044	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60044A	2-1-307	O	9/29/2022	PFD
A60046	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60046A	2-1-307	O	9/29/2022	PFD
A60047	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60047A	2-1-307	O	9/28/2021	PFD
A60048	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60048A	2-1-307	O	9/28/2021	PFD
A60049	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60049A	2-1-307	O	7/25/2022	PFD
A60050	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60050A	2-1-307	O	7/25/2022	PFD
A60051	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60051A	2-1-307	O	7/25/2022	PFD
A60052	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60052A	2-1-307	O	7/25/2022	PFD
A60410	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60410A	2-1-307	O	6/9/2021	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A60414	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60414A	2-1-307	O	9/13/2021	PFD
A60465	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60465A	2-1-307	O	6/28/2021	PFD
A60466	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60466A	2-1-307	O	6/28/2021	PFD
A60467	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60467A	2-1-307	O	6/28/2021	PFD
A60468	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60468A	2-1-307	O	6/28/2021	PFD
A60469	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60469A	2-1-307	O	6/28/2021	PFD
A60470	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60470A	2-1-307	O	6/28/2021	PFD
A60471	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60471A	2-1-307	O	6/28/2021	PFD
A60472	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60472A	12-11-502.3.1	M	7/20/2021	PFD
A60473	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60473A	12-11-502.3.1	M	7/20/2021	PFD
A60474	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60474A	12-11-502.3.1	M	7/20/2021	PFD
A60475	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60475A	12-11-502.3.1	M	7/20/2021	PFD
A60476	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60476A	12-11-502.3.1	M	7/20/2021	PFD
A60477	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60477A	12-11-502.3.1	M	7/20/2021	PFD
A60628	A0023	Chemtrade West US LLC	525 Castro Street	R	94801	A60628A	2-6-502	M	9/30/2021	PFD
A60629	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60629A	9-1-307	O	11/9/2021	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A60630	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60630A	9-1-307	O	11/9/2021	PFD
A60631	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60631A	2-1-307	O	11/9/2021	PFD
A60632	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60632A	9-1-307	O	11/9/2021	PFD
A60633	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60633A	2-1-307	O	12/1/2021	PFD
A60634	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60634A	2-1-307	O	12/1/2021	PFD
A60635	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60635A	2-1-307	O	12/1/2021	PFD
A60636	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60636A	8-5-320.5.2	O	12/7/2021	PFD
A60637	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60637A	8-5-321.1	O	12/7/2021	PFD
A60638	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60638B	2-1-301	P	12/7/2021	PFD
A60638	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60638A	2-1-307	O	12/7/2021	PFD
A60638	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60638C	2-1-302	P	12/7/2021	PFD
A60639	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60639C	2-1-302	P	12/7/2021	PFD
A60639	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60639B	2-1-301	P	12/7/2021	PFD
A60639	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60639A	2-1-307	O	12/7/2021	PFD
A60640	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60640A	1-522.7	M	12/9/2021	PFD
A60641	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60641A	10	O	2/14/2022	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A60642	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60642B	12-11-506	M	2/14/2022	PFD
A60642	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60642A	1-523.2	M	2/14/2022	PFD
A60643	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60643A	2-6-307	O	3/25/2022	PFD
A60644	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60644A	8-5-320.5.2	O	4/19/2022	PFD
A60645	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60645A	8-5-320.5.2	O	4/19/2022	PFD
A60646	A0023	Chemtrade West US LLC	525 Castro Street	R	94801	A60646B	12-15-401	A	5/4/2022	PFD
A60646	A0023	Chemtrade West US LLC	525 Castro Street	R	94801	A60646A	2-6-502	M	5/4/2022	PFD
A60647	A0023	Chemtrade West US LLC	525 Castro Street	R	94801	A60647A	2-6-307	O	5/19/2022	PFD
A60648	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60648A	8-10-501	M	5/16/2022	PFD
A60649	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60649A	8-8-302	O	6/10/2022	PFD
A60651	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60651A	2-1-307	O	7/25/2022	PFD
A60652	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60652A	6-1-301	O	7/28/2022	PFD
A60703	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60703A	12-11-502.3.1	M	7/20/2021	PFD
A60711	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60711A	2-6-307	O	10/19/2021	PFD
A60712	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60712A	2-1-307	O	10/19/2021	PFD
A60713	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60713A	2-1-307	O	10/19/2021	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A60714	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60714A	2-1-307	O	10/19/2021	PFD
A60715	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60715A	2-1-307	O	10/19/2021	PFD
A60716	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60716A	2-1-307	O	10/19/2021	PFD
A60717	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60717A	2-1-307	O	10/19/2021	PFD
A60718	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60718A	2-1-307	O	10/25/2021	PFD
A60719	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60719A	2-1-307	O	10/25/2021	PFD
A60720	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60720A	2-1-307	O	10/25/2021	PFD
A60721	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60721A	2-1-307	O	10/25/2021	PFD
A60722	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60722A	2-1-307	O	10/25/2021	PFD
A60723	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60723A	2-1-307	O	10/25/2021	PFD
A60724	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60724A	2-1-307	O	10/25/2021	PFD
A60903	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60903A	2-1-307	O	8/2/2022	PFD
A60904	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60904A	2-6-307	O	8/2/2022	PFD
A60905	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60905A	2-1-307	O	8/2/2022	PFD
A60906	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60906A	2-1-307	O	8/2/2022	PFD
A60907	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60907A	2-1-307	O	8/2/2022	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A60908	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60908A	9-9-301.2	O	8/2/2022	PFD
A60909	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60909A	2-1-307	O	8/2/2022	PFD
A60910	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60910A	2-1-307	O	8/2/2022	PFD
A60911	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60911A	2-1-307	O	8/2/2022	PFD
A60912	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60912A	2-1-307	O	8/2/2022	PFD
A60913	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60913A	2-1-307	O	8/2/2022	PFD
A60914	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60914A	2-1-307	O	8/2/2022	PFD
A60915	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60915A	2-1-307	O	8/2/2022	PFD
A60916	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60916A	2-1-307	O	8/2/2022	PFD
A60917	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60917A	2-1-307	O	8/2/2022	PFD
A60918	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60918A	2-1-307	O	8/2/2022	PFD
A60919	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60919A	2-1-307	O	8/2/2022	PFD
A60920	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60920A	2-1-307	O	8/2/2022	PFD
A60921	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60921A	12-11-502.3	M	9/29/2022	PFD
A60922	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60922A	12-11-502.3	M	9/29/2022	PFD
A60923	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60923A	12-11-502.3	M	9/29/2022	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A60924	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60924A	12-11-502.3	M	9/29/2022	PFD
A60925	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60925A	12-11-502.3	M	9/29/2022	PFD
A60926	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60926A	12-11-502.3	M	9/29/2022	PFD
A60927	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60927A	12-11-502.3	M	9/29/2022	PFD
A60928	A0010	Chevron Products Company	841 Chevron Way	R	94801	A60928A	8-18-503.4	M	11/2/2022	PFD
A61028	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61028A	2-1-307	O	11/5/2021	PFD
A61029	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61029A	2-1-307	O	11/5/2021	PFD
A61030	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61030A	2-1-307	O	11/5/2021	PFD
A61031	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61031A	2-1-307	O	11/18/2021	PFD
A61032	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61032A	2-1-307	O	11/5/2021	PFD
A61033	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61033A	2-1-307	O	11/5/2021	PFD
A61034	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61034A	2-1-307	O	11/5/2021	PFD
A61035	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61035A	2-1-307	O	11/5/2021	PFD
A61036	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61036A	2-1-307	O	11/5/2021	PFD
A61037	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61037A	2-1-307	O	12/5/2021	PFD
A61038	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61038A	2-1-307	O	12/16/2021	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A61039	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61039A	2-1-307	O	12/16/2021	PFD
A61040	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61040A	2-1-307	O	12/16/2021	PFD
A61041	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61041A	2-1-307	O	12/16/2021	PFD
A61042	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61042A	2-1-307	O	12/16/2021	PFD
A61043	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61043A	2-1-307	O	12/16/2021	PFD
A61044	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61044A	2-1-307	O	12/16/2021	PFD
A61045	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61045A	2-1-307	O	12/16/2021	PFD
A61046	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61046A	2-1-307	O	12/16/2021	PFD
A61047	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61047A	2-1-307	O	12/16/2021	PFD
A61048	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61048A	2-1-307	O	1/4/2022	PFD
A61049	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61049A	2-1-307	O	1/4/2022	PFD
A61050	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61050A	2-1-307	O	1/4/2022	PFD
A61051	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61051A	2-1-307	O	1/4/2022	PFD
A61052	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61052A	2-1-307	O	1/4/2022	PFD
A61053	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61053A	2-1-307	O	1/4/2022	PFD
A61054	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61054A	2-1-307	O	1/4/2022	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A61056	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61056A	2-1-307	O	1/4/2022	PFD
A61057	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61057A	2-1-307	O	1/11/2022	PFD
A61058	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61058A	2-1-307	O	1/11/2022	PFD
A61059	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61059B	6-1-302	O	10/27/2021	PFD
A61059	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61059A	2-6-307	O	10/27/2021	PFD
A61060	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61060B	2-6-307	O	10/27/2021	PFD
A61060	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61060A	6-1-302	O	10/27/2021	PFD
A61061	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61061A	2-6-307	O	10/27/2021	PFD
A61061	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61061B	6-1-302	O	10/27/2021	PFD
A61062	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61062A	2-6-307	O	10/27/2021	PFD
A61062	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61062B	6-1-302	O	10/27/2021	PFD
A61063	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61063A	2-1-307	O	9/29/2022	PFD
A61064	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61064A	2-1-307	O	9/29/2022	PFD
A61065	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61065A	2-1-307	O	9/29/2022	PFD
A61066	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61066A	2-1-307	O	9/29/2022	PFD
A61067	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61067A	2-1-307	O	9/22/2022	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A61068	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61068A	2-1-307	O	9/22/2022	PFD
A61069	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61069A	2-1-307	O	9/29/2022	PFD
A61070	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61070A	2-1-307	O	9/29/2022	PFD
A61071	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61071A	2-1-307	O	9/29/2022	PFD
A61072	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61072A	2-1-307	O	9/29/2022	PFD
A61073	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61073A	2-1-307	O	9/29/2022	PFD
A61074	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61074A	2-1-307	O	9/29/2022	PFD
A61075	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61075A	2-1-307	O	9/29/2022	PFD
A61078	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61078A	12-11-502.3.1	M	1/24/2022	PFD
A61079	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61079A	12-11-502.3.1	M	1/18/2022	PFD
A61080	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61080A	12-11-502.3.1	M	1/18/2022	PFD
A61081	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61081A	12-11-502.3.1	M	1/18/2022	PFD
A61082	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61082A	12-11-502.3.1	M	1/18/2022	PFD
A61083	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61083A	12-11-502.3.1	M	1/18/2022	PFD
A61084	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61084A	12-11-502.3.1	M	1/18/2022	PFD
A61085	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61085A	12-11-502.3.1	M	1/18/2022	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A61086	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61086A	12-11-502.3.1	M	1/18/2022	PFD
A61087	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61087A	12-11-502.3.1	M	1/18/2022	PFD
A61088	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61088A	12-11-502.3.1	M	1/18/2022	PFD
A61089	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61089A	12-11-502.3.1	M	1/18/2022	PFD
A61103	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61103A	1-440	A	8/1/2022	PFD
A61104	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61104A	1-301	O	8/1/2022	PFD
A61105	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61105A	6-1-301	O	10/27/2021	PFD
A61106	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61106A	6-1-301	O	11/3/2021	PFD
A61107	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61107A	6-1-301	O	10/27/2021	PFD
A61108	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61108A	9-2-301	O	3/1/2022	PFD
A61109	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61109B	1-523.2	M	6/14/2022	PFD
A61109	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61109C	2-1-307	O	6/14/2022	PFD
A61109	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61109A	1-523.1	M	6/14/2022	PFD
A61110	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61110A	10	O	7/25/2022	PFD
A61111	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61111A	10	O	7/25/2022	PFD
A61112	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61112A	10	O	7/25/2022	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A61113	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61113A	10	O	7/25/2022	PFD
A61114	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61114A	2-6-307	O	7/25/2022	PFD
A61115	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61115A	2-1-307	O	7/25/2022	PFD
A61116	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61116A	2-1-307	O	7/25/2022	PFD
A61116	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61116B	2-6-307	O	7/25/2022	PFD
A61117	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61117A	2-1-307	O	7/25/2022	PFD
A61118	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61118A	2-1-307	O	7/25/2022	PFD
A61119	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61119A	2-1-307	O	7/25/2022	PFD
A61120	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61120A	2-1-307	O	7/25/2022	PFD
A61121	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61121A	2-1-307	O	7/25/2022	PFD
A61122	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61122A	2-1-307	O	7/25/2022	PFD
A61123	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61123A	2-1-307	O	7/25/2022	PFD
A61124	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61124A	2-1-307	O	7/25/2022	PFD
A61125	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61125A	12-11-502.3	M	11/6/2021	PFD
A61471	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61471A	CFR	O	10/30/2021	PFD
A61472	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61472A	CFR	O	11/7/2021	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A61473	A0010	Chevron Products Company	841 Chevron Way	R	94801	A61473A	CFR	O	11/24/2021	PFD
A62003	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62003A	2-6-307	O	7/25/2022	PFD
A62004	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62004A	2-6-307	O	7/25/2022	PFD
A62005	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62005A	2-6-307	O	7/25/2022	PFD
A62006	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62006A	2-6-307	O	7/25/2022	PFD
A62007	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62007A	2-6-307	O	7/25/2022	PFD
A62008	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62008A	2-1-307	O	7/25/2022	PFD
A62009	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62009A	2-1-307	O	7/25/2022	PFD
A62010	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62010A	2-1-307	O	7/25/2022	PFD
A62028	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62028A	2-6-307	O	10/17/2022	PFD
A62029	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62029A	9-10-502	M	10/17/2022	PFD
A62030	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62030A	1-523.1	M	10/7/2022	PFD
A62031	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62031A	1-522.4	M	10/17/2022	PFD
A62032	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62032A	1-523.1	M	10/7/2022	PFD
A62033	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62033A	8-18-404	A	10/7/2022	PFD
A62034	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62034A	8-18-401	A	10/7/2022	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A62035	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62035A	8-18-401.3	A	10/17/2022	PFD
A62035	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62035B	8-18-401.6	A	10/17/2022	PFD
A62036	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62036A	8-18-401	A	10/7/2022	PFD
A62037	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62037A	8-18-401	A	10/7/2022	PFD
A62038	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62038A	2-1-301	P	10/7/2022	PFD
A62038	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62038B	2-1-302	P	10/7/2022	PFD
A62039	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62039A	6-1-301	O	12/8/2022	PFD
A62040	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62040A	6-1-301	O	12/8/2022	PFD
A62066	A1840	West Contra Costa County Landfill	1 Parr Boulevard	R	94801	A62066A	2-6-307	O	12/27/2022	PFD
A62632	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62632A	9-1-307	O	9/29/2022	PFD
A62633	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62633A	9-1-307	O	9/29/2022	PFD
A62634	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62634A	2-1-307	O	9/29/2022	PFD
A62635	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62635A	9-1-307	O	9/29/2022	PFD
A62636	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62636A	2-1-307	O	9/29/2022	PFD
A62637	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62637A	9-1-307	O	9/29/2022	PFD
A62638	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62638A	2-1-307	O	9/29/2022	PFD

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A62639	A0010	Chevron Products Company	841 Chevron Way	R	94801	A62639A	2-6-307	O	12/22/2022	PFD
A59003	Z6506	Chevron Long Wharf	841 Chevron Way	R	94802	A59003A	6-1-301	O	8/6/2019	PFD
A59236	A0423	Chevron Richmond Technology Center	100 Chevron Way	R	94802	A59236A	8-5-305.5	O	2/4/2020	PFD
A59236	A0423	Chevron Richmond Technology Center	100 Chevron Way	R	94802	A59236B	8-5-328	O	2/4/2020	PFD
A56041	A0093	Safeway Stores Inc, Bakery Plant	905 So 34th Street	R	94804	A56041A	2-1-307	O	2/25/2019	VR
A57779	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	A57779A	9-7-307.5	O	5/30/2019	VR
A57780	A0093	Safeway Stores Inc, Bakery Plant	905 So 34th Street	R	94804	A57780A	2-1-307	O	6/19/2019	VR
A57891	A0745	TransMontaigne Operating Company LP	488 Wright Avenue	R	94804	A57891A	8-33-309.5	O	9/6/2019	VR
A58704	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	A58704A	2-1-307	O	7/25/2019	VR
A58705	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	A58705B	2-1-302	P	9/17/2019	PFD
A58705	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	A58705A	2-1-301	P	9/17/2019	PFD
A58709	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	A58709A	2-1-307	O	3/4/2020	VR
A58710	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	A58710A	1-301	O	11/7/2019	VR
A58711	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	A58711A	1-301	O	11/7/2019	VR

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A58712	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	A58712A	1-301	O	11/7/2019	VR
A58713	A2482	City of Richmond Wastewater Treatment Plant	601 Canal Boulevard	R	94804	A58713A	1-301	O	11/7/2019	VR
A58724	E3822	Sims Metal Management	600 So 4th Street	R	94804	A58724A	10	O	6/30/2021	VR
A58791	A0061	Phillips 66 Company	1300 Canal Boulevard	R	94804	A58791A	8-5-320	O	12/21/2021	PFD
A58792	A0061	Phillips 66 Company	1300 Canal Boulevard	R	94804	A58792A	8-5-322.5	O	12/21/2021	PFD
A58793	A0061	Phillips 66 Company	1300 Canal Boulevard	R	94804	A58793A	8-5-305.3	O	1/11/2022	PFD
A58794	A0745	TransMontaigne Operating Company LP	488 Wright Avenue	R	94804	A58794A	8-5-305.3	O	3/4/2022	PFD
A58798	A0061	Phillips 66 Company	1300 Canal Boulevard	R	94804	A58798A	8-5-305.3	O	3/24/2022	PFD
A58799	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	A58799B	9-7-506	M	3/29/2022	PFD
A58799	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	A58799A	9-7-307	O	3/29/2022	PFD
A58800	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	A58800A	9-7-307	O	3/29/2022	PFD
A58801	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	A58801A	6-1-301	O	4/26/2022	PFD
A59231	A5558	523Rods	251 24th Street	R	94804	A59231A	2-1-302	P	8/26/2019	VR
A59232	A7847	Bay Marine Boatworks, Inc	310 W Cutting Blvd	R	94804	A59232A	2-1-302	P	8/28/2019	VR
A59240	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	A59240A	6-1-301	O	6/11/2020	VR
A59258	Z6906	Central Gas Richmond	1825 Cutting Blvd	R	94804	A59258A	2-1-307	O	10/29/2019	VR

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A59258	Z6906	Central Gas Richmond	1825 Cutting Blvd	R	94804	A59258B	8-7-302.2	O	10/29/2019	VR
A59266	W2547	Cutting Mini Market (ARCO)	1001 Cutting Blvd	R	94804	A59266A	2-1-302	P	12/17/2019	VR
A59496	Z5380	Commercial	2500 Bissell Ave	R	94804	A59496A	11-2-303.6	O	2/9/2021	VR
A59532	A0745	TransMontaigne Operating Company LP	488 Wright Avenue	R	94804	A59532A	8-5-320	O	3/12/2020	VR
A60650	FA939	AAK USA Richmond Corp	1145 Harbor Way South	R	94804	A60650A	6-1-301	O	7/15/2022	PFD
A61728	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	A61728A	1-301	O	5/4/2022	PFD
A61729	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	A61729A	1-301	O	5/4/2022	PFD
A61730	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	A61730A	1-301	O	5/4/2022	PFD
A61732	A0927	AAK USA Richmond Corp	1145 Harbour Way, South	R	94804	A61732A	2-1-307	O	7/5/2022	PFD
A61733	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	A61733B	2-1-302	P	7/19/2022	PFD
A61733	A0706	Gold Bond Building Products, LLC	1040 Canal Boulevard	R	94804	A61733A	2-1-301	P	7/19/2022	PFD
A61734	A0057	Richmond Products Terminal	1306 Canal Street	R	94804	A61734A	8-5-305.3	O	9/28/2022	PFD
A61735	A0057	Richmond Products Terminal	1306 Canal Street	R	94804	A61735A	8-5-322.5	O	9/28/2022	PFD
A61737	A0057	Richmond Products Terminal	1306 Canal Street	R	94804	A61737A	2-1-307	O	10/5/2022	PFD
A61738	A0057	Richmond Products Terminal	1306 Canal Street	R	94804	A61738A	2-1-307	O	10/5/2022	PFD
A57890	A7943	Biorichland LLC	2600 Hilltop Drive	R	94806	A57890A	2-1-302	P	8/27/2019	VR
A58548	Z6801	Chevron Station #90222	2900 Hilltop Rd	R	94806	A58548A	2-1-301	P	7/18/2019	VR

NOV Number	Site Number	Site Name	Street Name	City	Zip	NOV Offense #	Regulation	Type of Violation	Date of Issuance	Final Status
A58908	Z0961	MFD	1230 Brookside Dr #28	SP	94806	A58908A	11-2-401.3	A	1/3/2019	VR
A59265	Z4346	Top Food and Gas	1522 Rumrill Boulevard	SP	94806	A59265A	2-1-302	P	12/17/2019	PFD
A59479	Q5007	SFD	3111 Alta Mira Dr	R	94806	A59479A	11-2-303.1	O	3/2/2020	VR
A60247	FA103	Arco Facility 07127	15531 San Pablo Ave	R	94806	A60247A	2-1-307	O	5/10/2022	VR
A60353	Z8341	SFD	1939 Pablo Vista Ave	SP	94806	A60353A	6-3-301	O	12/8/2020	VR
A61402	FB367	Great Gas	1522 Rumrill Blvd	SP	94806	A61402A	8-7-302.5	O	11/8/2022	PFD
A61402	FB367	Great Gas	1522 Rumrill Blvd	SP	94806	A61402C	8-7-302.3	O	11/8/2022	PFD
A61402	FB367	Great Gas	1522 Rumrill Blvd	SP	94806	A61402B	8-7-301.6	O	11/8/2022	PFD
A62253	FB367	Great Gas	1522 Rumrill Blvd	SP	94806	A62253B	8-7-503.1	M	12/7/2022	PFD
A62253	FB367	Great Gas	1522 Rumrill Blvd	SP	94806	A62253A	2-1-307	O	12/7/2022	PFD

NTC Number	Site Number	Issue Date	Site Name	Address	City	ZIP	Regulation
A46915	112529	1/3/2019	City of Richmond Fire Station #68	2904 Hilltop Dr	SP	94806	2-1-307; 8-7-503
A45400	A6054	1/10/2019	EBMUD	2755 Isabel	R	94804	2-1-307
A45679	A0010	1/15/2019	Chevron Products Company	841 Chevron Way	R	94801	1-522.4
A46642	325120	1/22/2019	Air Liquide America Specialty - Richmond	1100 Hensley St.	R	94801	RMP
A47127		3/22/2019	Central Foods	4352 Appian Way	ES	94803	RMP
A47128	ASB106554	3/26/2019	Erhan Saritar, Homeowner	1324 Gaynor Ave	R	94801	11-2-401.5; 11-2-303.8
A45681	A0010	4/24/2019	Chevron Products Company	841 Chevron Way	R	94801	10
A45682	A0010	4/24/2019	Chevron Products Company	841 Chevron Way	R	94801	12-11-502.3(a)
A47157		7/31/2019	Atherstone Foods	200 W. Ohio	R	94804	17 CCR Sec 95384
A47167		8/14/2019	Las Montanas Supermarket	13901 San Pablo Ave	SP	94806	17 CCR Sec 95384
A47375	A5558	8/26/2019	East Bay Body Shop	251 24th St	R	94804	8-45-501
A47200	A0010	10/21/2019	Chevron Products Company	841 Chevron Way	R	94802	2-6-307
A47201	A0010	10/21/2019	Chevron Products Company	841 Chevron Way	R	94802	10-40CFR
A46988	Z6906	10/29/2019	Central Gas Richmond	1825 Cutting Blvd	R	94804	8-7-301.2/503.1/302.2
A46989	C8733	11/5/2019	Lal's Best Gasco Station	695 Harbour Way	R	94801	8-7-503.1
A46990	C9821	11/5/2019	Cheveron #4071	2234 MacDonald Ave	R	94801	8-7-503.1, 8-7-503..2
A47140		11/5/2019	Homeowner	230 Summer Ln	R	94806	11-2-401.5
A46994	108605	11/13/2019	Richmond Chevron	4838 Macdonald ave	R	94805	8-7-307
A47523	109183	1/28/2021	BNSF Railway Co.	980 Hensley St	R	94801	2-1-301, 8-7-301.5
A42709	A0010	4/21/2021	Chevron Product Company	841 Chevron Way	R	94802	10 40 CRF 60.692-2(a) (1)
A42710	A0010	6/8/2021	Chevron Product Company	841 Chevron Way	R	94802	2-6-307

NTC Number	Site Number	Issue Date	Site Name	Address	City	ZIP	Regulation
A42711	A0010	6/8/2021	Chevron Product Company	841 Chevron Way	R	94802	2-6-307
A42712	A0010	6/8/2021	Chevron Product Company	841 Chevron Way	R	94802	1-552.4
A47761	1122144	9/29/2021	San Pablo Kwik Serv	2701 El Poetal Dr	SP	94806	2-1-307
A45754	A0010	9/22/2022	Chevron Product Company	841 Chevron Way	R	94802	1-522.5

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07K43	I	A0010	4285	1/9/2019	9/9/2019	1/10/2019	6 TR SETS TRIPPED OFFLINE DUE TO REFINER-WIDE POWER DIP	Chevron Products Company	841 Chevron Way	94801
07K45	I	A0010	6051	1/10/2019		1/14/2019	ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07K49	I	A0010		1/13/2019	2/6/2019	1/17/2019	GAS CHROMATOGRAPH BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07K50	I	A0010		1/13/2019	1/18/2019	1/17/2019	TOTAL SULFUR MONITOR BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07K53	E	A0010	4285	1/17/2019	1/17/2019	1/18/2019	REFINERY-WIDE POWER DIP	Chevron Products Company	841 Chevron Way	94801
07K57	I	A0010	4285	1/17/2019	1/22/2019	1/22/2019	SAMPLE SYSTEM @ FCC FLARE WENT INOPRATIVE, REPAIRS ONGOING	Chevron Products Company	841 Chevron Way	94801
07K67	I	A0010	6051	1/24/2019		1/28/2019	ALKY COOLING WATER TOWER HYDROCARBON ANALYZER INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07K70	I	A0010	6021	1/29/2019	2/7/2019	1/31/2019	VENT GAS FLOW METER INOPERATIVE @ H2 FLARE	Chevron Products Company	841 Chevron Way	94801
07K72	B	A0010		2/2/2019		2/2/2019	V-475 FUEL DRUM EXCEEDED ITS 160 PPM 3-HR AVERAGE H2S LIMIT	Chevron Products Company	841 Chevron Way	94801
07K73	E	A0010		2/2/2019	2/2/2019	2/2/2019	V-475 FUEL DRUM EXCEEDED ITS 160 PPM 3-HR AVERAGE H2S LIMIT	Chevron Products Company	841 Chevron Way	94801
07K75	I	A0010		1/31/2019	2/10/2019	2/4/2019		Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07K76	I	A0010	6016	2/2/2019	2/14/2019	2/4/2019	SAMPLE STATION @ FCC FLARE BECAME POTENTIALLY INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07K77	B	A0010		2/1/2019	2/3/2019	2/4/2019	ANALYZER BECAME INOPERATIVE, WAS REPAIRED AND RECALIBRATED	Chevron Products Company	841 Chevron Way	94801
07K78	B	A0010	4340	2/4/2019		2/4/2019	PRESSURE INDICATOR WENT INOPERATIVE, REPAIRS ARE ONGOING	Chevron Products Company	841 Chevron Way	94801
07K79	B	A0010	4228	2/2/2019	2/4/2019	2/4/2019	SRU #2 / SO2 AND O2 ANALYZERS BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07K80	B	A0010		2/1/2019	2/3/2019	2/4/2019	V-870 H2S ANALYZER BECAME INOPERATIVE AND WAS REPAIRED	Chevron Products Company	841 Chevron Way	94801
07K81	E	A0010	4285	2/2/2019	2/2/2019	2/5/2019	shutdown at approx 0000 hours due to a power outage	Chevron Products Company	841 Chevron Way	94801
07K82	E	A0010	4228	2/2/2019	2/4/2019	2/5/2019	power outage and an unplanned plant shutdown on 2/2/19	Chevron Products Company	841 Chevron Way	94801
07K83	I	A0010		2/4/2019	2/5/2019	2/6/2019	H2 FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07K84	E	A0010	4334	2/2/2019	2/3/2019	2/6/2019	EXCEEDING 400PPM ON AVERAGE DAILY	Chevron Products Company	841 Chevron Way	94801
07K86	B	A0010	4229	2/4/2019	2/6/2019	2/7/2019	DID NOT MEET REQUIREMENTS OF BAAQMD REG 6-1-301	Chevron Products Company	841 Chevron Way	94801
07K88	B	A0010	4060	2/5/2019	2/6/2019	2/7/2019	EXCEEDED THE CO LIMIT AVERAGE OF 400PPM CORRECTED TO 3% O2	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07K89	E	A0010	4229	2/4/2019	2/5/2019	2/7/2019	EXCEEDED ITS 12HR 250 PPM SO2 CORRECTED 0% O2 LIMIT	Chevron Products Company	841 Chevron Way	94801
07K90	E	A0010		2/7/2019	2/8/2019	2/8/2019	TRAIN 1 EXCEEDED START UP TIME LIMIT OF 24 HOURS	Chevron Products Company	841 Chevron Way	94801
07K91	E	A0010		2/6/2019	2/8/2019	2/8/2019	F-1100 EXC FURNACE STARTUP OF 20HRS	Chevron Products Company	841 Chevron Way	94801
07K92	I	A0010	6012	2/8/2019	2/10/2019	2/11/2019	SISO FLARE SAMPLE STATION BECAME INOP 2/8/19	Chevron Products Company	841 Chevron Way	94801
07K93	I	A0010		2/8/2019	2/20/2019	2/11/2019	GAS CHROMATOGRAPH INOP, MONITORS PSA1 TAIL GAS BTU	Chevron Products Company	841 Chevron Way	94801
07K94	I	A0010	6016	2/8/2019		2/11/2019	FCC BECAME INERMITTENTLY INOPERATIVE ON 2/7/19 @2044HRS	Chevron Products Company	841 Chevron Way	94801
07K96	I	A0010	6012	2/10/2019	2/11/2019	2/12/2019	WATER SEAL LEVEL INDICATOR BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07L00	I	A0010	4285	2/11/2019	2/12/2019	2/13/2019	V-65 FLUE GAS ANALYZER INOP	Chevron Products Company	841 Chevron Way	94801
07L08	E	A0010	4285	2/10/2019	2/10/2019	2/14/2019	FCC DID NOT MEET THE ALTERNATIVE STANDARD PER 40 CFR	Chevron Products Company	841 Chevron Way	94801
07L09	E	A0010	4285	2/10/2019	2/12/2019	2/14/2019	ESP TEMP OPERATED BELOW 550F	Chevron Products Company	841 Chevron Way	94801
07L10	E	A0010	4285	2/10/2019	2/10/2019	2/14/2019	FCC DID NOT MEET THE ALTERNATIVE STANDARD PER 40CFR63.1564	Chevron Products Company	841 Chevron Way	94801

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07L11	E	A0010	4285	2/10/2019	2/12/2019	2/14/2019	THE ESP TEMP WAS BELOW 550F FROM 1306-1642	Chevron Products Company	841 Chevron Way	94801
07L12	E	A0010	4285	2/10/2019	2/13/2019	2/14/2019	TR SET OPERATED WITH GREATER THAN 2 TR SETS BELOW 200MA	Chevron Products Company	841 Chevron Way	94801
07L13	I	A0010		2/14/2019		2/15/2019	GAS CHROMATOGRAPH THAT MONITORS NATURAL GAS BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07L15	E	A0010		2/14/2019	2/14/2019	2/18/2019	FUEL GAS DRUM EXCEEDED THE 160 PPM 3HR H2S LIMIT	Chevron Products Company	841 Chevron Way	94801
07L16	E	A0010		2/14/2019	2/15/2019	2/18/2019	EXCEEDED 160 PPM 3HR AND 50 PPM 24HR H2S LIMIT	Chevron Products Company	841 Chevron Way	94801
07L17	I	A0010	4169	2/18/2019	2/19/2019	2/19/2019	NOX ANALYZERS BECAME INOP ON FEBRUARY 18, 2019	Chevron Products Company	841 Chevron Way	94801
07L18	I	A0010	4352	2/18/2019	2/19/2019	2/19/2019	CO ANALYZER BECAME INOP FEBRUARY 18TH	Chevron Products Company	841 Chevron Way	94801
07L19	E	A0010		2/17/2019	2/20/2019	2/20/2019	EXCEEDED 160 PPM 3HR AVERAGE	Chevron Products Company	841 Chevron Way	94801
07L27	E	A0010	4285	2/23/2019	2/23/2019	2/26/2019	EXCEEDED OPACITY LIMIT OF 30% FOR MORE THAN ONE 6 MIN	Chevron Products Company	841 Chevron Way	94801
07L28	E	A0010	4285	2/23/2019	2/23/2019	2/26/2019	TR SETS LESS THAN 296 MA AVERAGED OVER 3HR PERIOD	Chevron Products Company	841 Chevron Way	94801
07L30	I	A0010	4159	2/21/2019	2/26/2019	2/27/2019	NOX AND O2 ANALYZERS BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07L31	I	A0010	4167	2/21/2019	2/26/2019	2/27/2019	NOX AND O2 ANALYZERS BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07L38	B	A0010	701	3/6/2019	3/6/2019	3/6/2019	V-701 FUEL GAS DRUM EXCEEDED 160PPM 3HR AVG H2S LIMIT	Chevron Products Company	841 Chevron Way	94801
07L40	E	A0010	701	3/6/2019	3/6/2019	3/6/2019	V-701 FUEL GAS DRUM EXCEEDED 160 PPM 3-HR AVG H2S LIMIT	Chevron Products Company	841 Chevron Way	94801
07L44	E	A0010		3/5/2019	3/5/2019	3/7/2019	FURNACE(S4472) HAD NO NH3 INJECTION WITHIN 30 MINS	Chevron Products Company	841 Chevron Way	94801
07L46	E	A0010	4285	3/6/2019	3/8/2019	3/8/2019	START UP AT FCCU TR SETS OPERATED W/GREATER THAN 2 TRS SETS	Chevron Products Company	841 Chevron Way	94801
07L47	E	A0010	4285	3/6/2019	3/7/2019	3/8/2019	DURING STARTUP AT FCC THE ESP TEM OPEARATED BELOW 550 DEG	Chevron Products Company	841 Chevron Way	94801
07L48	E	A0010	4228	3/6/2019	3/6/2019	3/8/2019	SRU 2 EXCEEDED 1 HR 250 PPM SO2	Chevron Products Company	841 Chevron Way	94801
07L49	E	A0010	4227	3/6/2019	3/6/2019	3/8/2019	SRU 1 EXCEEDED 1-HR 250 PPM	Chevron Products Company	841 Chevron Way	94801
07L50	E	A0010	475	3/6/2019	3/6/2019	3/8/2019	FUEL GAS DRUM EXCEEDED THE 160 PPM 3-HR AVG	Chevron Products Company	841 Chevron Way	94801
07L51	E	A0010	701	3/6/2019	3/6/2019	3/8/2019	V-701 EXCEEDED 160 PPM 3-HR AVG	Chevron Products Company	841 Chevron Way	94801
07L52	I	A0010	6021	3/6/2019	4/18/2019	3/8/2019	HYDROGEN PLANT TRAIN 1 VENT GAS FLOW METERS BECAME INOP	Chevron Products Company	841 Chevron Way	94801

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07L55	E	A0010	4227	3/7/2019	3/7/2019	3/11/2019	SRU1 EXCEEDED IT'S 1HR 250 PPM SO2 LIMIT	Chevron Products Company	841 Chevron Way	94801
07L56	E	A0010	4229	3/7/2019	3/7/2019	3/11/2019	SRU3 EXCEEDED IT'S 1HR 250 PPM SO2 LIMIT	Chevron Products Company	841 Chevron Way	94801
07L65	E	A0010		3/12/2019	3/12/2019	3/15/2019	V-701 AVERAGE H2S LIMIT EXCEEDED 160 PPM 3-HR	Chevron Products Company	841 Chevron Way	94801
07L74	E	A0010	4285	3/19/2019	3/19/2019	3/21/2019	THE FCC TR SETS TRIPPED OFFLINE @ 2218 DURING UPSET	Chevron Products Company	841 Chevron Way	94801
07L76	E	A0010	4285	3/19/2019	3/19/2019	3/21/2019	FCC TR SETS TRIPPED OFFLINE DURING PROCESS UPSET.	Chevron Products Company	841 Chevron Way	94801
07L87	I	A0010		3/28/2019	3/31/2019	4/1/2019	GAS CHROMATOGRAPH THAT MONITORS BTU BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07L88	I	A0010		3/29/2019	3/30/2019	4/1/2019	H2S ANALYZER FAILED CALIBRATION AND WAS RECALIBRATED	Chevron Products Company	841 Chevron Way	94801
07L89	I	A0010		3/31/2019	4/1/2019	4/1/2019	H2S ANALYZER FAILED CALIBRATION AND WAS RECALIBRATED	Chevron Products Company	841 Chevron Way	94801
07L91	E	A0010	4228	3/7/2019	3/7/2019	4/8/2019	REFINERY SHUTDOWN RECOVERY	Chevron Products Company	841 Chevron Way	94801
07L92	E	A0010	4229	3/6/2019	3/6/2019	4/8/2019	REFINERY SHUTDOWN	Chevron Products Company	841 Chevron Way	94801
07L93	E	A0010		4/4/2019	4/7/2019	4/8/2019	REFINERY EXCEEDED CALENDAR DAY NOX EMISSIONS	Chevron Products Company	841 Chevron Way	94801

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07L96	I	A0010	6051	4/11/2019	4/15/2019	4/12/2019	ALKY COOLING TOWER HC ANALYZERS POTENTIALLY WENT INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07M02	I	A0010		4/20/2019	4/22/2019	4/22/2019	CHROMATOGRAPH FOR F-1100 AND F-2100 BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07M03	I	A0010	6013	4/19/2019		4/22/2019	NISO FLARE PURGE GAS FLOW METER INOP	Chevron Products Company	841 Chevron Way	94801
07M12	E	A0010	4338	5/4/2019	5/4/2019	5/7/2019	NOX CORRECTED TO 3%, O2, EXCEEDED 40-PPM 8HR AVERAGE	Chevron Products Company	841 Chevron Way	94801
07M13	E	A0010		5/4/2019	5/5/2019	5/7/2019	H2 PLANT FURNACE HAD NO NH3 INJECTION WITHIN 30 MINS.	Chevron Products Company	841 Chevron Way	94801
07M14	I	A0010		5/4/2019	5/7/2019	5/8/2019	S-4472 BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07M15	I	A0010	6015	5/6/2019		5/8/2019	WATER SEAL LEVEL BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07M16	E	A0010		5/4/2019	5/4/2019	5/8/2019	EXCEEDED 5PPM NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
07M17	E	A0010		5/4/2019	5/4/2019	5/8/2019	EXCEEDED 8HR AND 24HR START UP TIMER	Chevron Products Company	841 Chevron Way	94801
07M21	I	A0010	6021	5/10/2019		5/13/2019	H2 FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07M36	E	A0010	4228	6/1/2019	6/3/2019	6/4/2019	THE SRU-2 TRAIN WESP SHUTDOWN, WAS RESTARTED ON 06/03	Chevron Products Company	841 Chevron Way	94801

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07M37	I	A0010		6/3/2019	6/4/2019	6/5/2019	H2 FLARE MASS BECAME INOPERATIVE DUE TO MAINTENANCE	Chevron Products Company	841 Chevron Way	94801
07M38	E	A0010	4228	6/4/2019	6/5/2019	6/7/2019	SRU2 TRAIN WESP SHUTDOWN	Chevron Products Company	841 Chevron Way	94801
07M39	E	A0010	4228	6/4/2019	6/4/2019	9/7/2019	SRU2 TRAIN THERMAL OXIDIZER OPERATED BELOW MIM TEMPER LIMIT	Chevron Products Company	841 Chevron Way	94801
07M42	I	A0010		6/6/2019		6/10/2019	THE CO ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07M44	E	A0010	4228	6/8/2019	6/8/2019	6/11/2019	SRU2 TRAIN WESP SHUTDOWN AND WAS RESTARTED	Chevron Products Company	841 Chevron Way	94801
07M45	E	A0010		6/10/2019	6/10/2019	6/11/2019	F-2100 EXCEEDED THE 1HR AVERAGE NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
07M49	P	A0010	9323	5/17/2019	5/17/2019	5/20/2019	NATURAL GAS RELEASED WHILE SHUTTING DOWN	Chevron Products Company	841 Chevron Way	94801
07M50	I	A0010		6/11/2019	6/12/2019	6/13/2019	F-1100 AND F-2100 BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07M52	E	A0010	6021	6/12/2019	6/12/2019	6/14/2019	AVG NET HEATING OF COMBUSTION ZONE LESS THAN 270 BTU/SCF	Chevron Products Company	841 Chevron Way	94801
07M54	E	A0010		6/13/2019	6/13/2019	6/17/2019	THE NET HEATING VALUE@ H2 FLARE WAS LESS THAN 270 BTU/SCF	Chevron Products Company	841 Chevron Way	94801
07M55	E	A0010		6/13/2019	6/13/2019	6/17/2019	NO NH3 INJECTION FOR 30 MINS OF THE SCR, REACHING 562 F	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07M56	I	A0010	4285	6/14/2019		6/17/2019	SO2 ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07M64	I	A0010	4285	6/26/2019	6/27/2019	6/28/2019	CEMS BECAME INOPERATIVE AND WAS RESTARTED/CALIBRATED	Chevron Products Company	841 Chevron Way	94801
07M65	I	A0010	6039	6/29/2019		7/1/2019	RLOP FLARE POTENTIALLY BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07M67	I	A0010	6015	7/1/2019		7/2/2019	SAMPLE STATION POTENTIALLY BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07M78	E	A0010	4228	7/6/2019	7/6/2019	7/9/2019	SRU 2 TRAIN EXCEEDED THE 1 HR AVERAGE FOR SO2	Chevron Products Company	841 Chevron Way	94801
07M79	E	A0010	4228	7/6/2019	7/6/2019	7/9/2019	WESP @ SRU 2 TRAIN SHUTDOWN AND WAS RESTARTED	Chevron Products Company	841 Chevron Way	94801
07M81	I	A0010	4228	7/11/2019	7/16/2019	7/15/2019	SRU #2 TRAIN BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07M85	I	A0010		7/16/2019	7/17/2019	7/17/2019	TOTAL SULFUR ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07M87	I	A0010	4061	7/16/2019	7/17/2019	7/18/2019	NOX ANALYZER BECAME INOPERATIVE & WAS REPAIRED/CALIBRATED	Chevron Products Company	841 Chevron Way	94801
07M89	I	A0010		7/15/2019	7/17/2019	7/17/2019	H2 FLARE MASS SPECTROMETER BECAM INOP	Chevron Products Company	841 Chevron Way	94801
07M90	E	A0010	4228	7/17/2019	7/20/2019	7/19/2019	SRU 2 EXCEEDED 3 HR AVERAGE NOX CORRECTED TO 3% O2 LIMIT	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07M92	I	A0010	4341	7/21/2019	7/22/2019	7/22/2019	NOX ANALYZER BECAME INOPERATIVE, WAS REPAIRED & CALIBRATED	Chevron Products Company	841 Chevron Way	94801
07M95	E	A0010	4228	7/20/2019	7/20/2019	7/21/2019	ACID GAS FEED WAS INTRODUCED INTO THE 2SRU	Chevron Products Company	841 Chevron Way	94801
07M98	B	A1840	6	7/24/2019		7/24/2019	PG&E POWER OUTAGE	West Contra Costa County Landfill	1 Parr Boulevard	94801
07N11	I	A0010	6012	8/3/2019	8/4/2019	8/5/2019	FLARE WATER SEAL LEVEL INDICATOR BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07N15	I	A0010	6016	8/4/2019		8/6/2019	FCC FLARE BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07N17	E	A0010	4228	8/2/2019	8/20/2019	8/6/2019	SRU TRAIN EXCEEDED 3HR AVERAGE NOX	Chevron Products Company	841 Chevron Way	94801
07N22	E	A0010		8/5/2019	8/5/2019	8/8/2019	8HR START UP LIMIT EXCEEDED	Chevron Products Company	841 Chevron Way	94801
07N23	E	A0010		8/4/2019	8/4/2019	8/8/2019	20HR AND 24HR START UP EXCEEDED	Chevron Products Company	841 Chevron Way	94801
07N24	E	A0010	701	8/6/2019	8/6/2019	8/8/2019	V-701 EXCEEDED 1HR AVERAGE TOTAL SULFUR LIMIT	Chevron Products Company	841 Chevron Way	94801
07N25	E	A0010		2/6/2019	2/7/2019	8/8/2019	EXCEEDED 5PPM NOX	Chevron Products Company	841 Chevron Way	94801
07N26	E	A0010		5/10/2019	5/10/2019	8/8/2019	EXCEEDED 8HR STARTUP LIMIT	Chevron Products Company	841 Chevron Way	94801

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07N27	E	A0010		5/29/2019	5/29/2019	8/8/2019	EXCEEDED 8HR STARTUP TIME	Chevron Products Company	841 Chevron Way	94801
07N31	I	A0010		8/8/2019	8/9/2019	8/12/2019	H2S ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07N32	E	A0010		8/8/2019	8/8/2019	8/12/2019	EXCEEDED ITS 1HR AVERAGE TOTAL SULFUR LIMIT	Chevron Products Company	841 Chevron Way	94801
07N33	I	A0010	6021	8/10/2019	8/12/2019	8/12/2019	H2 FLARE MASS SPECTROMETER POTENTIALLY INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07N34	I	A0010	4285	8/11/2019		8/13/2019	SO2 ANALYZER POTENTIALLY BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07N50	I	A0010	4285	8/22/2019		8/23/2019	FCC F-300 SO2 ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07N51	E	A0010		8/22/2019	8/23/2019	8/26/2019	EXCEEDED 20HR STARTUP TIME, NOX	Chevron Products Company	841 Chevron Way	94801
07N52	E	A0010		8/23/2019		8/26/2019	EXCEEDED 132HR STARTUP OF HYDROGEN TRAIN 2	Chevron Products Company	841 Chevron Way	94801
07N56	I	A0010	6015	8/28/2019		8/30/2019	D&R FLARE BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07N59	B	A1840	15	9/1/2019	9/1/2019	9/2/2019	PG&E OUTAGE	West Contra Costa County Landfill	1 Parr Boulevard	94801
07N60	I	A0010		9/2/2019	9/3/2019	9/3/2019	V-701 H2S ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801

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07N61	I	A0010	4285	9/2/2019	9/3/2019	9/3/2019	FCC NOX ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07N64	I	A0010	4044	9/3/2019	9/4/2019	9/5/2019	NOX ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07N68	I	A0010	6013	9/4/2019		9/6/2019	NISO FLARE NATURAL GAS PURGE FLOW	Chevron Products Company	841 Chevron Way	94801
07N69	E	A0010	4228	9/5/2019	9/12/2019	9/6/2019	EXCEEDED 3HR AVERAGE NOX	Chevron Products Company	841 Chevron Way	94801
07N70	E	A0010	4228	9/4/2019	9/4/2019	9/6/2019	SRU 2 TRAIN WESP, DEENERGIZED	Chevron Products Company	841 Chevron Way	94801
07N71	E	A0010	4228	9/4/2019	9/5/2019	9/6/2019	SRU TRAIN OPERATED BELOW MINIMUM TEMP REQUIREMENT	Chevron Products Company	841 Chevron Way	94801
07N73	E	A0010	4285	9/6/2019	9/6/2019	9/9/2019	EXCEEDED ITS 30% SECOND 6-MIN AVERAGE LIMIT	Chevron Products Company	841 Chevron Way	94801
07N75	E	A0010	6013	6/5/2019	9/6/2019	9/9/2019	NISO FLARE EXCEEDED ITS COMBINED PURGE & PILOT GAS T/P LIMIT	Chevron Products Company	841 Chevron Way	94801
07N76	I	A0010	6051	9/7/2019		9/9/2019	ALKY COOLING WATER TOWER HC ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07N79	I	A0010	6012	9/8/2019	9/10/2019	9/10/2019	SISO WATER SEAL LEVEL INDICATOR BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07N81	I	A0010	4285	9/9/2019	9/12/2019	9/11/2019	CO ANALYZER BECAME INOPERATIVE, REPAIRS ONGOING	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07N82	I	A0010	6051	9/10/2019	9/11/2019	9/12/2019	ALKY COOLING WATER HYDROCARBON ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07N83	I	A0010		9/10/2019	9/11/2019	9/12/2019	ANALYZER THAT MEASURES TOTAL SULFUR CONTENT BECAME INOP.	Chevron Products Company	841 Chevron Way	94801
07N84	I	A0010		9/10/2019	9/18/2019	9/12/2019	H2 PLANT FLARE NAT. GAS PURGE FLOWMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07N87	E	A0010	4228	9/12/2019	9/12/2019	9/13/2019	ACID GAS WAS INTRODUCED TO 2SRU TRAIN	Chevron Products Company	841 Chevron Way	94801
07N89	I	A0010		9/12/2019		9/16/2019	ANALYZER BECAME INOPERATIVE, REPAIRS BEING MADE	Chevron Products Company	841 Chevron Way	94801
07P02	I	A0010	6015	9/18/2019		9/20/2019	D&R FLARE SAMPLE STATION BECAME INOPERATIVE, REPAIRS ONGOING	Chevron Products Company	841 Chevron Way	94801
07P05	E	A0010	4228	9/20/2019	9/23/2019	9/23/2019	SRU TRAIN 2 3HR AVERAGE NOX CORRECTED	Chevron Products Company	841 Chevron Way	94801
07P13	I	A0010	4285	9/26/2019	9/29/2019	9/30/2019	FCC F-300 NOX ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07P17	I	A0010	4165	9/28/2019	9/30/2019	9/30/2019	F-600 MNOX & O2 ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07P24	I	A0010		10/6/2019	10/7/2019	10/7/2019	ANALYZER FOR TOTAL SULPHUR CONTENT @ H2 PLANT INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07P31	E	A0010	4228	10/9/2019	10/9/2019	10/11/2019	TAIL GAS THERMAL OXIDIZER OPERATED BELOW THE MIN. TEMP	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07P32	E	A0010	4228	10/9/2019		10/11/2019	SRU 2 TRAIN WESP DEENERGIZED	Chevron Products Company	841 Chevron Way	94801
07P33	E	A0010	4227	10/10/2019		10/11/2019	SRU 1 TRAIN WESP DEENERGIZED	Chevron Products Company	841 Chevron Way	94801
07P35	I	A0010		10/11/2019	10/12/2019	10/14/2019	SO2 ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07P37	E	A0010		10/10/2019	10/11/2019	10/14/2019	REFINERY EXCEEDED REFINERY-WIDE NOX MASS EMISSIONS LIMIT	Chevron Products Company	841 Chevron Way	94801
07P38	E	A0010	4228	10/11/2019	10/11/2019	10/15/2019	SRU TRAIN #2 EXCEEDED IT'S 3 HR AVERAGE	Chevron Products Company	841 Chevron Way	94801
07P39	E	A0010	4227	10/11/2019	10/11/2019	10/15/2019	SRU TRAIN 1 EXCEEDED 3 HR AVERAGE NOX	Chevron Products Company	841 Chevron Way	94801
07P40	E	A0010	4227	10/12/2019	10/12/2019	10/15/2019	SRU 1 TRAIN EXCEEDED IT'S 3 HOUR AVERAGE	Chevron Products Company	841 Chevron Way	94801
07P41	E	A0010	4228	10/13/2019	10/13/2019	10/15/2019	SRU TRAIN 2 EXCEEDED 3 HOUR AVERAGE NOX	Chevron Products Company	841 Chevron Way	94801
07P42	E	A0010		10/11/2019	10/11/2019	10/15/2019	H2 PLANT FURNACE NO NH3 INJECTION WHEN SCR BED REACHED 500F	Chevron Products Company	841 Chevron Way	94801
07P43	I	A0010		10/13/2019	10/14/2019	10/15/2019	H2S ANALYZER BECAME INOPERATIVE AND WAS REPAIRED/CALIBRATED	Chevron Products Company	841 Chevron Way	94801
07P44	E	A0010	4227	10/12/2019	10/12/2019	10/15/2019	ACID GAS FEED WAS INTRODUCED BEFORE WESP WAS REENERGIZED	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07P45	E	A0010	4228	10/13/2019	10/13/2019	10/15/2019	ACID GAS FEED INTRODUCED TO PLANT BEFORE WESP WAS REENERGIZE	Chevron Products Company	841 Chevron Way	94801
07P54	E	A0010	4228	10/20/2019	10/21/2019	10/22/2019	SRU 2 TRAIN DEENERGIZED PRIOR TO PULLING ACID GAS FED	Chevron Products Company	841 Chevron Way	94801
07P55	E	A0010	4285	10/19/2019	10/19/2019	10/22/2019	STACK OPACITY EXCEEDED 30% 6-MIN AVERAGE	Chevron Products Company	841 Chevron Way	94801
07P58	I	A0010	4229	10/19/2019	10/21/2019	10/22/2019	SO2 AND O2 ANALYZERS BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07P66	E	A0010	4227	10/27/2019	10/27/2019	10/28/2019	SRU TRAIN 1 EXCEEDED 3 HR AVG	Chevron Products Company	841 Chevron Way	94801
07P70	B	A1840	5	10/27/2019	10/28/2019	10/28/2019	PG&E POWER OUTAGE	West Contra Costa County Landfill	1 Parr Boulevard	94801
07P76	I	A0010	701	10/28/2019	10/29/2019	10/30/2019	V-701 H2S ANALYZER BECAME INOPERATIVE. REPAIRED & CALIBRATED	Chevron Products Company	841 Chevron Way	94801
07P79	I	A0010		10/30/2019	10/31/2019	11/1/2019	V-701 H2S ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07P82	I	A0010		11/2/2019	11/3/2019	11/4/2019	V-701 ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07P87	I	A0010	4341	11/3/2019	11/4/2019	11/5/2019	NOX & O2 ANALYZERS BECAME INOPERATIVE AND WHERE REPAIRED	Chevron Products Company	841 Chevron Way	94801
07P92	I	A0010		11/11/2019	11/12/2019	11/12/2019	H2S ANALYZER BECAME INOPERATIVE, WAS REPAIRED & RECALIBRATED	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07P93	I	A0010	701	11/11/2019	11/12/2019	11/12/2019	V-701 H2S ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Q01	I	A0010		11/20/2019	11/25/2019	11/21/2019	V-701 H2S ANALYZER BECAME INOPERATIVE, REPAIRS ONGOING	Chevron Products Company	841 Chevron Way	94801
07Q02	I	A0010	4352	11/19/2019	12/6/2019	11/21/2019	COGEN 2000 CO & O2 ANALYZERS BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07Q04	E	A0023	1	11/17/2019	11/17/2019	11/22/2019	VALVE FAILURE CAUSED SULFUR TO FEED RESULTING IN EXCESS SO2	Chemtrade West US LLC	525 Castro Street	94801
07Q06	E	A0010	4228	11/20/2019	11/21/2019	11/25/2019	SRU 2 TRAIN EXCEEDED AVERAGE SO2 LIMIT	Chevron Products Company	841 Chevron Way	94801
07Q07	E	A0010		11/22/2019	11/22/2019	11/25/2019	ACID GAS FEED WAS INTRODUCED TO THE PLANT	Chevron Products Company	841 Chevron Way	94801
07Q08	E	A0010	4228	11/22/2019	11/23/2019	11/25/2019	SRU 2 TRAIN EXC 3HR AVERAGE NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
07Q19	I	A0010	475	11/26/2019	12/6/2019	11/27/2019	V-475 BTU ANALYZER BECAME INOP. REPAIRS ONGOING.	Chevron Products Company	841 Chevron Way	94801
07Q22	E	A0010	4228	11/28/2019	11/28/2019	11/29/2019	SRU TRAIN 2 EXCEEDED 3-HR AVG NOX	Chevron Products Company	841 Chevron Way	94801
07Q26	E	A0010	4227	11/30/2019	11/30/2019	12/3/2019	SRU TRAIN 1 SHUTDOWN AND RESTARTED	Chevron Products Company	841 Chevron Way	94801
07Q27	E	A0010		8/22/2019	8/23/2019	11/19/2019	FURNACE START UP TIME EXCEEDED RESULTING IN NOX EXCESS	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07Q28	E	A0010		2/6/2019	2/7/2019	11/19/2019	FURNACE START UP TIME EXCEEDED RESULTING IN NOX EXCESS	Chevron Products Company	841 Chevron Way	94801
07Q29	E	A0010	4227	12/1/2019	12/1/2019	12/4/2019	SRU TRAIN 1 WESP SHUTDOWN AND RESTARTED.	Chevron Products Company	841 Chevron Way	94801
07Q33	I	A0010	6015	12/2/2019	12/3/2019	12/4/2019	VENT GAS FLOW ANALYZRT AT THE LSFO FLARE BEACAME INOP	Chevron Products Company	841 Chevron Way	94801
07Q34	I	A0010	475	12/3/2019	12/6/2019	12/4/2019	SULFUR ANALYZER BECAME INOP. REPAIRS ONGOING.	Chevron Products Company	841 Chevron Way	94801
07Q35	I	A0010	475	12/3/2019	12/6/2019	12/4/2019	H2S ANALYZER BECAME INOP. REPAIRS ONGOING.	Chevron Products Company	841 Chevron Way	94801
07Q36	I	A0010	6015	12/2/2019		12/4/2019	VENT GAS TEMP ANALYZER BECAME INOP. REPAIRS ONGOING.	Chevron Products Company	841 Chevron Way	94801
07Q37	I	A0010		12/3/2019	12/6/2019	12/4/2019	V-475 H2S ANALYZER BECAME INOP - REPAIRS ONGOING	Chevron Products Company	841 Chevron Way	94801
07Q38	I	A0010	6015	12/4/2019		12/6/2019	VENT GAS TEMP ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Q40	I	A0010		12/5/2019	12/6/2019	12/6/2019	H2 FLARE HN3 VENT GAS FLOW BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07Q44	E	A0010	4155	12/6/2019	12/6/2019	12/10/2019	F135 EXCEEDED IT'S ROLLING 3 HR AVERAGE NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
07Q49	I	A0010	4352	12/10/2019		12/11/2019	COGEN 2000 CO & O2 ANALYZERS BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07Q53	E	A0010	4228	12/11/2019	12/11/2019	12/13/2019	EXCEEDED ITS 3HR AVERAGE, NOX CORRECTED TO 0% O2 LIMIT	Chevron Products Company	841 Chevron Way	94801
07Q65	E	A0010	4228	12/13/2019	12/13/2019	12/16/2019	SRU TRAIN 2 EXCEEDED ITS 3 HOUR AVERAGE NOX	Chevron Products Company	841 Chevron Way	94801
07Q67	B	A1840	5	12/16/2019	12/16/2019	12/16/2019	PG&E POWER LOSS	West Contra Costa County Landfill	1 Parr Boulevard	94801
07Q68	E	A1840	5	12/16/2019	12/16/2019	12/16/2019	PG&E POWER LOSS	West Contra Costa County Landfill	1 Parr Boulevard	94801
07Q71	E	A0010	4227	12/14/2019	12/14/2019	12/18/2019	SRU 1 TRAIN WESP WAS SHUTDOWN AND RESTARTED	Chevron Products Company	841 Chevron Way	94801
07Q72	E	A0010	4227	12/15/2019	12/15/2019	12/19/2019	SRU 1 TRAIN OXIDIZER OPERATED BELOW MIN TEMP	Chevron Products Company	841 Chevron Way	94801
07Q73	E	A0010	4228	12/15/2019	12/15/2019	12/19/2019	SRU 2 TRAIN OXIDIZER OPERATED BELOW MIN TEMP	Chevron Products Company	841 Chevron Way	94801
07Q74	E	A0010	4228	12/15/2019	12/15/2019	12/19/2019	SRU 2 TRAIN OXIDIZER OPERATED BELOW MIN TEMP	Chevron Products Company	841 Chevron Way	94801
07Q75	E	A0010	4227	12/16/2019	12/16/2019	12/19/2019	SRU TRAIN 1 EXCEEDED IT'S 3 HR AVERAGE NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
07Q76	E	A0010	4228	12/16/2019	12/16/2019	12/19/2019	THERMAL OXIDIZER OPERATED BELOW MINIMUM TEMPRATURE	Chevron Products Company	841 Chevron Way	94801
07Q77	E	A0010	4285	12/18/2019	12/18/2019	12/19/2019	EXCEEDED 30% 6-MIN AVERAGE LIMIT	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07Q80	I	A0010	6013	12/17/2019	12/18/2019	12/19/2019	FLARE WATER SEAL LEVEL INDICATOR BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07Q83	I	A0010	6039	12/18/2019		12/20/2019	FLARE WATER SEAL LEVEL INDICATOR BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Q84	I	A0010	6013	12/18/2019		12/20/2019	NISO FLARE VENT GAS FLOWMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Q85	I	A0010	6039	12/18/2019		12/20/2019	RLOP FLARE VENT GAS FLOWMETER POTENTIALLY BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Q86	I	A0010	6012	12/19/2019		12/20/2019	SISO FLARE VENT GAS FLOWMETER POTENTIALLY BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Q91	I	A0010	6013	12/20/2019	12/27/2019	12/23/2019	NISO FLARE VENT GAS PRESSURE MONITOR INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Q92	I	A0010	6016	12/20/2019	12/22/2019	12/23/2019	FCC FLARE VENT GAS MONITOR BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Q95	I	A0010	6013	12/19/2019	12/23/2019	12/23/2019	NISO FLARE PURGE GAS FLOWMETER, POTENTIALLY INOP	Chevron Products Company	841 Chevron Way	94801
07Q96	I	A0010	6013	12/19/2019		12/23/2019	NISO FLARE PURGE GAS FLOWMETER POTENTIALLY INOP	Chevron Products Company	841 Chevron Way	94801
07R00	I	A0010		12/24/2019	12/25/2019	12/26/2019	H2S ANALYZER FAILED CALIBRATION	Chevron Products Company	841 Chevron Way	94801
07R01	E	A0010		12/23/2019	12/24/2019	12/26/2019	V-475 FUEL GAS DRUM EXCEEDED 160 PPM	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07R02	E	A0010		12/23/2019	12/24/2019	12/26/2019	V-701 FUEL GAS DRUM EXCEEDED 160 PPM	Chevron Products Company	841 Chevron Way	94801
07R03	E	A0010		12/23/2019	12/24/2019	12/26/2019	V-475 FUEL GAS DRUM EXCEEDED 160 PPM	Chevron Products Company	841 Chevron Way	94801
07R04	E	A0010		12/23/2019	12/24/2019	12/26/2019	V-701 FUEL GAS DRUM EXCEEDED 1-HR AVG TOTAL SULFUR LIMIT	Chevron Products Company	841 Chevron Way	94801
07R05	I	A0010	4161	12/25/2019	12/26/2019	12/27/2019	NOX ANALYZER FAILED CALIBRATION AND WAS RECALIBRATED	Chevron Products Company	841 Chevron Way	94801
07R06	I	A0010		12/25/2019	12/26/2019	12/27/2019	H2S ANALYZER BECAME INOP.	Chevron Products Company	841 Chevron Way	94801
07R07	E	A0010	4228	12/24/2019	12/24/2019	12/27/2019	ACID GAS FEED WAS INTRODUCED INTO THE 2SRU TRAIN	Chevron Products Company	841 Chevron Way	94801
07R08	E	A0010	4228	12/23/2019	12/24/2019	12/27/2019	THERMAL OXIDIZER TEMP OPERATED BELOW MINIMUM TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801
07R13	I	A0010	6016	12/28/2019	12/30/2019	12/30/2019	FCC FLARE VENT GAS FLOW #1 (59FI735) MONITOR INOP	Chevron Products Company	841 Chevron Way	94801
07R14	I	A0010	6016	12/28/2019	12/30/2019	12/30/2019	FCC FLARE VENT GAS FLOW #2 (59FI737) MONITOR INOP	Chevron Products Company	841 Chevron Way	94801
07R16	I	A0010	6013	12/30/2019		12/30/2019	SAMPLE STATION BECAME INOPERATIVE / REPAIRS ONGOING	Chevron Products Company	841 Chevron Way	94801
07R18	E	A0010	4229	12/31/2019	12/31/2019	1/2/2020	SRU #3 EXCEEDED ITS 1HR 250 PPM SO2 LIMIT	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07R19	I	A0010	4350	1/1/2020	1/2/2020	1/2/2020	COGEN 1000 NOX ANALYZER FAILED CALIBRATION	Chevron Products Company	841 Chevron Way	94801
07R21	I	A0010	4285	1/5/2020	1/6/2020	1/6/2020	FCC NOX ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07R22	E	A0010		12/24/2019	12/24/2019	1/6/2020	FUEL GAS DRUM EXCEEDED 50PPM 24 HR AVERAGE H2S LIMIT	Chevron Products Company	841 Chevron Way	94801
07R24	I	A0010	4352	1/6/2020	1/14/2020	1/7/2020	COGEN 2000 CO AND O2 ANALYZERS ARE BEING REPLACED	Chevron Products Company	841 Chevron Way	94801
07R28	E	A0010	4227	1/8/2020	1/8/2020	1/10/2020	EXCEEDED 3HR AVERAGE NOX CORRECTED TO 0% O2 LIMIT	Chevron Products Company	841 Chevron Way	94801
07R33	E	A0010	4285	1/11/2020	1/11/2020	1/14/2020	FCC TR SETS TRIPPED OFFLINE AND WHERE PLACED BACK INTO SVC	Chevron Products Company	841 Chevron Way	94801
07R35	I	A0010	6013	1/13/2020		1/15/2020	NISO FLARE PILOT GAS FLOWMETER POTENTIALLY BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07R49	B	A0010	4155	1/26/2020	1/26/2020	1/27/2020	BAD ORDER FLOW CONTROLLER IN FC-1350	Chevron Products Company	841 Chevron Way	94801
07R50	I	A0010	4285	1/26/2020	2/2/2020	1/27/2020	FCC F-300 ESP HOPPER INLET TEMP INDICATOR BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07R52	E	A0010		5/29/2019	5/29/2019	1/28/2020	TRAIN 2 DID NOT INJECT AMMONIA TO SCR	Chevron Products Company	841 Chevron Way	94801
07R53	E	A0010		5/5/2019	5/3/2019	1/28/2020	H2 TRAIN WAS STARTING UP AND EXCEEDED 8 HR LIMIT	Chevron Products Company	841 Chevron Way	94801

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07R54	E	A0010	4155	1/26/2020	1/26/2020	1/27/2020	HOT OIL FURNACE EXCEEDED NOX LIMIT OVER 3 HR AVERAGE	Chevron Products Company	841 Chevron Way	94801
07R56	E	A0010		8/5/2019	8/5/2019	8/8/2019	AMMONIA INJECTION TO SCR (A-301) INTERRUPTED DURING STARTUP	Chevron Products Company	841 Chevron Way	94801
07R57	E	A0010	4285	1/26/2020	1/26/2020	1/29/2020	F-300 OPACITY EXCEEDED NO>ONE 6 MINUTE AVERAGE	Chevron Products Company	841 Chevron Way	94801
07R58	E	A0010	4227	1/27/2020	1/28/2020	1/29/2020	SRU 1 TRAIN WESP EXCEEDED 1-HR AVG WESP VOLTAGE	Chevron Products Company	841 Chevron Way	94801
07R59	E	A0010	4228	1/26/2020	1/26/2020	1/29/2020	SRU TRAIN 2 EXCEEDED 3 HR AVG NOX CORRECTED TO 0% O2 LIMIT	Chevron Products Company	841 Chevron Way	94801
07R60	E	A0010	4285	1/26/2020	1/26/2020	1/29/2020	OPACITY EXCEEDED LIMIT	Chevron Products Company	841 Chevron Way	94801
07R63	I	A0010		1/4/2020	1/6/2020	1/6/2020	NOX ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07R64	E	A0010	4044	2/2/2020	2/3/2020	2/4/2020	EXCEEDED THE TITLE V DAILY FIRING RATE LIMIT	Chevron Products Company	841 Chevron Way	94801
07R65	E	A0010	4044	1/31/2020	2/1/2020	2/4/2020	EXCEEDED THE TITLE V DAILY FIRING RATE LIMIT	Chevron Products Company	841 Chevron Way	94801
07R66	E	A0010	4044	1/29/2020	1/30/2020	2/4/2020	EXCEEDED THE TITLE V DAILY FIRING RATE LIMIT	Chevron Products Company	841 Chevron Way	94801
07R72	E	A0010		2/7/2020	2/7/2020	2/10/2020	WHARF EMISSION REDUCTION DEVICE POTENTIALY OP. >1200 DEG F	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07R74	E	A0010	4227	2/10/2020	2/10/2020	2/12/2020	SRU TRAIN 1 EXCEEDED 3-HR AVG NOX CORRECTED TO 0% O2 LIMIT	Chevron Products Company	841 Chevron Way	94801
07R75	E	A0010	4228	2/10/2020	2/10/2020	2/12/2020	SRU TRAIN 2 EXCEEDED 3-HR AVG NOX CORRECTED TO 0% O2 LIMIT	Chevron Products Company	841 Chevron Way	94801
07R76	I	A0010	6021	2/11/2020	2/13/2020	2/12/2020	H2 PLANT FLARE MASS SPEC BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07R78	E	A0010	4227	2/10/2020	2/11/2020	2/13/2020	SRU 1 TRAIN EXCEEDED CALENDAR DAY SO2 LIMIT	Chevron Products Company	841 Chevron Way	94801
07R79	E	A0010	4227	2/10/2020	2/11/2020	2/13/2020	SRU 1 TRAIN EXCEEDED CALENDAR DAY CO LIMIT	Chevron Products Company	841 Chevron Way	94801
07R80	E	A0010	4227	2/10/2020	2/10/2020	2/13/2020	SRU TRAIN 1 EXCEEDED 1HR 250PPM SO2 LIMIT	Chevron Products Company	841 Chevron Way	94801
07R81	E	A0010		2/10/2020	2/10/2020	2/13/2020	F-1100 EXCEEDED 1HR CO AVERAGE	Chevron Products Company	841 Chevron Way	94801
07R82	E	A0010		2/10/2020	2/10/2020	2/13/2020	F-2100 EXCEEDED 1HR CO LIMIT	Chevron Products Company	841 Chevron Way	94801
07R83	E	A0010	4227	2/10/2020	2/10/2020	2/13/2020	THERMAL OXIDIZER TEMPERATURE OPERATED BELOW MIN TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801
07R84	E	A0010	4228	2/12/2020	2/12/2020	2/13/2020	SRU TRAIN 2 TRIPPED OFFLINE	Chevron Products Company	841 Chevron Way	94801
07R85	E	A0010	4227	2/10/2020	2/10/2020	2/13/2020	SRU TRAIN 1 WESP TRIPPED OFFLINE	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07R86	E	A0010	4227	2/11/2020	2/11/2020	2/13/2020	SRU 1 TRAIN WESP TRIPPED OFFLINE	Chevron Products Company	841 Chevron Way	94801
07R87	E	A0010		2/11/2020	2/15/2020	2/14/2020	POTENTIAL DEVIATION WAS IDENTIFIED AND INOP ON FCC ESP	Chevron Products Company	841 Chevron Way	94801
07R88	E	A0010	6016	2/10/2020	2/10/2020	2/14/2020	FCC FLARE EXCEEDED THE VISIBLE LIMIT	Chevron Products Company	841 Chevron Way	94801
07R89	E	A0010	6013	2/10/2020	2/10/2020	2/14/2020	NISO FLARE EXCEEDED THE VISIBLE LIMIT	Chevron Products Company	841 Chevron Way	94801
07R93	E	A0010	4285	2/14/2020	2/14/2020	2/18/2020	FCC EXCEEDED IT'S OPACITY LIMIT OF 30%	Chevron Products Company	841 Chevron Way	94801
07R95	I	A0010	6039	2/14/2020		2/18/2020	RLOP FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07R96	I	A0010		2/14/2020	2/20/2020	2/18/2020	H2 PLANT FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07R97	I	A0010	6013	1/30/2020	3/13/2020	2/19/2020	NISO FLARE STEAM 69FC283 FLOWMETER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07R98	I	A0010	6013	1/30/2020	3/13/2020	2/19/2020	NISO FLARE STEAM 69FC284 FLOWMETER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07S04	E	A0010	4228	2/17/2020	2/17/2020	2/21/2020	SRU TRAIN 2 EXCEEDED 3HR NOX	Chevron Products Company	841 Chevron Way	94801
07S05	E	A0010	4227	2/18/2020	2/18/2020	2/21/2020	THERMAL OXIDIZER OPERATED BELOW THE MINIMUM TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07S06	E	A0010	4227	2/18/2020	2/18/2020	2/21/2020	SRU 1 TRAIN WESP TRIPPED OFFLINE & WAS RESTARTED	Chevron Products Company	841 Chevron Way	94801
07S07	E	A0010	4285	2/17/2020	2/17/2020	2/21/2020	FCC EXCEEDED ITS OPACITY OF 30%	Chevron Products Company	841 Chevron Way	94801
07S08	E	A0010	4285	2/17/2020	2/17/2020	2/21/2020	FCC TR TRIPPED OFFLINE	Chevron Products Company	841 Chevron Way	94801
07S10	E	A0010	4228	2/20/2020	2/21/2020	2/24/2020	2SRU TRAIN EXCEEDED 3HOUR AVERAGE	Chevron Products Company	841 Chevron Way	94801
07S11	E	A0010	4227	2/20/2020	2/20/2020	2/24/2020	SRU #1 TRAIN THERMAL OXIDIZER TEMP OPERATED BELOW MIN	Chevron Products Company	841 Chevron Way	94801
07S12	E	A0010	4227	2/20/2020	2/20/2020	2/24/2020	SRU 1 TRAIN WESP TRIPPED OFFLINE	Chevron Products Company	841 Chevron Way	94801
07S13	E	A0010	4228	2/20/2020	2/20/2020	2/24/2020	SRU 2 TRAIN WESP TRIPPED OFFLINE	Chevron Products Company	841 Chevron Way	94801
07S14	E	A0010	4228	2/21/2020	2/21/2020	2/24/2020	SRU 2 TRIAN THERMAL OXIDIZER OPERATED BELOW MIN TEMP	Chevron Products Company	841 Chevron Way	94801
07S17	I	A0010	4285	2/22/2020	2/24/2020	2/24/2020	V-65 FLUE GAS O2 ANALYZER BECAME INOP - REPAIRS ONGOING	Chevron Products Company	841 Chevron Way	94801
07S19	E	A0010	4227	2/22/2020	2/22/2020	2/25/2020	SRU 1 TRAIN WESP TRIPPED OFFLINE	Chevron Products Company	841 Chevron Way	94801
07S20	E	A0010	475	2/22/2020	2/22/2020	2/26/2020	V475 FUEL GAS DRUM EXCEEDED 160 PPM 3HR AVG H2S LIMIT	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07S21	E	A0010	475	2/22/2020	2/23/2020	2/26/2020	V475 FUEL GAS DRUM EXCEEDED 50 PPM 24HR AVG H2S LIMIT	Chevron Products Company	841 Chevron Way	94801
07S22	E	A0010	475	2/22/2020	2/23/2020	2/26/2020	V475 FUEL GAS DRUM EXCEEDED 50 PPM CALENDAR DAY H2S LIMIT	Chevron Products Company	841 Chevron Way	94801
07S23	E	A0010	475	2/22/2020	2/22/2020	2/26/2020	V475 FUEL GAS DRUM EXCEEDED 1HR AVG TOTAL SULFUR LIMIT	Chevron Products Company	841 Chevron Way	94801
07S25	E	A0010	701	2/22/2020	2/22/2020	2/26/2020	V701 FUEL GAS DRUM EXCEEDED 160 PPM 3HR AVG H2S LIMIT	Chevron Products Company	841 Chevron Way	94801
07S26	E	A0010	701	2/22/2020	2/22/2020	2/26/2020	V701 EXCEEDED 1HR AVG TOTAL SULFUR LIMIT	Chevron Products Company	841 Chevron Way	94801
07S27	E	A0010		2/22/2020	2/22/2020	2/26/2020	EXCEEDED 1HR TOTAL SULFUR LIMIT	Chevron Products Company	841 Chevron Way	94801
07S28	E	A0010	6010	2/22/2020	2/22/2020	2/26/2020	NET HEATING VALVE OF THE COMBUSTION ZONE AT THE LSFO	Chevron Products Company	841 Chevron Way	94801
07S29	E	A0010	4227	2/22/2020	2/23/2020	2/26/2020	SRU TRAIN 1 EXCEEDED 3HR AVG NOX CORRECTED TO 0% O2 LIMIT	Chevron Products Company	841 Chevron Way	94801
07S30	E	A0010	4227	2/23/2020	2/23/2020	2/26/2020	SRU 1 EXCEEDED 1HR 250 PPM SO2 CORRECTED TO 0% O2 LIMIT	Chevron Products Company	841 Chevron Way	94801
07S31	E	A0010	6010	2/22/2020	2/22/2020	2/26/2020	LSFO FLARE S6010 EXCEEDED VISIBLE EMISSIONS LIMIT	Chevron Products Company	841 Chevron Way	94801
07S34	E	A0010	4228	2/24/2020	2/24/2020	2/27/2020	SRU TRAIN 2 EXCEEDED 3HR O2 LIMIT	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07S35	E	A0010	4228	2/25/2020	2/25/2020	2/27/2020	SRU 2 TRAIN EXCEEDED 3HR NOX AVERAGE	Chevron Products Company	841 Chevron Way	94801
07S36	E	A0010	4338	2/25/2020	2/25/2020	2/27/2020	F-1551 NOX CORRECED TO 3% O2	Chevron Products Company	841 Chevron Way	94801
07S39	E	A0010	4227	2/24/2020	2/24/2020	3/3/2020	SRU 1 TRAIN WESP TRIPPED OFFLINE & WAS RESTARTED	Chevron Products Company	841 Chevron Way	94801
07S40	E	A0010	4228	2/22/2020	2/22/2020	3/3/2020	SRU 2 TRAIN WESP TRIPPED OFFLINE & WAS RESTARTED	Chevron Products Company	841 Chevron Way	94801
07S41	E	A0010	4228	2/28/2020	2/28/2020	3/3/2020	SRU 2 TRAIN EXCEEDED 1HR AVERAGE SO2 LIMIT OF 250PPM	Chevron Products Company	841 Chevron Way	94801
07S42	E	A0010	4227	2/28/2020	2/29/2020	3/3/2020	SRU 1 TRAIN WESP TRIPPED OFFLINE & WAS RESTARTED.	Chevron Products Company	841 Chevron Way	94801
07S43	E	A0010	4227	2/28/2020	2/29/2020	3/3/2020	THERMAL OXIDIZER OPERATED BELOW MINIMUM TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801
07S44	E	A0010	4228	2/28/2020	2/28/2020	3/3/2020	SRU 2 TRAIN WESP TRIPPED OFFLINE & WAS RESTARTED	Chevron Products Company	841 Chevron Way	94801
07S45	E	A0010	4228	2/28/2020	2/28/2020	3/3/2020	SRU 2 TRAIN OXIDIZER TEMP OPERATED BELOW MINIMUM TEMP	Chevron Products Company	841 Chevron Way	94801
07S47	E	A0010	4228	3/1/2020	3/1/2020	3/4/2020	SRU 2 TRAIN THERMAL OXIDIZER TEMP BELOW MINIMUM	Chevron Products Company	841 Chevron Way	94801
07S48	E	A0010	4228	3/1/2020	3/1/2020	3/4/2020	SRU 2 TRAIN WESP TRIPPED OFFLINE. RESTARTED.	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07S49	I	A0010		3/3/2020	3/4/2020	3/5/2020	H2 PLANT FLARE MASS SPECTROMETER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07S50	E	A0010	4227	3/2/2020	3/3/2020	3/5/2020	SUR TRAIN 1 TRIPPED OFFLINE	Chevron Products Company	841 Chevron Way	94801
07S51	E	A0010	4285	3/4/2020	3/4/2020	3/5/2020	FCC TR TRIPPED OFFLINE	Chevron Products Company	841 Chevron Way	94801
07S53	E	A0010	4227	3/4/2020	3/6/2020	3/6/2020	EXCEEDED CALENDAR DAY AVERAGE CO LIMIT	Chevron Products Company	841 Chevron Way	94801
07S54	E	A0010	4228	3/3/2020	3/5/2020	3/6/2020	SRU 2 TRAIN EXCEEDED ITS AVERAGE DAY CO LIMIT ON 3/3 & 3/4	Chevron Products Company	841 Chevron Way	94801
07S55	E	A0010	4227	3/3/2020	3/4/2020	3/6/2020	EXCEEDED 3HR AVERAGE NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
07S56	E	A0010	4285	3/4/2020	3/4/2020	3/6/2020	STACK OPACITY EXCEEDED 6 MINUTE AVERAGE LIMIT	Chevron Products Company	841 Chevron Way	94801
07S57	E	A0010	4285	3/4/2020	3/4/2020	3/6/2020	F-300 STACK OPACITY EXCEEDED 3 HR AVERAGE LIMIT	Chevron Products Company	841 Chevron Way	94801
07S64	E	A0010		3/8/2020	3/9/2020	3/11/2020	EXCEEDED CALENDAR DAY REFINERY-WIDE NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
07S65	I	A0010	6010	3/9/2020	3/12/2020	3/11/2020	LSFO FLARE STEAM FLOWMETER 39FT011 BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07S76	E	A0010	4227	3/17/2020	3/17/2020	3/17/2020	ACID GAS FEED INTRODUCED TO SRU TRAIN DURING STARTUP	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07S77	I	A0010	6016	1/30/2020		3/19/2020	FCC FLARE BECAME INOPERATIVE (59FC731A)	Chevron Products Company	841 Chevron Way	94801
07S78	I	A0010	6016	1/30/2020	10/10/2020	3/19/2020	FCC FLARE STEAM FLOW METER (59FC731C) BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07S87	E	A0010		4/1/2020	4/2/2020	4/2/2020	1HR NOX LIMIT OF 5 PPM CORRECTED TO 3% O2	Chevron Products Company	841 Chevron Way	94801
07S88	B	A0010		4/1/2020	4/2/2020	4/2/2020	FLARE GAS RECIRCULATION TRIPPED OFF ON HIGH VIBERATION	Chevron Products Company	841 Chevron Way	94801
07S90	E	A0010		4/2/2020	4/2/2020	4/3/2020	F-2100 EXCEEDED 1HR AVERAGE NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
07S96	B	A1840	15	4/6/2020	4/7/2020	4/6/2020	TRANSFORMER MALFUNCTIONED CAUSING A DISRUPTION OF POWER	West Contra Costa County Landfill	1 Parr Boulevard	94801
07S97	E	A1840	15	4/6/2020	4/7/2020	4/6/2020	TRANSFORMER MALFUNCTIONED CAUSING A DISRUPTION OF POWER	West Contra Costa County Landfill	1 Parr Boulevard	94801
07S99	I	A0010	6013	4/7/2020	4/9/2020	4/9/2020	NISO FLARE BECAME INOPERTIVE	Chevron Products Company	841 Chevron Way	94801
07T00	I	A0010	6013	4/7/2020	4/8/2020	4/9/2020	NISO FLARE BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07T01	I	A0010	6013	4/7/2020	4/8/2020	4/8/2020	VENT GAS FLARE ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07T13	I	A0010	6039	4/28/2020	4/29/2020	4/30/2020	FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07T16	E	A0010	4285	5/2/2020	5/2/2020	5/5/2020	FCC OPERATED WITH ALL TR SETS DE-ENERGIZED	Chevron Products Company	841 Chevron Way	94801
07T17	E	A0010	4285	5/2/2020	5/2/2020	5/5/2020	F-300 STACK OPACITY EXCEEDED 30% 6 MINUTE AVERAGE	Chevron Products Company	841 Chevron Way	94801
07T19	E	A0010		5/6/2020	5/6/2020	5/7/2020	EXCEEDED 1HR AVERAGE NOXX LIMIT	Chevron Products Company	841 Chevron Way	94801
07T27	E	A0010	4228	5/17/2020	5/18/2020	5/20/2020	2SRU TRAIN DEENERGIZED PRIOR TO PULLING ACID GAS FEED	Chevron Products Company	841 Chevron Way	94801
07T28	E	A0010	4228	5/19/2020	5/20/2020	5/21/2020	3 HOUR NOX CORRECTED TO 0% O2 LIMIT	Chevron Products Company	841 Chevron Way	94801
07T29	E	A0010	4228	5/20/2020	5/20/2020	5/21/2020	EXCEEDED 1 HOUR AVERAGE SO2 LIMIT	Chevron Products Company	841 Chevron Way	94801
07T30	E	A0010	4228	5/20/2020	5/20/2020	5/21/2020	SRU #2 TRAIN WAS DE- ENERGIZED	Chevron Products Company	841 Chevron Way	94801
07T31	E	A0010	4227	5/20/2020	5/20/2020	5/21/2020	SRU #1 TRAIN THERMAL OXIDIZER TEMP BELOW MIN TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801
07T32	E	A0010	4228	5/18/2020	5/22/2020	5/21/2020	SRU #2 TRAIN THERMAL OZIDIZER TEMP BEGAN OPERATING BELOW TEM	Chevron Products Company	841 Chevron Way	94801
07T33	E	A0010	4228	5/21/2020	5/22/2020	5/22/2020	3 HOUR AVERAGE NOX CORRECTED TO 0% O2	Chevron Products Company	841 Chevron Way	94801
07T34	E	A0010	4228	5/20/2020	5/21/2020	5/22/2020	EXCEEDED ITS CALENDAR DAY AVERAGE SO2 LIMIT	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07T35	I	A0010		5/20/2020	5/21/2020	5/22/2020	FUEL GAS H2S ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07T42	E	A0010	4228	5/22/2020	5/22/2020	5/26/2020	ACID GAS DURING STARTUP PRIOR TO WET ELECTROSTATIC PRECIPITA	Chevron Products Company	841 Chevron Way	94801
07T43	I	A0010		5/24/2020	5/27/2020	5/26/2020	FLARE STEAM TEMP MONITOR BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07T45	I	A0010	4059	5/24/2020	5/26/2020	5/26/2020	F-247 ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07T47	E	A0010	4229	7/6/2019	7/6/2019	7/9/2019	EXCESS OF 1HR 250 PPM SO2	Chevron Products Company	841 Chevron Way	94801
07T51	I	A0010		5/25/2020	5/26/2020	5/27/2020	H2S ANALZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07T52	I	A0010	6039	5/25/2020	5/27/2020	5/27/2020	SPECTROMETER, THAT MEASURES BTU BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07T54	I	A0010	6015	5/24/2020	5/27/2020	5/28/2020	TEMPERATURE MONITOR BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07T61	E	A0010		6/2/2020	6/3/2020	6/4/2020	FUEL GAS DRUM EXCEEDED PPM 3HR H2S	Chevron Products Company	841 Chevron Way	94801
07T62	E	A0010		6/3/2020	6/4/2020	6/4/2020	FUEL GAS DRUM EXCEEDED PPM 24HR AVERAGE	Chevron Products Company	841 Chevron Way	94801
07T63	E	A0010		6/3/2020	6/4/2020	6/4/2020	FUEL GAS DRUM EXCEEDED PPM CALENDAR DAY H2S	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07T68	E	A0010	4228	6/8/2020	6/8/2020	6/10/2020	SRU #2 TRAIN OPERATED WITH THE WESP[DEENERGIZED	Chevron Products Company	841 Chevron Way	94801
07T69	E	A0010	428	6/9/2020	6/9/2020	6/12/2020	WESP DEENERGIZED	Chevron Products Company	841 Chevron Way	94801
07T70	E	A0010	4228	6/11/2020	6/11/2020	6/12/2020	WESP DEENERGIZED	Chevron Products Company	841 Chevron Way	94801
07T72	I	A0010		6/15/2020		6/17/2020	ANALYZER BECAME INOPERATIVE, WAS REPLACED AND IS ONGOING	Chevron Products Company	841 Chevron Way	94801
07T77	I	A0010	6039	6/22/2020	6/23/2020	6/24/2020	RLOP FLARE MASS SPECTROMETER FOR BTU BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07T78	I	A0010	6019	6/22/2020	6/24/2020	6/24/2020	ALKY FLARE MASS SPECTROMETER FOR BTU BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07T83	I	A0010	6016	6/24/2020	6/25/2020	6/26/2020	FCC FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07T84	I	A0010	6013	6/24/2020	6/25/2020	6/26/2020	NISO FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07T85	I	A0010		7/2/2020	7/3/2020	7/6/2020	TAIL GAS TOTAL SULFUR BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07T88	I	A0010	6010	7/6/2020	7/7/2020	7/8/2020	LSFO FLARE BECAME INOPERATIVE AND WAS RESTORED	Chevron Products Company	841 Chevron Way	94801
07T89	I	A0010	6015	7/7/2020	7/8/2020	7/9/2020	D&R FLARE MASS SPECTROMETER BECAME INOP	Chevron Products Company	841 Chevron Way	94801

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07T90	E	A0010	4228	7/7/2020	7/7/2020	7/9/2020	SRU #2 TRAIN DEENERGIZED	Chevron Products Company	841 Chevron Way	94801
07T93	I	A0010	6012	7/8/2020	7/9/2020	7/10/2020	SISO FLARE BECAME INOPERATIVE AND WAS RETURNED TO SERVICE	Chevron Products Company	841 Chevron Way	94801
07U02	I	A0010	4161	7/5/2020	7/7/2020	7/15/2020	NOX & O2 ANALYZERS BECAME INOPERATIVE AND WHERE RECALIBRATED	Chevron Products Company	841 Chevron Way	94801
07U11	E	A0010	4227	7/23/2020	7/23/2020	7/27/2020	SRU #1 TRAIN WITH THE WESP DEENERGIZED	Chevron Products Company	841 Chevron Way	94801
07U12	E	A0010	4227	7/26/2020	7/26/2020	7/28/2020	SRU TRAIN 1 EXCEEDED ITS 3 HR AVERAGE NOX	Chevron Products Company	841 Chevron Way	94801
07U13	E	A0010	4227	7/26/2020	7/26/2020	7/28/2020	SRU TRAIN 1 EXCEEDED ITS 3 HR AVERAGE NOX	Chevron Products Company	841 Chevron Way	94801
07U15	E	A0010	4227	7/24/2020	7/25/2020	7/28/2020	SRU #1 TRAIN DEENERGIZED	Chevron Products Company	841 Chevron Way	94801
07U16	E	A0010	4227	7/24/2020	7/25/2020	7/28/2020	SRU TRAIN WESP WAS DENERGIZED PRIOR TO PULLING ACID GAS FEED	Chevron Products Company	841 Chevron Way	94801
07U17	E	A0010	4227	7/25/2020	7/25/2020	7/28/2020	SRU #1 TRAIN THERMAL OXIDIZER OPERATED BELOW MINIMUM TEMP	Chevron Products Company	841 Chevron Way	94801
07U18	I	A0010	6010	7/27/2020	8/5/2020	7/29/2020	LSFO FLARE SAMPLE STATION BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07U19	E	A0010	4227	7/28/2020	7/28/2020	7/30/2020	SRU TRAIN #1 EXCEEDED 3 HOUR NOX AVERAGE	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07U21	I	A0010	4071	7/31/2020	8/3/2020	8/3/2020	F-1100B NOX AND O2 ANALYZERS BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07U40	E	A0010	4227	8/11/2020	8/11/2020	8/12/2020	OPERATING WITH ACID GAS FEED PRIOR TO ENERGIZING	Chevron Products Company	841 Chevron Way	94801
07U41	E	A0010	4227	8/9/2020	8/10/2020	8/12/2020	SRU TRAIN EXCEEDED ITS 3 HOUR AVERAGE	Chevron Products Company	841 Chevron Way	94801
07U42	B	A0010	4350	8/14/2020	8/14/2020	8/14/2020	COGEN 1000 TRAIN TRIPPED OFF RESULTING IN PLANT UPSETS	Chevron Products Company	841 Chevron Way	94801
07U48	E	A0010	6016	8/14/2020	8/14/2020	8/17/2020	FCC FLARE EXCEEDED VISABLE EMISSIONS LIMIT OF 5 MIN IN 2 HRS	Chevron Products Company	841 Chevron Way	94801
07U49	I	A0010	4133	8/15/2020	8/16/2020	8/17/2020	#5 BOILER NOX & O2 ANALYZERS BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07U50	I	A0010	6039	8/14/2020	8/16/2020	8/17/2020	RLOP FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07U52	I	A0010	6013	8/13/2020	8/18/2020	8/17/2020	NISO FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07U63	I	A0010	6039	8/17/2020	8/19/2020	8/19/2020	MASS SPECTROMETER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07U65	I	A0010	6019	8/18/2020	8/19/2020	8/20/2020	AKLY FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07U66	I	A0010	6016	8/18/2020	8/19/2020	8/20/2020	FCC FLARE MASS SPECTROMETER BECAME INOP	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07U75	E	A0010	4227	8/22/2020	8/23/2020	8/25/2020	SRU TRAIN 1 EXCEEDED 3 HOUR AVERAGE	Chevron Products Company	841 Chevron Way	94801
07U76	E	A0010	4228	8/22/2020	8/23/2020	8/25/2020	SRU TRAIN #2 EXCEEDED 3 HOUR AVERAGE	Chevron Products Company	841 Chevron Way	94801
07U77	E	A0010	4227	8/22/2020	8/22/2020	8/25/2020	WESP DE-ENERGIZED	Chevron Products Company	841 Chevron Way	94801
07U78	E	A0010	4228	8/22/2020	8/23/2020	8/25/2020	THERMAL OXIDIZER BELOW MIN TEMP	Chevron Products Company	841 Chevron Way	94801
07U85	I	A0010	6019	8/24/2020	8/26/2020	8/26/2020	VENT GAS PRESSURE ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07U86	I	A0010	6019	8/24/2020	8/31/2020	8/26/2020	ALKY FALRE GAS FLOW METER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07U90	I	A0010	4285	8/25/2020	8/26/2020	8/27/2020	FCC OPACITY ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07U95	E	A0010	4228	8/28/2020	8/28/2020	8/31/2020	SRU TRAIN 2 EXCEEDED 3HR AVERAVE NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
07U96	I	A0010	4228	8/29/2020	8/31/2020	8/31/2020	EXHAUST FLOW ANALYZER FOR SRU #2 TRAIN BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07V08	I	A0010	4228	9/1/2020	9/3/2020	9/3/2020	EXHAUST FLOW ANALYZER FOR TRAIN #2 BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07V16	I	A0010	4350	9/7/2020	8/8/2020	9/8/2020	ANALYZERS BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07V18	I	A0010		9/7/2020	9/8/2020	9/8/2020	H2S ANALYZER BECAME INOPERATIVE AND WAS CALIBRATED	Chevron Products Company	841 Chevron Way	94801
07V20	I	A0010	4285	9/6/2020	9/8/2020	9/8/2020	FCC ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07V21	I	A0010	4285	9/5/2020	9/8/2020	9/8/2020	FCC F-300 NOX ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07V22	I	A0010	6010	9/6/2020	9/8/2020	9/8/2020	LSFO FLARE SAMPLE STATION BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07V23	I	A0010	6016	9/6/2020		9/8/2020	FCC FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07V24	I	A0010	6010	9/6/2020		9/8/2020	LSFO FLARE MASS SPEC BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07V25	I	A0010	6039	9/6/2020	9/8/2020	9/8/2020	RLOP FLARE MASS SPECTROMETER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07V26	I	A0010	6013	9/5/2020		9/8/2020	NISO FLARE MASS SPEC BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07V30	E	A0010	6010	9/6/2020	9/6/2020	9/10/2020	FLARE COMBUSTION WAS > 270 BTU/SCF IN 15 MIN PERIOD	Chevron Products Company	841 Chevron Way	94801
07V32	I	A0010	4285	9/8/2020	9/10/2020	9/10/2020	FCC OPACITY ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07V33	E	A0010	4228	9/10/2020	9/10/2020	9/11/2020	SRU 2 TRAIN EXCEEDED 3 HR AVERAGE NOX, CORRECTED TO 0%	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07V41	E	A0010	4228	9/15/2020	9/15/2020	9/17/2020	SRU #2 TRAIN OPERATED WITH THE WESP DEENERGIZED	Chevron Products Company	841 Chevron Way	94801
07V42	E	A0010	4285	9/16/2020	9/16/2020	9/17/2020	F-300 STACK OPACITY EXCEEDED 30% 6-MINUTE AVERAGE LIMIT	Chevron Products Company	841 Chevron Way	94801
07V43	I	A0010	4340	9/15/2020	9/17/2020	9/17/2020	THE RLOP F-1251 NOX ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07V44	I	A0010	4148	9/16/2020	9/17/2020	9/18/2020	THE SUMP LEVEL ANALYZER BEACEM INOP	Chevron Products Company	841 Chevron Way	94801
07V45	I	A0010	4413	9/16/2020	9/17/2020	9/18/2020	THE FUME INLET ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07V46	I	A0010	4413	9/16/2020	9/17/2020	9/18/2020	THE OXIDATION ZONE TEMPERATURE ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07V50	I	A0010	4285	9/19/2020		9/21/2020	FCC V-65 FLUE GAS O2 ANALYZER BECAME INOP.	Chevron Products Company	841 Chevron Way	94801
07V51	E	A0010		9/19/2020	9/19/2020	9/22/2020	F-1100 EXCEEDED 1 HR AVERAGE NOX CORRECTED TO 3% O2 LIMIT	Chevron Products Company	841 Chevron Way	94801
07V52	I	A0010	6016	9/21/2020	9/23/2020	9/23/2020	FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07V54	B	A1840	15	9/24/2020	9/24/2020	9/24/2020	WASTE TRANSPORT VEHICLEM STRUCK OVERHEAD PHONE LINES	West Contra Costa County Landfill	1 Parr Boulevard	94801
07V55	E	A1840	15	9/24/2020	9/24/2020	9/24/2020	WASTE TRANSPORT VEHICLE STRUCK OVERHEAD PHONE LINES	West Contra Costa County Landfill	1 Parr Boulevard	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07V60	I	A0010		9/25/2020	9/29/2020	9/28/2020	FUEL GAS H2S ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07V61	I	A0010	6016	9/24/2020	9/30/2020	9/28/2020	MASS SPECTROMETER THAT MEASURES BTU BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07V64	I	A0010	6013	9/27/2020	9/29/2020	9/29/2020	NISO FLARE MASS SPECTROMETER, THAT MEASURES BTU, BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07V65	I	A0010	6039	9/28/2020	10/1/2020	9/30/2020	RLOP FLARE FLOWMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07V71	I	A0010	6016	10/1/2020	10/10/2020	10/5/2020	FCC FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07V72	I	A0010	6013	10/2/2020	10/3/2020	10/5/2020	NISO FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07V73	I	A0010	6019	10/1/2020	10/3/2020	10/5/2020	ALKY FLARE MS BECAME INOPERATIVE AND WAS RETURNED TO SERVICE	Chevron Products Company	841 Chevron Way	94801
07V74	I	A0010	6039	10/3/2020	10/5/2020	10/5/2020	RLOP FLARE MS BECAME INOPERATIVE AND WAS RETURNED TO SERVICE	Chevron Products Company	841 Chevron Way	94801
07V75	E	A0010		10/2/2020	10/4/2020	10/6/2020	FCC ESP WAS SHUT OFF. MAIN BLOWER SHUT DOWN.	Chevron Products Company	841 Chevron Way	94801
07V79	I	A0010	6039	10/5/2020		10/7/2020	RLOP FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07V85	I	A0010	6019	10/7/2020	10/18/2020	10/9/2020	ALKY FLARE WATER SEAL LEVEL INDICATOR BECAME INOP	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07V86	E	A0010	4227	10/8/2020	10/9/2020	10/12/2020	SRU TRAIN 1 EXCEEDED 3 HOUR AVERAGE NOX	Chevron Products Company	841 Chevron Way	94801
07V87	E	A0010	4228	10/8/2020	10/9/2020	10/12/2020	SRU 2 TRAIN EXCEEDED 3 HOUR AVERAGE	Chevron Products Company	841 Chevron Way	94801
07V88	I	A0010	6016	1/30/2020	10/13/2020	10/13/2020	FCC FLARE STEAM FLOW METER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07V89	I	A0010	6019	10/11/2020		10/13/2020	ALKY FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07V93	I	A0010	6039	10/14/2020	10/28/2020	10/16/2020	RLOP FLARE MASS SPECTROMETER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07W05	I	A0010		10/17/2020	10/19/2020	10/19/2020	FUEL GAS DRUM TOTAL SULFUR ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07W06	B	A1840	15	10/18/2020	10/18/2020	10/19/2020	SYSTEM SHUTDOWN DUE TO PGE POWER OUTAGE	West Contra Costa County Landfill	1 Parr Boulevard	94801
07W07	I	A0010	6010	10/15/2020	10/19/2020	10/19/2020	LSFO FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07W19	E	A0010	4227	10/21/2020	10/21/2020	10/22/2020	SRU# 1 TRAIN DEENERGIZED	Chevron Products Company	841 Chevron Way	94801
07W20	B	A1840	15	10/21/2020	10/21/2020	10/21/2020	PG&E POWER OUTAGE	West Contra Costa County Landfill	1 Parr Boulevard	94801
07W21	E	A1840	15	10/21/2020	10/21/2020	10/21/2020	PG&E POWER OUTAGE	West Contra Costa County Landfill	1 Parr Boulevard	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07W29	E	A0010	4228	10/25/2020	10/25/2020	10/27/2020	SRU TRAIN 2 EXCEEDED 3 HR AVERAGE NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
07W30	E	A0010	4228	10/26/2020	10/26/2020	10/27/2020	SRU TRAIN 2 EXCEEDED 3 HR NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
07W31	E	A0010	4228	10/25/2020	10/25/2020	10/27/2020	SRU 2 TRAIN THERMAL OXIDIZER OPERATED BELOW MIN TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801
07W32	E	A0010	4228	10/25/2020	10/25/2020	10/27/2020	SRU 2 WESP WAS DEENERGIZED PRIOR TO PULLING ACID GAS FEED	Chevron Products Company	841 Chevron Way	94801
07W34	B	A1840		10/28/2020	10/28/2020	10/28/2020	SITE WIDE POWER OUTAGE	West Contra Costa County Landfill	1 Parr Boulevard	94801
07W35	E	A0010		4/1/2020	4/2/2020	4/2/2020	AMMONIA INJECTION INTERPTION	Chevron Products Company	841 Chevron Way	94801
07W36	E	A0010		4/2/2020	4/2/2020	4/3/2020	AMMONIA INJECTION INTERRUPTION	Chevron Products Company	841 Chevron Way	94801
07W37	E	A0010		5/6/2020	5/6/2020	5/7/2020	AMMONIA INJECTION INTERRUPTION	Chevron Products Company	841 Chevron Way	94801
07W40	I	A0010		10/27/2020	10/28/2020	10/29/2020	H2 PLANT FLARE MASS SPECTROMETER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07W41	E	A0010	4228	10/27/2020	10/30/2020	10/30/2020	SRU TRAIN 2 EXCEEDED IT'S 3HR AVERAGE NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
07W42	E	A1840	15	10/18/2020	10/18/2020	10/19/2020	SYSTEM SHUTDOWN DUE TO PG&E POWER OUTAGE	West Contra Costa County Landfill	1 Parr Boulevard	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07W44	E	A0010		11/2/2020	11/2/2020	11/3/2020	GOLDEN GATE GROUND MONITOR EXCEEDED H2S 3 MIN AVERAGE	Chevron Products Company	841 Chevron Way	94801
07W46	I	A0010	4155	11/2/2020		11/4/2020	F-135 NOX & O2 ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07W47	I	A0010	6012	11/2/2020	11/3/2020	11/4/2020	SISO FLARE MASS SPECTROMETER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07W48	I	A0010	6013	11/2/2020	11/3/2020	11/4/2020	NISO FLARE MASS SPECTROMETER THAT MEASURES BTU BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07W49	E	A0010	4229	11/2/2020	11/2/2020	11/5/2020	SRU 3 TRAIN EXCEEDED 1 HR SO2 LIMIT	Chevron Products Company	841 Chevron Way	94801
07W50	E	A0010	4227	11/2/2020	11/2/2020	11/5/2020	SRU 1 TRAIN EXCEEDED 1 HR SO2 LIMIT	Chevron Products Company	841 Chevron Way	94801
07W51	E	A0010		11/3/2020	11/3/2020	11/5/2020	THE SRA @ H2 PLANT HAD NO HN3 INJECTION WITHIN 30 MINUTES	Chevron Products Company	841 Chevron Way	94801
07W52	E	A0010	4227	11/3/2020	11/4/2020	11/5/2020	SRU 1 TRAIN THERMAL OZIDIZER OPERATED BELOW MIN TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801
07W53	E	A0010	4227	11/2/2020	11/2/2020	11/5/2020	SRU 1 TRAIN OPERATING W/ WESP DE-ENERGIZED	Chevron Products Company	841 Chevron Way	94801
07W54	E	A1840	15	10/28/2020	10/28/2020	10/29/2020	PG&E POWER OUTAGE	West Contra Costa County Landfill	1 Parr Boulevard	94801
07W55	E	A0010	6039	11/2/2020	11/2/2020	11/5/2020	RLOP FLARE EXCEEDED VISIBLE EMISIONS LIMIT OF 5 MINS	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07W56	E	A0010	6012	11/2/2020	11/2/2020	11/5/2020	SISO FLARE EXCEEDED VISIBLE EMISSIONS LIMIT OF 5 MINS	Chevron Products Company	841 Chevron Way	94801
07W57	E	A0010	6013	11/2/2020	11/2/2020	11/5/2020	NISO FLARE EXCEEDED VISIBLE EMISSIONS LIMIT OF 5 MINS	Chevron Products Company	841 Chevron Way	94801
07W60	E	A0010	6039	11/2/2020	11/3/2020	11/6/2020	FLARING GREATER THAN 15 MINS	Chevron Products Company	841 Chevron Way	94801
07W61	E	A0010		11/4/2020	11/5/2020	11/6/2020	F-1100 FAILED TO MAINTAIN CATALYST BED ABOVE 500 DEGREES	Chevron Products Company	841 Chevron Way	94801
07W62	E	A0010	4227	11/3/2020	11/10/2020	11/6/2020	SRU TRAIN 1 EXCEEDED 3 HOUR AVERAGE	Chevron Products Company	841 Chevron Way	94801
07W66	E	A0010	6039	11/6/2020	11/6/2020	11/9/2020	MATERIAL ROUTED TO FLARE >15 MIN. RSR BTU LESS THAN 270 BTU.	Chevron Products Company	841 Chevron Way	94801
07W67	E	A0010	6013	11/7/2020	11/7/2020	11/10/2020	NISO FLARE 15MIN AVERAGE NET HEATING VALUE OF THE COMBUSTION	Chevron Products Company	841 Chevron Way	94801
07W68	E	A0010	6039	11/7/2020	11/7/2020	11/11/2020	RLOP FLARE GREATER THAN 15 MINS AVERAGE NET HEATING	Chevron Products Company	841 Chevron Way	94801
07W69	E	A0010	4227	11/10/2020	11/10/2020	11/12/2020	SRU 1 TRAIN OPERATED W/ WESP DE-ENERGIZED	Chevron Products Company	841 Chevron Way	94801
07W70	E	A0010	6013	11/8/2020	11/8/2020	11/12/2020	AVERAGE NET HEATING VALUE OF NISO FLARE WAS LESS THAN 270BTU	Chevron Products Company	841 Chevron Way	94801
07W71	E	A0010	6039	11/8/2020	11/8/2020	11/12/2020	RLOP FLARE WAS > 270 BTU IN A 15 MIN BLOCK	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07W72	E	A0010	6039	11/9/2020	11/10/2020	11/12/2020	RLOP FLARE > 270 BTU/SCF IN 15 MIN BLOCK	Chevron Products Company	841 Chevron Way	94801
07W73	E	A0010	6039	11/10/2020	11/10/2020	11/12/2020	RLOP FLARE WAS > 270 BTU/SCF IN 15 MIN BLOCK	Chevron Products Company	841 Chevron Way	94801
07W76	I	A0010	6013	11/10/2020	11/16/2020	11/12/2020	NISO FLARE VENT GAS TEMP ANALYZERS BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07W77	I	A0010		11/11/2020	11/12/2020	11/12/2020	V-701 H2S ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07W78	I	A0010	6010	11/11/2020	11/12/2020	11/13/2020	LSFO FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07W79	I	A0010	6015	11/11/2020	11/16/2020	11/13/2020	D&R FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07W82	E	A0010	6012	11/13/2020	11/13/2020	11/16/2020	SISO FLARE EXCEEDED VISABLE EMISSIONS LIMIT OF 5 MINS/2 HRS	Chevron Products Company	841 Chevron Way	94801
07W86	E	A0010	4227	11/17/2020	11/17/2020	11/18/2020	SRU TRAIN 1 EXCEEDED 3 HOUR LIMIT	Chevron Products Company	841 Chevron Way	94801
07W87	I	A0010		11/16/2020	11/17/2020	11/17/2020	V-870 H2S ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07W88	I	A0010	6013	11/17/2020	11/18/2020	11/19/2020	NISO FLARE MASS BTU SPECTROMETER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07W89	I	A0010	4161	11/18/2020	11/19/2020	11/20/2020	F-500 NOX AND O2 ANALYZERS BECAME INOP.	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07W94	I	A0010	4133	11/27/2020	11/28/2020	11/30/2020	#5 BOILER NOX & O2 ANALYZERS BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07W96	I	A0010		11/26/2020	11/30/2020	11/30/2020	V-701 TOTAL SULPHUR ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07W97	I	A0010		11/29/2020	11/30/2020	11/30/2020	V-475 FUEL GAS DRUM TOTAL SULPHUR ANALYZER BECAME INOP.	Chevron Products Company	841 Chevron Way	94801
07W98	I	A0010		11/29/2020	11/30/2020	11/30/2020	H2S ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07W99	I	A0010		11/27/2020	11/30/2020	12/1/2020	FUEL (NATURAL GAS) BTU ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07X04	B	A1840	15	12/4/2020	12/4/2020	12/4/2020	POWER SURGE CAUSED DISRUPTION IN GCCS	West Contra Costa County Landfill	1 Parr Boulevard	94801
07X05	E	A1840	15	12/4/2020	12/4/2020	12/4/2020	POWER SURGE	West Contra Costa County Landfill	1 Parr Boulevard	94801
07X07	I	A0010	6012	12/4/2020	12/5/2020	12/7/2020	SISO FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07X09	E	A0010	6016	12/5/2020	12/5/2020	12/8/2020	AVG NET HEATING VALUE WAS LESS THAN 270 BTU/SCF	Chevron Products Company	841 Chevron Way	94801
07X10	E	A0010	6016	12/8/2020	12/9/2020	12/8/2020	AVG NET HEATING VALUE WAS LESS THAN 270 BTU/SCF	Chevron Products Company	841 Chevron Way	94801
07X11	I	A0010	6051	12/2/2020	12/8/2020	12/9/2020	HYDROCARBON ANALYZERS (12AI1400 & 12AI1401) INOP.	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07X12	E	A0010	4285	12/6/2020		12/10/2020	TR SETS OPERATED GREATER THAN 2 TR SETS BELOW 200MA	Chevron Products Company	841 Chevron Way	94801
07X13	E	A0010	6013	12/10/2020	12/10/2020	12/11/2020	AVERAGE NET HEATING VALUE OF NISO FLARE > 270 BTU/SCF	Chevron Products Company	841 Chevron Way	94801
07X14	E	A0010	4228	12/9/2020	12/11/2020	12/11/2020	SRU 2 TRAIN EXCEEDED 3HR AVERAGE, NOX CORRECTED TO 0% O2 LIM	Chevron Products Company	841 Chevron Way	94801
07X15	I	A0010	6039	12/9/2020	12/10/2020	12/11/2020	RLOP FLARE CAMERA DATA EQUIPMENT FAILED TO RECORD REAL-TIME	Chevron Products Company	841 Chevron Way	94801
07X17	I	A0010		12/11/2020	12/14/2020	12/14/2020	F1100 NATURAL GAS CHROMATOGRAPH (BTU) BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07X18	I	A0010	6016	12/12/2020	12/29/2020	12/14/2020	FCC FLARE MASS SPECTOMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07X19	E	A0010	4228	12/13/2020	12/14/2020	12/15/2020	SRU TRAIN OPERATING W/ ACID GAS FEED BEFORE ENERGIZING WESP	Chevron Products Company	841 Chevron Way	94801
07X20	E	A0010		12/13/2020	12/13/2020	12/15/2020	FUEL GAS DRUM EXCEEDED 1HR AVERAGE TOTAL SULPHUR 200 PPM LIM	Chevron Products Company	841 Chevron Way	94801
07X21	E	A0010		12/14/2020	12/15/2020	12/17/2020	EXCEEDED REFINERY WIDE NOX EMISSIONS LIMIT OF 3116 LBS	Chevron Products Company	841 Chevron Way	94801
07X25	I	A0010	6012	12/17/2020	12/28/2020	12/21/2020	SISO FLARE STEAM FLOW METER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07X26	E	A0010	4285	12/22/2020		12/23/2020	FCC EXCEEDED IT'S ROLLING 7 DAY SO2 LIMIT	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07X30	I	A0010	4350	12/25/2020	12/26/2020	12/28/2020	NOX ANALYZER BECAME INOPERATIVE AND WAS RECALIBRATED	Chevron Products Company	841 Chevron Way	94801
07X31	I	A0010	4285	12/25/2020	12/26/2020	12/28/2020	CO ANALYZER BECAME INOPERATIVE AND WAS RE-CALIBRATED	Chevron Products Company	841 Chevron Way	94801
07X32	I	A0010	4340	12/25/2020	12/26/2020	10/28/2020	ANALYZERS BECAME INOPERATIVE AND WERE RETURNED TO SERVICE	Chevron Products Company	841 Chevron Way	94801
07X33	I	A0010		12/24/2020	12/28/2020	12/28/2020	D&R FLARE VIDEO RECORDING EQUIPMENT BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07X35	E	A0010	4227	12/27/2020	12/28/2020	12/29/2020	SRU TRAIN 1 EXCEEDED 3 HR AVERAGE NOX	Chevron Products Company	841 Chevron Way	94801
07X36	I	A0010		12/27/2020	12/28/2020	12/29/2020	H2 PLANT FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07X37	E	A0010	4228	12/27/2020	12/28/2020	12/29/2020	SRU TRAIN 2 EXCEEDED 3 HR AVG NOX	Chevron Products Company	841 Chevron Way	94801
07X38	I	A0010		12/28/2020		12/30/2020	FLOW METER RECEIVED ERROR THAT IT MAY BE INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07X43	E	A0010	4285	1/3/2021	1/9/2021	1/6/2021	FCC EXCEEDED ROLLING 7 DAY AVERAGE 40 PPM NOX	Chevron Products Company	841 Chevron Way	94801
07X39	E	A0010	6021	1/3/2021	1/3/2021	1/6/2021	material was routed to the flare for greater than 15 minutes	Chevron Products Company	841 Chevron Way	94801
07X40	I	A0010		1/4/2021	1/5/2021	1/6/2021	FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07X44	I	A0010	6051	1/5/2021	1/6/2021	1/7/2021	THE HYDROCARBON ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07X47	I	A0010		1/7/2021	1/12/2021	1/11/2021	H2S ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07X46	I	A0010		1/8/2021	1/11/2021	1/11/2021	H2S ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07X61	E	A0010	4227	1/14/2021	1/14/2021	1/15/2021	THERMAL OXIDIZER BELOW MINIMUM TEMP	Chevron Products Company	841 Chevron Way	94801
07X66	I	A0010		1/14/2021		1/19/2021	V-701 HES ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07X60	E	A0010	4227	1/14/2021	1/14/2021	1/15/2021	SRUTRAIN EXCEEDED 3 HOUR AVERAGE	Chevron Products Company	841 Chevron Way	94801
07X67	I	A0010		1/15/2021	1/18/2021	1/19/2021	F-2100 PSA2 TAIL GAS FUEL BTU ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07X68	I	A0010	6010	1/16/2021		1/19/2021	LSFO FLARE SAMPLE STATION BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07X69	I	A0010	6013	1/16/2021	1/18/2021	1/19/2021	NISO FLARE SAMPLE STATION BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07X74	E	A0010	6016	1/16/2021	1/16/2021	1/20/2021	AVG NET HEATING VALUE DROPPING BELOW 270	Chevron Products Company	841 Chevron Way	94801
07X64	B	A1840		1/19/2021	1/19/2021	1/19/2021	HIGH WINDS CAUSED A UTILITY POWER OUTAGE	West Contra Costa County Landfill	1 Parr Boulevard	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07X78	E	A1840		1/19/2021	1/19/2021	1/22/2021	HIGH WINDS CAUSED A UTILITY POWER OUTAGE & SHUT DOWN	West Contra Costa County Landfill	1 Parr Boulevard	94801
07X77	E	A0010	4285	1/19/2021	1/22/2021	1/22/2021	FCC OPERATED W/ ALL TR SET DE-ENERGIZED	Chevron Products Company	841 Chevron Way	94801
07X65	B	A1840		1/19/2021	1/19/2021	1/19/2021	HIGH WINDS CAUSED A UTILITY POWER OUTAGE	West Contra Costa County Landfill	1 Parr Boulevard	94801
07X79	E	A1840		1/19/2021	1/19/2021	1/22/2021	HIGH WINDS CAUSED A UTILITY POWER OUTAGE & SHUT DOWN	West Contra Costa County Landfill	1 Parr Boulevard	94801
07X76	I	A0010		1/19/2021	1/20/2021	1/21/2021	F-1100 ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07X75	I	A0010		1/19/2021	1/21/2021	1/21/2021	ALKY FLARE FLOW METER 59XI736 BECAME INOP. BACK IN SERVICE.	Chevron Products Company	841 Chevron Way	94801
07X83	I	A0010	4159	1/21/2021	1/22/2021	1/25/2021	F-410/420 INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07X84	E	A0010		1/21/2021	1/21/2021	1/25/2021	FUEL GAS DRUM EXCEEDED 1 HOUR AVERAGE	Chevron Products Company	841 Chevron Way	94801
07X85	E	A0010		1/21/2021	1/21/2021	1/25/2021	V-701 FUEL GAS DRUM EXCEEDED 1 HOUR AVERAGE LIMIT	Chevron Products Company	841 Chevron Way	94801
07X86	E	A0010		1/21/2021	1/22/2021	1/25/2021	V-475 FUEL GAS DRUM EXCEEDED 3HR AVERAGE H2S LIMIT	Chevron Products Company	841 Chevron Way	94801
07X82	E	A0010	4155	1/21/2021	1/22/2021	1/25/2021	F135 EXCEEDED 3 HOUR AVERAGE	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07X81	I	A0010		1/23/2021	1/24/2021	1/25/2021	ANALYZER BECAME INOP AND WAS CALIBRATED	Chevron Products Company	841 Chevron Way	94801
07X92	I	A0010	4285	1/24/2021	1/25/2021	1/26/2021	THE FCC CO ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07X95	E	A0010	4285	1/25/2021	1/25/2021	1/26/2021	F-300 STACK OPACITY EXCEEDED IT'S 30% 6-MIN AVERAGE LIMIT	Chevron Products Company	841 Chevron Way	94801
07Y03	E	A0010	4285	1/26/2021	1/26/2021	1/29/2021	F-300 STACK OPACITY EXCEEDED 3% AVERAGE	Chevron Products Company	841 Chevron Way	94801
07Y05	E	A0010	4285	1/26/2021	1/26/2021	1/29/2021	FCC OPERATED W/ ALL TR SETS DE-ENERGIZED	Chevron Products Company	841 Chevron Way	94801
07Y04	E	A0010	4285	1/26/2021	1/27/2021	1/29/2021	FCC OPERATED ABOVE 20% OPACITY LIMIT FOR 3 HOUR PERIOD	Chevron Products Company	841 Chevron Way	94801
07Y00	E	A0010	4227	1/26/2021	1/27/2021	1/28/2021	SRU 1 TRAIN THERMAL OXIDIZER BELOW MINIMUM TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801
07Y01	E	A0010	6013	1/27/2021	1/28/2021	1/28/2021	NISO FLARE EXCEEDED 1 CALENDAR DAY COMBINED PURGE & PILOT GA	Chevron Products Company	841 Chevron Way	94801
07Y02	E	A0010		1/27/2021	1/28/2021	1/29/2021	REFINERY EXCEEDED CALENDAR DAY NOX MASS EMISSIONS LIMIT	Chevron Products Company	841 Chevron Way	94801
07Y09	E	A0010	4228	1/27/2021	2/9/2021	1/29/2021	SRU #2 TRAIN EXCEEDED 3HR AVERAGE NOX CORRECTED TO 0%	Chevron Products Company	841 Chevron Way	94801
07Y08	E	A0010	4228	1/27/2021		1/29/2021	SRU #2 TRAIN BEGAN OPERATING BELOW MINIMUM TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07Y12	I	A0010	4285	2/1/2021	2/17/2021	2/2/2021	FCC CO ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Y19	I	A0010		2/2/2021	2/7/2021	2/4/2021	ALKY FLARE FLOW METER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07Y20	E	A0010	6016	2/3/2021	2/3/2021	2/4/2021	AVG NET HEATING VALUE LESS THAN 270 BTU/SCF IN 15 MIN BLOCK	Chevron Products Company	841 Chevron Way	94801
07Y25	I	A0010		2/4/2021	3/4/2021	2/8/2021	H2 PLANT FLARE MASS SPETROMETER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07Y24	I	A0010		2/5/2021	2/8/2021	2/8/2021	ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Y26	E	A0010	4285	2/8/2021	2/8/2021	2/9/2021	F-300 STACK OPACITY EXCEEDED 30% 6 MINUTE AVERAGE	Chevron Products Company	841 Chevron Way	94801
07Y27	E	A0010	6016	2/9/2021	2/9/2021	2/10/2021	AVERAGE NET HEATING VALUE OF FLARE > 270 BTU/SCF FOR 15 MIN	Chevron Products Company	841 Chevron Way	94801
07Y28	E	A0010	4228	2/9/2021	2/9/2021	2/10/2021	ACID GAS FEED INTRODUCED TO 2SRU TRAIN	Chevron Products Company	841 Chevron Way	94801
07Y36	I	A0010	6021	2/12/2021	2/16/2021	2/16/2021	SULFUR MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Y35	I	A0010		2/15/2021	2/16/2021	2/16/2020	ANALYZER BECAME INOPERATIVE AND WAS RETURNED TO SERVICE	Chevron Products Company	841 Chevron Way	94801
07Y39	E	A0010	6013	2/18/2021	2/18/2021	2/18/2021	WHEN REGULATED MATERIAL WAS ROUTED TO THE FLARE FOR GREATER	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07Y40	I	A0010	4285	2/19/2021	2/22/2021	2/22/2021	FCC CO ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Y41	I	A0010	6051	2/21/2021	2/23/2021	2/23/2021	HYDROCARBON ANALYZER @ ALKY TOWER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Y48	I	A0010		2/25/2021	3/5/2021	3/1/2021	H2 PLANT FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Y49	B	A1840		2/26/2021	2/26/2021	2/26/2021	DOWNTIME WAS DUE TO A SITE-WIDE UTILITY POWER OUTAGE WHICH W	West Contra Costa County Landfill	1 Parr Boulevard	94801
07Y50	E	A1840		2/26/2021	2/26/2021	2/26/2021	DOWNTIME WAS DUE TO A SITE-WIDE UTILITY POWER OUTAGE WHICH W	West Contra Costa County Landfill	1 Parr Boulevard	94801
07Y51	E	A0010		3/1/2021	3/1/2021	3/3/2021	REFINERY EXCEEDED THE CALENDAR DAY NOX MASS EMISSIONS LIMIT	Chevron Products Company	841 Chevron Way	94801
07Y52	E	A0010	4285	3/2/2021	3/2/2021	3/4/2021	F-300 STACK OPACIITY EXCEEDED 30% 6-MIN AVERAGE LIMIT	Chevron Products Company	841 Chevron Way	94801
07Y54	I	A0010		3/3/2021	3/4/2021	3/5/2021	H2 FLARE PILOT GAS FLOW METER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07Y67	E	A0010	4285	3/5/2021	3/5/2021	3/9/2021	STACK OPACITY EXCEEDED 30% 6MIN AVERAGE LIMIT	Chevron Products Company	841 Chevron Way	94801
07Y68	E	A0010	4285	3/5/2021	3/5/2021	3/9/2021	FCC OPERATED WITH ALL TR SETS DE-ENERGIZED	Chevron Products Company	841 Chevron Way	94801
07Y60	I	A0010	4071	3/6/2021	3/8/2021	3/8/2021	NOX ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07Y61	B	A0010		3/6/2021	3/8/2021	3/8/2021	H2 FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Y70	E	A0010		3/8/2021	3/8/2021	3/11/2021	AVERAGE NET HEATING VALUE < 270 BTU/SCF IN A 15 MIN BLOCK	Chevron Products Company	841 Chevron Way	94801
07Y69	I	A0010	6015	3/9/2021	3/11/2021	3/11/2021	D&R FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Y79	P	A0010		3/11/2021	3/12/2021	3/12/2021	PRM M-294 LEADED NATURAL GAS INTO THE ATMOSPHERE	Chevron Products Company	841 Chevron Way	94801
07Y76	I	A0010		3/13/2021	3/14/2021	3/15/2021	F2100 NOX ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Y75	B	A1840		3/13/2021	3/13/2021	3/13/2021	POWER OUTAGE AT FLARE SYSTEM GCCS	West Contra Costa County Landfill	1 Parr Boulevard	94801
08A82	E	A1840		3/13/2021	3/13/2021	3/13/2021	LFG & GCCS DOWNTIME UNDER VOLTAGE ALARM TRIGGERED	West Contra Costa County Landfill	1 Parr Boulevard	94801
07Y77	I	A0010		3/14/2021	3/15/2021	3/15/2021	NATURAL GAS CHROMATOGRAPH BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Y78	I	A0010	6039	3/14/2021	3/24/2021	3/16/2021	RLOP FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Y80	E	A0010		3/15/2021	3/16/2021	3/18/2021	REFINERY EXCEEDED THE CALENDAR DAY NOX MASS EMISSIONS LIMIT	Chevron Products Company	841 Chevron Way	94801
07Y81	I	A0010		3/21/2021		3/23/2021	FUEL GAS PRESSURE FLOW METER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07Y83	E	A0010		3/22/2021	3/22/2021	3/25/2021	FUEL GAS DRUM EXCEEDED 1-HOUR AVERAGE	Chevron Products Company	841 Chevron Way	94801
07Y84	E	A0010		3/22/2021	3/22/2021	3/25/2021	FUEL GAS DRUM EXCEEDED 1-HOUR AVERAGE SULFUR	Chevron Products Company	841 Chevron Way	94801
07Y85	E	A0010		3/22/2021	3/22/2021	3/25/2021	FUEL GAS DRUM EXCEEDED 3-HOUR AVERAGE	Chevron Products Company	841 Chevron Way	94801
07Y86	E	A0010		3/22/2021	3/22/2021	3/25/2021	FUEL GAS DRUM EXCEEDED 3-HOUR AVERAGE H2S LIMIT	Chevron Products Company	841 Chevron Way	94801
07Y96	E	A0010	4155	3/26/2021	3/26/2021	3/29/2021	F-135 EXCEEDED IT'S 3 HR AVERAGE NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
07Y95	I	A0010	6015	3/27/2021	3/29/2021	3/29/2021	D&R FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Y97	I	A0010	6016	3/29/2021	4/1/2021	3/31/2021	FCC FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Z03	E	A0010	4155	4/7/2021	4/7/2021	4/8/2021	F-135 EXCEEDED IT'S 3 HR AVERAGE NOX LIMIT OF 8.85 LB/HR	Chevron Products Company	841 Chevron Way	94801
07Z08	I	A0010		4/8/2021	4/11/2021	4/12/2021	ALKY FLARE FLOW METER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Z13	B	A1840		4/15/2021	4/15/2021	4/15/2021	LFG & GCCS DOWNTIME OCCURED	West Contra Costa County Landfill	1 Parr Boulevard	94801
07Z14	E	A1840		4/15/2021	4/15/2021	4/15/2021	LFG & GCCS DOWNTIME OCCURED INDICATING A MOMENTARY LOSS OF P	West Contra Costa County Landfill	1 Parr Boulevard	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07Z16	I	A0010		4/15/2021	4/20/2021	4/16/2021	H2 PLANT FLARE MASS SPECTROMETER MONITOR BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07Z17	E	A0010	4227	4/15/2021	4/15/2021	4/19/2021	WESP WAS DEENERGIZED PRIOR TO PULLING ACID GAS FEED	Chevron Products Company	841 Chevron Way	94801
07Z19	I	A0010	4227	4/16/2021	4/17/2021	4/19/2021	SRU #1 TRAIN SO2 ANALYZER BECAME INOPERATIVE AND WAS RESET	Chevron Products Company	841 Chevron Way	94801
07Z18	I	A0010		4/17/2021	4/20/2021	4/19/2021	H2S ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Z20	E	A0010	4227	4/17/2021	4/19/2021	4/20/2021	SRU TRAIN 1 EXCEEDED IT'S 3HR AVERAGE NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
07Z22	I	A0010	4169	4/22/2021	4/26/2021	4/26/2021	O2 AND NOX ANALYZERS BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Z26	E	A0010	4227	4/25/2021	4/27/2021	4/28/2021	SRU 1 TRAIN EXCEEDED 3 HR AVERAGE NOX	Chevron Products Company	841 Chevron Way	94801
07Z24	I	A0010		4/26/2021	4/27/2021	4/28/2021	O2 ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Z27	E	A0010	4227	4/27/2021	4/27/2021	4/27/2021	SRU TRAIN OPERATING W/ ACID GAS FEED IN SYSTEM	Chevron Products Company	841 Chevron Way	94801
07Z29	I	A0010	6013	4/29/2021	5/3/2021	5/3/2021	MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Z30	B	A0010	4350	5/3/2021	5/4/2021	5/4/2021	COGEN 1000 TRAIN EXCEEDED 10PPM NOX LIMIT	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07Z36	E	A0010	4350	5/3/2021	5/4/2021	5/6/2021	COGEN 1000 TRAIN EXCEEDED 10PPM NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
07Z35	I	A0010		5/4/2021	5/5/2021	5/6/2021	H2 PLANT FLARE MASS SPECTROMETER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07Z37	I	A0010	6021	5/4/2021	5/5/2021	5/6/2021	FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Z32	B	A1840		5/5/2021	5/5/2021	5/5/2021	DOWNTIME OCCURRED INDICATING A MOMENTARY LOSS OF POWER	West Contra Costa County Landfill	1 Parr Boulevard	94801
07Z33	E	A1840		5/5/2021	5/5/2021	5/5/2021	LFG & GCCS DOWNTIME INDICATING MOMENTARY POWER LOSS	West Contra Costa County Landfill	1 Parr Boulevard	94801
07Z34	I	A0010	4227	5/5/2021		5/6/2021	SO2 LOW RANGE ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Z42	E	A0010	4227	5/7/2021	5/7/2021	5/11/2021	1SRU TRAIN WESP DEENERGIZED PRIOR TO PULLING ACID GAS FEED	Chevron Products Company	841 Chevron Way	94801
07Z45	I	A0010		5/9/2021	5/10/2021	5/11/2021	FLOW METER BECAME INOPERATIVE AND WAS RETURNED TO SERVICE	Chevron Products Company	841 Chevron Way	94801
07Z48	E	A0010	4227	5/10/2021	5/11/2021	5/12/2021	SRU TRAIN 1 EXCEEDED IT'S 3HR AVERAGE NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
07Z46	I	A0010	6010	5/10/2021	5/11/2021	5/12/2021	FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Z47	I	A0010	6010	5/10/2021	5/11/2021	5/12/2021	LSFO FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07Z55	E	A0010	4227	5/11/2021	5/21/2021	5/14/2021	SRU #1 TRAIN EXCEEDED IT'S CALENDAR DAY AVERAGE SO2 LIMIT	Chevron Products Company	841 Chevron Way	94801
07Z61	E	A0010		8/6/2019	8/7/2019	5/19/2021	UPSET THAT RESULTED IN FUEL GAS DRUM EXCEEDANCE	Chevron Products Company	841 Chevron Way	94801
07Z54	E	A0010	4227	5/11/2021	5/11/2021	5/14/2021	SRU 1 TRAIN EXCEEDED THE 1HR AVERAGE SO2 LIMIT	Chevron Products Company	841 Chevron Way	94801
07Z73	I	A0010	6039	5/24/2021		5/26/2021	RLOP FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07Z74	I	A0010	6019	5/25/2021	5/26/2021	5/27/2021	ALKY FLARE MASS SPECTROMETER THAT MEASURES BTU, BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07Z71	B	A1840		5/25/2021	5/25/2021	5/25/2021	LFG GCCS SYSTEM SHUT DOWN DUE TO LOSS OF POWER TO SITE	West Contra Costa County Landfill	1 Parr Boulevard	94801
07Z72	E	A1840		5/25/2021	5/25/2021	5/25/2021	LFG GCCS SYSTEM SHUT DOWN DUE TO LOSS OF POWER TO SITE	West Contra Costa County Landfill	1 Parr Boulevard	94801
07Z76	I	A0010	4161	5/26/2021	5/27/2021	5/28/2021	F-500 NOX ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07Z80	E	A0010	6019	5/27/2021	5/27/2021	5/29/2021	ALKY FLARE EXCEEDED THE VISIBLE EMISSIONS LIMIT OF 5 MINUETS	Chevron Products Company	841 Chevron Way	94801
07Z81	E	A0010	6016	5/27/2021	5/27/2021	5/29/2021	FCC FLARE EXCEEDED THE VISIBLE SMISSIONS LIMIT OF 5 MINUETS	Chevron Products Company	841 Chevron Way	94801
07Z90	B	A1840		6/2/2021	6/2/2021	6/2/2021	LFG AND GCCS DOWN DUE TO POWER OUTAGE	West Contra Costa County Landfill	1 Parr Boulevard	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
07Z91	E	A1840		6/2/2021	6/2/2021	6/2/2021	LFG AND GCCS DOWN DUE TO POWER OUTAGE	West Contra Costa County Landfill	1 Parr Boulevard	94801
07Z94	I	A0010		6/5/2021	6/7/2021	6/7/2021	H2S ANALYZER BECAME INOPERATIVE AND WAS RETURNED TO SERVICE	Chevron Products Company	841 Chevron Way	94801
07Z97	I	A0010	6015	6/7/2021		6/9/2021	FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08A02	I	A0010		6/8/2021	6/19/2021	6/10/2021	V-701 H2S ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
07Z96	I	A0010	6010	6/8/2021	6/9/2021	6/9/2021	LSFO MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08A00	I	A0010	6013	6/8/2021	6/10/2021	6/10/2021	NISO FLARE MASS SPECTROMETER THAT MEASURES BTU BECAME INOP	Chevron Products Company	841 Chevron Way	94801
08A01	I	A0010	6012	6/9/2021	6/14/2021	6/10/2021	SISO FLARE MASS SPECTROMETER THAT MEASURES BTU BECAME INOP	Chevron Products Company	841 Chevron Way	94801
08A25	E	A0010	4227	6/23/2021		6/25/2021	SRU TRAIN 1 EXCEEDED IT'S 3 HR AVERAGE NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
08A26	B	A1840		6/24/2021	6/24/2021	6/24/2021	GCCS SHUTDOWN DUE TO PG&E POWER OUTAGE	West Contra Costa County Landfill	1 Parr Boulevard	94801
08A27	E	A1840		6/24/2021	6/24/2021	6/24/2021	GCCS SHUTDOWN DUE TO PG&E OUTAGE	West Contra Costa County Landfill	1 Parr Boulevard	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
08A36	I	A0010	4285	6/25/2021	7/6/2021	7/6/2021	FCC V-65 O2 GAS ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08A30	I	A0010		6/28/2021	7/6/2021	6/30/2021	BTU ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08A37	I	A0010	4350	7/4/2021	7/5/2021	7/6/2021	ANALYZERS BECAME INOPERATIVE AND WHERE RETURNED TO SERVICE	Chevron Products Company	841 Chevron Way	94801
08A38	I	A0010	4285	7/4/2021	7/5/2021	7/6/2021	NOX ANALYZER BECAME INOPERATIVE AND WAS RETURNED TO SERVICE	Chevron Products Company	841 Chevron Way	94801
08A47	I	A0010	4227	7/7/2021	7/7/2021	7/9/2021	SRU #1 TRAIN WAS NOT OPERATING WITH ACID GAS FEED IN THE SYS	Chevron Products Company	841 Chevron Way	94801
08A54	E	A0010	4285	12/17/2020	12/22/2020	7/14/2021	TR SETS OPERATED > 200MA AVERAGED OVER 3 HR PERIOD	Chevron Products Company	841 Chevron Way	94801
08A50	I	A0010	6039	7/9/2021	7/12/2021	7/12/2021	RLOP FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08A68	E	A0010	4227	7/15/2021	7/15/2021	7/19/2021	1 SRU TRAIN WESP DEENERGIZED PRIOR TO PULLING ACID GAS FEED	Chevron Products Company	841 Chevron Way	94801
08A67	E	A0010	4227	7/15/2021	7/19/2021	7/19/2021	THERMAL OXIDIZER OPERATED BELOW MINIMUM TEMP.LIMIT	Chevron Products Company	841 Chevron Way	94801
08A66	E	A0010	4227	7/15/2021	7/19/2021	7/19/2021	SRU TRAIN EXCEEDED 3 HR NOX AVERAGE	Chevron Products Company	841 Chevron Way	94801
08A69	E	A0010	4227	7/19/2021	7/19/2021	7/19/2021	1 SRU TRAIN OPERATING W/ACID GAS FEED IN SYS PRIOR	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
08A78	E	A0010	4228	7/23/2021	7/23/2021	7/26/2021	WESP WAS DE-ENERGIZED PRIOR TO PULLING ACID GAS FEED	Chevron Products Company	841 Chevron Way	94801
08A79	E	A0010	4228	7/23/2021		7/26/2021	THERMAL OXIDIZER OPERATED BELOW MINIMUM TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801
08A77	B	A0010		7/25/2021	7/25/2021	7/25/2021	REFINERY WIDE POWER INTERRUPTION	Chevron Products Company	841 Chevron Way	94801
08A84	E	A0010	4227	7/25/2021	7/25/2021	7/28/2021	SRU 1 TRAIN EXCEEDED 1HOUR AVERAGE LIMIT	Chevron Products Company	841 Chevron Way	94801
08A86	E	A0010	4227	7/25/2021	7/25/2021	7/28/2021	WESP WAS DE-ENERGIZED PRIOR TO PULLING ACID GAS FEED	Chevron Products Company	841 Chevron Way	94801
08A88	E	A0010	4285	7/25/2021	7/25/2021	7/28/2021	STACK OPACITY EXCEEDED IT'S 6MIN ABERAGE LIMIT	Chevron Products Company	841 Chevron Way	94801
08A89	E	A0010	4285	7/25/2021	7/25/2021	7/28/2021	FCC TR SETS TRIPPED OFFLINE	Chevron Products Company	841 Chevron Way	94801
08A91	E	A0010		7/25/2021	7/25/2021	7/28/2021	F2100 EXCEEDED 1 HR NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
08A90	E	A0010		7/25/2021	7/25/2021	7/28/2021	NO NH3 INJECTION WITHIN 30 MIN OF SCR CATALYST BED REACHING	Chevron Products Company	841 Chevron Way	94801
08A85	E	A0010	4229	7/25/2021	7/25/2021	7/28/2021	SRU 3 TRAIN EXCEEDED 1 HOUR LIMIT	Chevron Products Company	841 Chevron Way	94801
08A92	E	A0010	6021	7/25/2021	7/25/2021	7/28/2021	H2 PLANT FLARE WAS > 270 BTU IN A 15 MIN BLOCK	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
08A87	E	A0010	4155	7/25/2021	7/25/2021	7/28/2021	F135 EXCEEDED 3 HOUR NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
08A93	E	A0010	4227	7/25/2021		7/29/2021	THERMAL OXIDIZER OPERATED BELOW MINIMUM TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801
08A95	E	A0010	4227	7/26/2021	7/27/2021	7/28/2021	SRU TRAIN 1 EXCEEDED CALENDAR DAY AVG SO2 LIMIT	Chevron Products Company	841 Chevron Way	94801
08A94	E	A0010	4227	7/26/2021	7/26/2021	7/29/2021	SRU 1 TRAIN EXCEEDED 1 HR AVG SO2 LIMIT	Chevron Products Company	841 Chevron Way	94801
08A96	E	A0010	4227	7/27/2021	7/27/2021	7/29/2021	SRU TRAIN 1 EXCEEDED 3 HR AVG NOX	Chevron Products Company	841 Chevron Way	94801
08B01	I	A0010	6016	7/30/2021	8/2/2021	8/2/2021	FCC FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08B04	E	A0010	4228	8/1/2021	8/1/2021	8/4/2021	ACID GAS FEED INTRODUCED PRIOR TO ENERGIZING WESP	Chevron Products Company	841 Chevron Way	94801
08B09	I	A0010	6015	8/6/2021	8/9/2021	8/9/2021	FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08B10	I	A0010	4228	8/7/2021	10/5/2021	8/9/2021	STACK EXHAUST FLOW METER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08B18	E	A0010	4228	8/7/2021	8/7/2021	8/11/2021	SRU 2 TRAIN WESP WAS DEENERGIZED PRIOR TO PULLING ACID GAS F	Chevron Products Company	841 Chevron Way	94801
08B17	E	A0010	4228	8/7/2021	8/8/2021	8/11/2021	SRU 2 TRAIN THERMAL OXIDIZER OPERATED BELOW THE MINIMUM TEMP	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
08B16	E	A0010	4228	8/8/2021	8/8/2021	8/11/2021	SRU TRAIN #2 EXCEEDED 3 HR AVERAGE NOC CORRECTED TO 0% O2	Chevron Products Company	841 Chevron Way	94801
08B15	E	A0010		8/10/2021	8/10/2021	8/11/2021	FCC FLAR & ALKY FLARE EXCEEDED THE VISIBLE EMISSIONS LIMIT	Chevron Products Company	841 Chevron Way	94801
08B22	I	A0010	6016	8/10/2021	8/12/2021	8/12/2021	FCC FLARE SMAPLE STATION BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08B19	E	A0010	4228	8/10/2021	8/10/2021	8/12/2021	SRU 2 TRAIN EXCEEDED 3 HR AVERAGE 0% O2 LIMIT	Chevron Products Company	841 Chevron Way	94801
08B20	E	A0010	4228	8/10/2021	8/10/2021	8/12/2021	ACID GAS FEED WAS INTRODUCED TO SRU 2 TRAIN PRIOR TO ENERGIZ	Chevron Products Company	841 Chevron Way	94801
08B21	I	A0010		8/11/2021	8/12/2021	8/12/2021	H2S ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08B24	E	A0010		8/12/2021	8/12/2021	8/13/2021	F-2100 FURNACE DID NOT INJECT NH3 WHEN SCR CATALYST BED WAS	Chevron Products Company	841 Chevron Way	94801
08B30	E	A0010	4227	8/12/2021	8/15/2021	8/16/2021	SRU #1 TRAIN STACK NOX EXCEEDED 3 HOUR AVERAGE	Chevron Products Company	841 Chevron Way	94801
08B31	I	A0010		8/13/2021	8/14/2021	8/16/2021	NOX ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08B40	E	A0010	4227	8/15/2021	8/15/2021	8/18/2021	SRU TRAIN OPERATING W/ACID GAS FEED PRIOR TO ENERGIZING WESP	Chevron Products Company	841 Chevron Way	94801
08B41	E	A0010	4227	8/19/2021	8/19/2021	8/20/2021	THERMAL OXIDIZER OPERATED BELOW MINIMUM TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801

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08B48	I	A0010	6013	8/25/2021	8/31/2021	8/27/2021	NISO VENT GAS TEMP AND MOLECULAR FLOW METERS INOP	Chevron Products Company	841 Chevron Way	94801
08B49	I	A0010	6012	8/25/2021	8/31/2021	8/27/2021	SISO FLARE VENT GAS TEMP AND MOLECULAR WEIGHT FLOW METER INO	Chevron Products Company	841 Chevron Way	94801
08B50	I	A0010	4188	8/28/2021	8/30/2021	8/30/2021	NOX ANALYZER BECAME INOPERATIVE AND WAS RETURNED TO SERVICE	Chevron Products Company	841 Chevron Way	94801
08B60	I	A0010	6015	9/5/2021	9/7/2021	9/7/2021	FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08B64	E	A0010	4227	9/5/2021	9/5/2021	9/7/2021	THERMAL OXIDIZER OPERATED BELOW MIN TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801
08B61	I	A0010	4227	9/6/2021	9/7/2021	9/7/2021	SO2 ANALYZER BECAME INOPERATIVE AND WAS RESET	Chevron Products Company	841 Chevron Way	94801
08B62	I	A0010	4070	9/6/2021	9/7/2021	9/7/2021	NOX & O2 ANALYZERS BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08B63	I	A0010	4068	9/6/2021	9/7/2021	9/7/2021	NOX ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08B74	E	A0010	6019	9/11/2021	9/11/2021	9/14/2021	AVERAGE NET HEATING VALVE OF THE COMBUSTION ZONE WAS LESS	Chevron Products Company	841 Chevron Way	94801
08B75	E	A0010	6016	9/11/2021	9/11/2021	9/14/2021	AVERAGE NET HEATING VALVE OF THE COMBUSTION ZONE LESS THAN	Chevron Products Company	841 Chevron Way	94801
08B76	E	A0010	6012	9/11/2021	9/11/2021	9/14/2021	NET HEATING VALUE OF FLARE <270 BTU/SCF IN 15 IMN BLOCK	Chevron Products Company	841 Chevron Way	94801

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08B93	I	A0010		9/18/2021	9/20/2021	9/20/2021	H2S & SO2 ANALYZERS @ CASTRO GLM STATION WHERE INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08C03	I	A0010	6015	9/25/2021	9/26/2021	9/27/2021	MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08C13	I	A0010	6016	9/30/2021		10/4/2021	FCC FLARE BECAME INOP	Chevron Products Company	841 Chevron Way	94801
08C12	E	A0010	4228	10/1/2021	10/1/2021	10/4/2021	SRU 2 TRAIN EXCEEDED 1 HOUR AVERAGE	Chevron Products Company	841 Chevron Way	94801
08C16	E	A0010	4228	10/1/2021	10/2/2021	10/5/2021	SRU 2 TRAIN EXCEEDED ITS CALENDAR DAY AVERAGE CO LIMIT	Chevron Products Company	841 Chevron Way	94801
08C11	I	A0010	6010	10/2/2021	10/4/2021	10/4/2021	FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08C14	E	A0010	4228	10/2/2021	10/3/2021	10/4/2021	THERMAL OXIDIZER BELOW MIN TEM	Chevron Products Company	841 Chevron Way	94801
08C20	E	A0010	4228	10/3/2021	10/4/2021	10/6/2021	SRU TRAIN EXCEEDED 3 HOUR AVERAGE NOX	Chevron Products Company	841 Chevron Way	94801
08C19	E	A0010	4228	10/4/2021	10/5/2021	10/6/2021	THERMAL OXIDIZER OPERATED BELOS THE MINIMUM TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801
08C22	E	A0010		10/5/2021	10/5/2021	10/7/2021	F-1100 EXCEEDED 1 HOUR AVERAGE NOX CORRECTED TO 3% O2 LIMIT	Chevron Products Company	841 Chevron Way	94801
08C24	B	A1840	161	10/7/2021	10/7/2021	10/7/2021	POWER LOSS INTERRUPTED NORMAL FLARE OPERATION	West Contra Costa County Landfill	1 Parr Boulevard	94801

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08C25	E	A1840	161	10/7/2021	10/7/2021	10/7/2021	POWER LOSS INTERRUPTED NORMAL FLARE OPERATION	West Contra Costa County Landfill	1 Parr Boulevard	94801
08C31	I	A0010	6019	10/9/2021		10/11/2021	ALKY FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08C51	I	A0010	6019	10/19/2021	10/20/2021	10/21/2021	ALKY FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08C53	I	A0010	4155	10/19/2021		10/21/2021	F-135 NOX AND O2 ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08C54	I	A0010	6016	10/20/2021	10/21/2021	10/22/2021	FCC FLARE MASS SPECTROMETER THAT MEASURES BTU BECAME INOP	Chevron Products Company	841 Chevron Way	94801
08C73	E	A0010	475	10/24/2021	10/25/2021	10/26/2021	V-475 FUEL GAS DRUM EXCEEDED CALENDAR DAY TOTAL SULFUR LIMIT	Chevron Products Company	841 Chevron Way	94801
08C78	E	A0010		10/24/2021	10/25/2021	10/26/2021	FUEL GAS DRUM EXCEEDED IT'S 50PPM CALENDAR DAY H2S LIMIT	Chevron Products Company	841 Chevron Way	94801
08C82	E	A0010	4285	10/24/2021		10/27/2021	FCC TR SETS TRIPPED OFFLINE. >2 TR SETS CURRENTLY OFFLINE.	Chevron Products Company	841 Chevron Way	94801
08C92	E	A0010	6019	10/24/2021	10/24/2021	10/27/2021	FLARE HAD VISIBLE EMISSIONS IN EXCESS OF 3 MIN	Chevron Products Company	841 Chevron Way	94801
08C93	E	A0010	6016	10/24/2021	10/24/2021	10/27/2021	FLARE HAD VISIBLE EMISSIONS IN EXCESS OF 3 MIN	Chevron Products Company	841 Chevron Way	94801
08C58	B	A0010		10/24/2021	10/25/2021	10/25/2021	POWER INTERRUPTION	Chevron Products Company	841 Chevron Way	94801

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08C80	E	A0010	4227	10/24/2021	10/24/2021	10/27/2021	S4227 1SRU TRAIN WESP DEENERGIZED PRIOR TO PULLING ACID GAS	Chevron Products Company	841 Chevron Way	94801
08C81	E	A0010	4227	10/24/2021	10/27/2021	10/27/2021	S4227 OPERATED BELOW MINIMUM TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801
08C61	B	A1840		10/24/2021	10/25/2021	10/24/2021	SHUTDOWN OF THE GCCS SYSTEM DUE TO LOSS OF POWER	West Contra Costa County Landfill	1 Parr Boulevard	94801
08C62	E	A1840		10/24/2021	10/25/2021	10/24/2021	SHUTDOWN OF THE GCCS SYSTEM DUE TO LOSS OF POWER	West Contra Costa County Landfill	1 Parr Boulevard	94801
08C83	E	A0010	4285	10/24/2021		10/27/2021	ESP INLET TEMP WAS LESS THAN 550F. STILL ONGOING.	Chevron Products Company	841 Chevron Way	94801
08C68	I	A0010		10/24/2021	10/26/2021	10/26/2021	H2S ANALYZER BECAME INOPERATIVE AND WAS RETURNED TO SERVICE	Chevron Products Company	841 Chevron Way	94801
08C72	E	A0010	701	10/24/2021	10/24/2021	10/26/2021	V-701 FUEL GAS DRUM EXCEEDED 1 HR AVG TOTAL SULFUR LIMIT	Chevron Products Company	841 Chevron Way	94801
08C95	E	A0010	6013	10/24/2021	10/24/2021	10/27/2021	NISO FLARE 6013 EXCEEDED VISIBLE EMISSIONS LIMIT	Chevron Products Company	841 Chevron Way	94801
08C67	I	A0010		10/24/2021	10/27/2021	10/26/2021	WHARF LERP ERD EXHAUST TEMP ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08C75	E	A0010		10/24/2021	10/24/2021	10/26/2021	V-870 EXCEEDED 1 HR AVG TOTAL SULFUR LIMIT	Chevron Products Company	841 Chevron Way	94801
08C77	E	A0010	475	10/24/2021	10/24/2021	10/26/2021	V-475 FUEL GAS DRUM EXCEEDED 1 HR AVG TOTAL SULFUR LIMIT	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
08C70	E	A0010		10/24/2021	10/24/2021	10/26/2021	V-879 FUEL GAS DRUM EXCEEDED 3 HR AVG LIMIT	Chevron Products Company	841 Chevron Way	94801
08C74	E	A0010		10/24/2021	10/25/2021	10/26/2021	FUEL GAS DRUM EXCEEDED IT'S 160 PPM H2S 3HR LIMIT	Chevron Products Company	841 Chevron Way	94801
08C94	E	A0010	6039	10/24/2021	10/24/2021	10/27/2021	RLOP FLARE EXCEEDED VISIBLE EMISSIONS LIMIT	Chevron Products Company	841 Chevron Way	94801
08C76	E	A0010		10/24/2021	10/25/2021	10/26/2021	FUEL GAS DRUM EXCEEDED IT'S 50PPM 24HR AVERAGE H2S LIMIT	Chevron Products Company	841 Chevron Way	94801
08C87	E	A0010	6012	10/24/2021	10/24/2021	10/27/2021	SISO FLARE GREATER THAN 15 MINUET AVERAGE NET HEATING VALUE	Chevron Products Company	841 Chevron Way	94801
08C86	E	A0010	6039	10/24/2021	10/25/2021	10/27/2021	AVG NET HEATING VALUE OF COMBUSTION ZONE LESS THAN 270 BTU	Chevron Products Company	841 Chevron Way	94801
08C90	E	A0010	6016	10/24/2021	10/24/2021	10/27/2021	AVG NET HEATING VALUE <270 BTU/SCF	Chevron Products Company	841 Chevron Way	94801
08C88	E	A0010	6039	10/25/2021	10/26/2021	10/27/2021	AVG NET HEATING VALUE OF THE COMBUSTION ZONE WAS <270 BTU	Chevron Products Company	841 Chevron Way	94801
08C84	E	A0010	4352	10/25/2021	10/25/2021	10/27/2021	COGEN 2000 TRAIN EXCEEDED 3HR NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
08C89	E	A0010	6019	10/25/2021	10/26/2021	10/27/2021	ALKY FLARE GREATER THAN 15 MINUET AVERAGE NET HEATING VALUE	Chevron Products Company	841 Chevron Way	94801
08C85	E	A0010	6012	10/25/2021	10/25/2021	10/27/2021	SISO FLARE GREATER THAN 15 MINUET AVERAGE NET HEATING VALUE	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
08C91	E	A0010	6016	10/25/2021	10/26/2021	10/27/2021	AVG NET HEATING VALUE OF COMBUSTION ZONE <270 BTU/SCF	Chevron Products Company	841 Chevron Way	94801
08C97	E	A0010	4229	10/25/2021	10/26/2021	10/29/2021	SRU 3 TRAIN EXCEEDED ITS 1 HOUR AVERAGE SO2 LIMIT OF 250PPM	Chevron Products Company	841 Chevron Way	94801
08D03	E	A0010	6039	10/26/2021	10/26/2021	10/29/2021	RLOP FLARE GREATER THAN 15 MIN AVERAGE NET HEATING COMBUSTIO	Chevron Products Company	841 Chevron Way	94801
08D09	E	A0010	6016	10/26/2021	10/26/2021	10/29/2021	REGULATED MATERIAL ROUTED TO FLARE HEATING VALUE DROPPED	Chevron Products Company	841 Chevron Way	94801
08D10	E	A0010	6012	10/26/2021	10/26/2021	10/29/2021	REGULATED MATERIAL ROUTED TO FLARE HEATING VALUE DROPPED	Chevron Products Company	841 Chevron Way	94801
08D08	E	A0010	6019	10/26/2021	10/26/2021	10/29/2021	REGULATED MATERIAL ROUTED TO FLARE HEATING VALUE DROPPED	Chevron Products Company	841 Chevron Way	94801
08D11	E	A0010	6013	10/26/2021	10/26/2021	10/29/2021	REGULATED MATERIAL ROUTED TO FLARE HEATING VALUE DROPPED	Chevron Products Company	841 Chevron Way	94801
08D00	I	A0010	6016	10/26/2021	10/28/2021	10/29/2021	FCC FLARE MASS SPECTROMETER THAT MEASURES BTU BECAME INOP	Chevron Products Company	841 Chevron Way	94801
08C98	E	A0010	4227	10/27/2021	11/1/2021	10/29/2021	SRU 1 TRAIN EXCEEDED 3 HOUR AVERAGE NOX CORRECTED TO 0% O2 L	Chevron Products Company	841 Chevron Way	94801
08D01	I	A0010		10/27/2021	11/3/2021	10/29/2021	F-2100 PSA2 TAIL GAS FUEL BTU ANALYZER BACME INOP	Chevron Products Company	841 Chevron Way	94801
08C99	E	A0010	4227	10/27/2021	10/27/2021	10/29/2021	SRU 1 TRAIN THERMAL OXIDIZER OPERATED BELOW MIN TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801

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08D06	E	A0010	6012	10/27/2021	10/27/2021	10/30/2021	REGULATED MAT'L ROUTED TO FLARE FOR GREATER THAN 15 MIN	Chevron Products Company	841 Chevron Way	94801
08D07	E	A0010	6016	10/27/2021	10/28/2021	10/30/2021	REGULATED MAT'L ROUTED TO FLARE FOR GREATER THAN 15 MIN	Chevron Products Company	841 Chevron Way	94801
08D12	E	A0010	6039	10/27/2021	10/27/2021	10/30/2021	REGULATED MATERIAL ROUTED TO FLARE HEATING VALUE DROPED	Chevron Products Company	841 Chevron Way	94801
08D05	E	A0010	6013	10/27/2021	10/28/2021	10/30/2021	REGULATED MAT'L ROUTED TO FLARE FOR GREATER THAN 15 MIN	Chevron Products Company	841 Chevron Way	94801
08D04	E	A0010	6013	10/28/2021	10/28/2021	10/30/2021	REGULATED MAT'L ROUTED TO FLARE FOR GREATER THAN 15 MIN	Chevron Products Company	841 Chevron Way	94801
08D02	I	A0010		10/28/2021		10/29/2021	V-701 H2S ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
08D71	I	A0010		10/28/2021	11/9/2021	11/18/2021	V-701 H2S ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08D19	I	A0010		10/28/2021	11/1/2021	11/1/2021	ISOMAX COOLING WATER TOWER CONDUCTIVITY ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
08D14	I	A0010	6013	10/28/2021		11/1/2021	NISO FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08D22	E	A0010	6012	10/30/2021	10/30/2021	11/2/2021	AVERAGE NET HEATING VALUE OF COMBUSTION ZONE BELOW 270 BTU	Chevron Products Company	841 Chevron Way	94801
08D23	E	A0010	6013	10/30/2021	10/30/2021	11/2/2021	AVERAGE NET HEATING VALUE > 270 BTU/SCF IN 15 MIN BLOCK	Chevron Products Company	841 Chevron Way	94801

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08D16	E	A0010	4227	10/30/2021	10/30/2021	11/1/2021	SRU 1 TRAIN THERMAL OXIDIZER OPERATED BELOW MINIMUM TEMP	Chevron Products Company	841 Chevron Way	94801
08D41	I	A0010	6016	10/30/2021	11/10/2021	11/8/2021	FCC FLARE VENT GAS FLOW METER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08D20	E	A0010		10/31/2021	11/1/2021	11/2/2021	FUEL GAS DRUM EXCEEDED ITS 50 PPM 24HR AVERAGE H2S LIMIT	Chevron Products Company	841 Chevron Way	94801
08D21	E	A0010		11/1/2021	11/1/2021	11/2/2021	V-701 FUEL GAS DRUM EXCEEDED IT'S 1HR AVERAGE SULFUR LIMIT	Chevron Products Company	841 Chevron Way	94801
08D26	I	A0010	4285	11/1/2021	11/2/2021	11/3/2021	FCC V65 FLUE GAS O2 ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08D24	E	A0010	6013	11/1/2021	11/2/2021	11/2/2021	AVERAGE NET HEATING VALUE > 270 BTU/SCF	Chevron Products Company	841 Chevron Way	94801
08D28	I	A0010	6039	11/2/2021	11/9/2021	11/4/2021	RLOP FLARE MASS SPECTROMETER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
08D32	E	A0010	4227	11/2/2021	11/9/2021	11/5/2021	SRU 1 TRAIN THERMAL OXIDIZER BELOW MINIMUM TEMP LIMIT.	Chevron Products Company	841 Chevron Way	94801
08D29	I	A0010	6039	11/2/2021		11/4/2021	RLOP FLARE VENT GAS FLOW METER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08D31	E	A0010	4227	11/3/2021		11/5/2021	SRU TRAIN 1 EXCEEDED 3 HR AVG NOX. STILL ONGOING.	Chevron Products Company	841 Chevron Way	94801
08D38	E	A0010	6039	11/4/2021	11/4/2021	11/8/2021	RLOP FLARE NET HEATING VALUE BELOW 270 BTU/SCF	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
08D39	E	A0010	6012	11/4/2021	11/4/2021	11/8/2021	SISO FLARE AVERAGE NET HEATING VALUE > 270 BTU/SCF	Chevron Products Company	841 Chevron Way	94801
08D40	E	A0010	6012	11/5/2021	11/5/2021	11/8/2021	SISO FLARE AVG NET HEATING VALUE > 270 BTU/SCF	Chevron Products Company	841 Chevron Way	94801
08D37	I	A0010		11/6/2021	11/7/2021	11/8/2021	NOX ANALYZER BECAME INOPERATIVE AND WAS RETURNED TO SERVICE	Chevron Products Company	841 Chevron Way	94801
08D36	E	A0010		11/6/2021	11/6/2021	11/8/2021	GLM EXCEEDED H2S 3-MIN AVERAGE LIMIT	Chevron Products Company	841 Chevron Way	94801
08D43	I	A0010	6015	11/7/2021	11/8/2021	11/9/2021	D&R FLARE MASS SPECTROMETER THAT MEASURES BTU, BECAME INOP	Chevron Products Company	841 Chevron Way	94801
08D54	E	A0010	4228	11/9/2021	11/11/2021	11/12/2021	SRU #2 TRAIN THERMAL OXIDIZER OPERATED BELOW MIN TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801
08D53	E	A0010	4228	11/10/2021		11/12/2021	SRU TRAIN 2 EXCEEDED 3-HR AVG NOX	Chevron Products Company	841 Chevron Way	94801
08D62	E	A0010	6010	11/12/2021	11/13/2021	11/15/2021	AVG NET HEATING VALUE OF THE COMBUSTION ZONE < 270 BTU/SCF	Chevron Products Company	841 Chevron Way	94801
08D57	I	A0010		11/12/2021	11/16/2021	11/15/2021	PSA2 TAIL GAS FUEL BTU ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08D63	E	A0010	6010	11/14/2021	11/14/2021	11/15/2021	AVG NET HEATING VALUE OF COMBUSTION ZONE <270 BTU/SCF	Chevron Products Company	841 Chevron Way	94801
08D72	E	A0010		11/16/2021	11/17/2021	11/18/2021	V-701 FUEL DRUM EXCEEDED H2S CALENDAR DAY AVERAGE LIMIT	Chevron Products Company	841 Chevron Way	94801

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08D74	E	A0010	4227	11/16/2021	11/16/2021	11/19/2021	SRU TRAIN 1 EXCEEDED 3 HOUR AVERAGE NOX	Chevron Products Company	841 Chevron Way	94801
08D70	I	A0010		11/16/2021	11/17/2021	11/18/2021	HE PLANT FLARE SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08D76	E	A0010	4228	11/16/2021	11/16/2021	11/19/2021	ACID GAS FEED WAS INTRODUCED TO THE SRU TRAIN	Chevron Products Company	841 Chevron Way	94801
08D73	I	A0010	6013	11/17/2021	11/18/2021	11/18/2021	NISO FLARE MASS SPECTROMETER THAT MEASURES BTU, BECAME INOP	Chevron Products Company	841 Chevron Way	94801
08D77	I	A0010		11/19/2021		11/22/2021	V-701 H2S ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
08D78	E	A0010	4227	11/21/2021	11/22/2021	11/23/2021	SRU TRAIN 1 EXCEEDED 3 HOUR NOX AVERAGE	Chevron Products Company	841 Chevron Way	94801
08D79	E	A0010	4228	11/21/2021	11/22/2021	11/23/2021	SRU TRAIN 2 EXCEEDED 3 HOUR NOX	Chevron Products Company	841 Chevron Way	94801
08D83	E	A0010	4285	11/24/2021		11/24/2021	FCC EXCEEDED ROLLING 7 DAY AVERAGE PPM SO2	Chevron Products Company	841 Chevron Way	94801
08D87	I	A0010		11/25/2021	12/1/2021	11/29/2021	V701 H2S ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08D84	I	A0010		11/25/2021	11/29/2021	11/29/2021	TAIL GAS TOTAL SULPHUR ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08D88	I	A0010		11/26/2021	12/7/2021	11/29/2021	DC FLARE ANALYZER HAS BEEN INOPERATIVE > 24 HRS	Chevron Products Company	841 Chevron Way	94801

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08D89	I	A0010	4167	11/28/2021	11/29/2021	11/30/2021	NOX ANALYZER BECAME INOPERATIVE AND WAS RETURNED TO SERVICE	Chevron Products Company	841 Chevron Way	94801
08D91	E	A0010	4285	11/29/2021		12/1/2021	FCC EXCEEDED 365 AVERAGE	Chevron Products Company	841 Chevron Way	94801
08D92	E	A0010	4285	11/29/2021		12/1/2021	FCC EXCEEDED IT'S ROLLING 365 DAY AVERAGE SO2 LIMIT	Chevron Products Company	841 Chevron Way	94801
08D93	E	A0010	4227	12/2/2021	12/2/2021	12/3/2021	SRU 1 TRAIN OPERATED BELOW THE MINIMUM TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801
08D94	I	A0010	6051	12/2/2021	12/3/2021	12/6/2021	HYDROCARBON ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08D96	I	A0010	6016	12/3/2021		12/6/2021	FCC FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08D99	E	A0010	6010	12/7/2021	12/7/2021	12/8/2021	REGULATED MATERIAL ROUTED TO FLARE AND TEMP DROPPED	Chevron Products Company	841 Chevron Way	94801
08E16	I	A0010		12/8/2021	12/16/2021	12/16/2021	H2 FLARE PILOT GAS FLOW METER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08E06	I	A0010		12/9/2021	12/10/2021	12/13/2021	H2S ANALYZER BECAME INOPERATIVE AND WAS RETURNED TO SERVICE	Chevron Products Company	841 Chevron Way	94801
08E10	I	A0010	6010	12/9/2021	12/13/2021	12/13/2021	LSFO FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08E09	I	A0010	6016	12/10/2021	12/13/2021	12/13/2021	FCC FLARE VENT GAS FLOW METER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801

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08E17	I	A0010	6013	12/12/2021	12/17/2021	12/16/2021	NISO FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08E13	I	A0010		12/13/2021	12/14/2021	12/15/2021	V-701 H2S ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08E15	E	A0010	4285	12/13/2021	12/15/2021	12/16/2021	FCC TR SETS TRIPPED OFFLINE	Chevron Products Company	841 Chevron Way	94801
08E11	E	A0010	6019	12/13/2021	12/13/2021	12/14/2021	NET HEATING VALUE OF COMBUSTION ZONE AT ALKY FLARE LESS THAN	Chevron Products Company	841 Chevron Way	94801
08E14	I	A0010	6016	12/13/2021	12/15/2021	12/15/2021	FCC FLARE VENT GAS FLOW METER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08E19	I	A0010	4038	12/15/2021	12/16/2021	12/17/2021	THE 4 RHEN WEST NOX & CO2 ANALYZERS WERE INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08E20	E	A0010	6019	12/15/2021	12/15/2021	12/17/2021	FLARE > 15 MINUTE AVERAGE NET HEATING VALUE OF THE COMBUSTIO	Chevron Products Company	841 Chevron Way	94801
08E48	I	A0010		12/16/2021		12/28/2021	H2S FLARE PILOT GAS FLOW METER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08E32	I	A0010	4228	12/19/2021		12/21/2021	SRU 2 STACK EXHAUST FLOW METER BECAME INOPERTIVE	Chevron Products Company	841 Chevron Way	94801
08E34	E	A0010		12/20/2021	12/21/2021	12/22/2021	REFINERY-WIDE NOX MASS EMISSIONS LIMIT	Chevron Products Company	841 Chevron Way	94801
08E33	I	A0010	6016	12/21/2021		12/22/2021	FCC FLARE VENT GAS FLOW METER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801

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08E37	I	A0010	6012	12/23/2021		12/26/2021	SISO FLARE BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08E47	I	A0010	6012	12/23/2021	12/28/2021	12/28/2021	SISO FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
07R44	B	A0057	21	1/20/2020	1/20/2020	1/20/2020	GASOLINE FOUND LEAKING FROM WATERDRAW VALVE.	Richmond Products Terminal	1306 Canal Street	94804
08E52	E	A0010	6013	12/30/2021	12/30/2021	1/2/2022	NISO FLARE EXCEEDED VISIBLE EMISSIONS LIMIT	Chevron Products Company	841 Chevron Way	94801
08E53	E	A0010	6016	12/30/2021	12/30/2021	1/2/2022	FCC FLARE LESS THAN 270 BTU IN 15 MIN BLOCK	Chevron Products Company	841 Chevron Way	94801
08E61	I	A0010	6013	12/30/2021	1/4/2022	1/3/2022	NISO FLARE WATER SEAL LEVEL INDICATOR BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08F76	E	A0010	4228	2/25/2022	2/26/2022	2/28/2022	SRU TRAIN 2 EXCEEDED 3 HOUR NOX AVERAGE	Chevron Products Company	841 Chevron Way	94801
08F77	E	A0010	4228	2/25/2022	2/26/2022	3/1/2022	2SRU TRAIN WESP DENERGIZED PRIOR TO PULLING ACID GAS FEED	Chevron Products Company	841 Chevron Way	94801
08F74	E	A0010	4228	2/25/2022	2/26/2022	2/28/2022	THERMAL OXIDIZER OPERATED BELOW MINIMUM TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801
08F75	I	A0010	6015	2/25/2022	3/1/2022	2/28/2022	D&R FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08F73	I	A0010		2/24/2022	3/8/2022	2/28/2022	ISOMAX COOLING WATER TOWER HYDROCARBON ANALYZER INOPERATIVE	Chevron Products Company	841 Chevron Way	94801

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08F63	I	A0010	4169	2/18/2022		2/23/2022	FUEL GAS PRESSURE FLOW METER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08F48	I	A0010		2/15/2022	2/21/2022	2/17/2022	ISOMAX COOLING WATER TOWER HYDROCARBON ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
08F49	I	A0010	6039	2/15/2022	2/16/2022	2/17/2022	RLOP FLARE STEAM FLOW METER AND STEAM TEMP FLOW METER INOPER	Chevron Products Company	841 Chevron Way	94801
08F46	E	A0010	6010	2/13/2022	2/13/2022	2/16/2022	AVG NET HEATING VALUE OF COMBUSTION ZONE < 270 BTU/SCF	Chevron Products Company	841 Chevron Way	94801
08F45	E	A0010	6010	2/11/2022	2/11/2022	2/15/2022	LSFO FLARE > 270 BTU/SCF IN A 15 MIN BLOCK	Chevron Products Company	841 Chevron Way	94801
08F31	I	A0010		2/4/2022	2/13/2022	2/7/2022	H2 FLARE NITROGEN PURGE TO NH3 RELIEF BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08F29	I	A0010		2/3/2022	2/14/2022	2/7/2022	ISOMAX COOLING TOWER HYDROCARBON ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08F22	I	A0010	6016	1/30/2022	2/3/2022	2/1/2022	FCC FLARE VENT GAS FLOW METER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
08F16	E	A0010	6010	1/26/2022	1/26/2022	1/28/2022	AVG NET HEATING VALUE OF COMBUSTION ZONE < 270 BTU/SCF	Chevron Products Company	841 Chevron Way	94801
08F12	I	A0010	6039	1/25/2022	1/26/2022	1/27/2022	RLOP FLARE MASS SEPCTROMETER MONITOR BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08F06	E	A0010	4228	1/22/2022	1/22/2022	1/26/2022	SRU TRAIN 2 EXCEEDED 3 HR AVERAGE NOX LIMIT	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
08F05	I	A0010	6015	1/21/2022	1/25/2022	1/24/2022	D&R FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08F01	E	A0010	4227	1/21/2022	1/21/2022	1/24/2022	THERMAL OXIDIZER OPERATED BELOW MINIMUM TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801
08E91	I	A0010	4285	1/19/2022	1/20/2022	1/20/2022	FCC CO ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08E90	I	A0010	6012	1/18/2022	1/19/2022	1/20/2022	SISO FLARE MASS SPECTROMETER, THAT MEASURES BTU BECAME INOP	Chevron Products Company	841 Chevron Way	94801
08E89	I	A0010	6016	1/17/2022	1/21/2022	1/18/2022	FCC FLARE VENT GAS FLOW METER 59FI735 BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08E85	E	A0010	6016	1/14/2022	1/14/2022	1/17/2022	FCC FLARE HEATING ZONE AVG TEMP < 270 BTU/SCF FOR 15 MINS	Chevron Products Company	841 Chevron Way	94801
08E84	I	A0010	6013	1/14/2022	1/22/2022	1/17/2022	NISO FLARE WATER SEAL LEVEL INDICATOR BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08E81	E	A0010	4228	1/13/2022	1/13/2022	1/17/2022	SRU TRAIN 2 EXCEEDED 3HR AVERAGE NOX	Chevron Products Company	841 Chevron Way	94801
08E83	E	A0010	6016	1/13/2022	1/13/2022	1/17/2022	AVERAGE NET HEATING VALUE OF FLARE > 270 BTU/SCF IN 15 MIN	Chevron Products Company	841 Chevron Way	94801
08E72	I	A0010		1/9/2022	1/10/2022	1/11/2022	F-1100 PSA1 TAIL GAS TOTAL SULFUR ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
08E70	I	A0010	6016	1/6/2022	1/8/2022	1/10/2022	FCC FLARE VENT GAS FLOW METER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
08E62	I	A0010	6012	1/5/2022	1/14/2022	1/3/2022	SISO FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08E65	I	A0010	6010	1/2/2022	1/7/2022	1/4/2022	LSFO FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08E63	I	A0010		1/1/2022	1/2/2022	1/3/2022	TOTAL SULPHUR ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08N97	E	A0010	4285	12/2/2022		12/5/2022	FCC EXCEEDED IT'S 7 DAY AVG 50 PPM SO2 LIMIT	Chevron Products Company	841 Chevron Way	94801
08P47	E	A0010	4227	12/21/2022	12/21/2022	12/22/2022	SRU #2 TRAIN TO OPERATED BELOW MINIMUM TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801
08P48	E	A0010	6012	12/21/2022	12/21/2022	12/22/2022	AVG NET HEATING VALUE OF SISO FLARE > 270 BTU/SCF 15 MIN	Chevron Products Company	841 Chevron Way	94801
08L92	I	A0010	6016	9/14/2022	9/17/2022	9/16/2022	FCC FLARE VENT GAS FLOW METER 59FI735 BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08L67	E	A0010	4228	9/5/2022	9/5/2022	9/8/2022	SRU #2 TRAIN EXCEEDED 3 HR AVG NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
08N25	I	A0010	6013	11/9/2022		11/10/2022	NISO FLARE PILOT GAS FLOW METER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08N47	E	A0010	4228	11/16/2022	11/17/2022	11/18/2022	SRU 2 TRAIN EXCEEDED 3 HOUR NOX AVERAGE, CORRECTED TO 0% O2	Chevron Products Company	841 Chevron Way	94801
08M72	I	A0010	4285	10/23/2022	10/24/2022	10/24/2022	CEMS ANALYZERS BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
08M71	E	A0010	4228	10/22/2022	10/23/2022	10/24/2022	SRU 2 TRAIN NOX	Chevron Products Company	841 Chevron Way	94801
08K08	I	A0010		7/8/2022	7/9/2022	7/11/2022	V-701 H2S ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08M25	E	A0010	4228	9/26/2022	9/26/2022	9/27/2022	SRU TRAIN 2 EXCEEDED 3 HR AVG NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
08L75	E	A0010	4285	9/5/2022	9/7/2022	9/9/2022	FCC ESP INLET TEMP WAS LESS THAN 550F	Chevron Products Company	841 Chevron Way	94801
08P52	E	A0010	4227	12/20/2022	12/21/2022	12/24/2022	SRU 1 TRAIN EXCEEDED 1 HR AVE LIMIT	Chevron Products Company	841 Chevron Way	94801
08L95	E	A0010		9/14/2022	9/14/2022	9/16/2022	FUEL GAS DRUM EXCEEDED 160 PPM 3 HR AVERAGE H2S LIMIT	Chevron Products Company	841 Chevron Way	94801
08L10	E	A0010	6010	8/18/2022	8/19/2022	8/20/2022	REGULATED MAT'L ROUTED TO FLARE FOR GREATER THAN 15 MIN	Chevron Products Company	841 Chevron Way	94801
08N11	I	A0010	6013	11/3/2022		11/7/2022	NISO FLARE MASS SPECTROMETER THAT MEASURES BTU BECAME INOPER	Chevron Products Company	841 Chevron Way	94801
08K13	E	A0010	4227	7/8/2022	7/9/2022	7/12/2022	SRU TRAIN EXCEEDED IT'S 3 HR AVG NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
08P80	E	A0010		12/30/2022	12/30/2022	1/3/2023	CASTRO GLM EXCEEDED IT'S SO2 3-MIN AVG OF 0.50 PPM	Chevron Products Company	841 Chevron Way	94801
08L41	E	A0010	4285	8/30/2022	8/30/2022	9/2/2022	ESP INLET TEMP BELOW 1-HR AVG MIN TEMP 550F LIMIT	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
08N12	I	A0010	6016	11/4/2022	11/7/2022	11/7/2022	FCC FLARE MASS SPECTROMETER THAT MEASURES BTU BECAME INOPERA	Chevron Products Company	841 Chevron Way	94801
08P62	I	A0010		12/25/2022	12/27/2022	12/27/2022	V-870 TOTAL SULFUR ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08L38	I	A0010	6039	8/30/2022	9/1/2022	9/1/2022	RLOP FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08L81	E	A0010	6016	9/11/2022	9/11/2022	9/13/2022	AVG NET HEATING OF COMBUSTION ZONE WAS LESS THAN 270 BTU/SCF	Chevron Products Company	841 Chevron Way	94801
08L07	E	A0010	4228	8/19/2022	8/19/2022	8/20/2022	ACID FEED GAS INTORDUCED TO 2SRU TRAIN PRIOR TO ENG WESP	Chevron Products Company	841 Chevron Way	94801
08L70	I	A0010		9/6/2022		9/8/2022	V-701 H2S ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08P56	E	A0010	4228	12/21/2022	12/22/2022	12/24/2022	SRU 2 TRAIN EXCEEDED 12 HR AVG SO2 LIMIT	Chevron Products Company	841 Chevron Way	94801
08P04	E	A0010	4227	12/2/2022	12/2/2022	12/6/2022	SRU 1 TRAIN THERMAL OXIDIZER OPERATED BELOW MINIMUM TEMPERAT	Chevron Products Company	841 Chevron Way	94801
08M15	I	A0010	4285	9/14/2022	9/21/2022	9/22/2022	FCC OPACITY ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
08P36	I	A0010	6013	12/17/2022	12/30/2022	12/19/2022	NISO FLARE PILOT GAS FLOW METER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
08L24	E	A0010	4228	8/27/2022		8/29/2022	SRU TRAIN 2 EXCEEDED 3 HR AVE NOX. DEVIATION ONGOING.	Chevron Products Company	841 Chevron Way	94801

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08K09	I	A0010		7/10/2022	7/11/2022	7/11/2022	V-701 ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08M82	E	A0010	4227	10/26/2022	10/26/2022	10/28/2022	SRU TRAIN 1 EXCEEDED ITS 3-HR AVG NOX	Chevron Products Company	841 Chevron Way	94801
08M65	E	A0010	4228	10/19/2022	10/20/2022	10/20/2022	SRU #2 TRAIN EXCEEDED 3 HOUR AVG NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
08K60	I	A0010	4040	7/31/2022	8/1/2022	8/2/2022	O2 ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08K04	E	A0010		7/8/2022	7/8/2022	7/11/2022	AVERAGE HEATING VALUE OF COMBUSTION ZONE WAS LESS THAN 270	Chevron Products Company	841 Chevron Way	94801
08L97	E	A0010	4285	9/14/2022		9/16/2022	FCC ESP TEMPERATURE WAS BELOW 1 HR AVERAGE	Chevron Products Company	841 Chevron Way	94801
08L76	E	A0010	4285	9/5/2022	9/7/2022	9/9/2022	FCC TR SETS DEENERGIZED	Chevron Products Company	841 Chevron Way	94801
08K05	E	A0010	4227	7/7/2022	7/7/2022	7/11/2022	WESP DENERGIZED	Chevron Products Company	841 Chevron Way	94801
08N06	E	A0010	4227	11/3/2022	11/3/2022	11/7/2022	SRU TRAIN 1 EXCEEDED 3 HOUR AVERAGE	Chevron Products Company	841 Chevron Way	94801
08P46	E	A0010	4227	12/21/2022	12/21/2022	12/22/2022	SRU #1 TRAIN TO OPERATED BELOW MIN TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801
08L93	E	A0010		9/13/2022	9/14/2022	9/16/2022	FUL GAS DRUM EXCEEDED 1 HR AVERAGE 200 PPM TOTAL SULFUR LIM	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
08M31	E	A0010	4228	9/29/2022	9/30/2022	9/30/2022	SRU TRAIN 2 EXCEEDED 3-HR AVG NOX	Chevron Products Company	841 Chevron Way	94801
08M06	E	A0010	475	9/17/2022	9/17/2022	9/20/2022	V475 FUEL GAS DRUM EXCEEDED 1 HR AVG TOTAL SULFUR LIMIT	Chevron Products Company	841 Chevron Way	94801
08L84	E	A0010	4155	9/10/2022	9/11/2022	9/14/2022	EXCEEDED 3 HR AVERAGE NOX LIMIT OF 8.85 LB/HR	Chevron Products Company	841 Chevron Way	94801
08M90	E	A0010	4228	10/1/2022	10/2/2022	10/3/2022	SRU Train 2 exceeding its 3-hour average NOX	Chevron Products Company	841 Chevron Way	94801
08M04	I	A0010	6039	9/16/2022		9/19/2022	RLOP FLARE SAMPLE STATION BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08M73	I	A0010		10/19/2022	10/21/2022	10/24/2022	D&R FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08L90	E	A0010	6039	9/12/2022	9/12/2022	9/15/2022	REGULATED MATERIAL WAS ROUTED TO THE FLARE > 15 MINUETS	Chevron Products Company	841 Chevron Way	94801
08L82	I	A0010	4038	9/11/2022	9/12/2022	9/13/2022	4 RHEN WEST NOX ANALYZER WAS INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08M91	E	A0010	4228	10/3/2022	10/3/2022	10/3/2022	SRU Train 2 exceeding its 3-hour average NOX	Chevron Products Company	841 Chevron Way	94801
08P66	E	A0010	4228	12/27/2022		12/29/2022	SRU TRAIN 2 EXCEEDED 3 HR AVG NOX CORRECTED TO 0% 02	Chevron Products Company	841 Chevron Way	94801
08M13	E	A0010		9/21/2022	9/21/2022	9/22/2022	F-2100 EXCEEDED 1 HR AVG NOX LIMIT OF 5 PPM CORRECTED TO 3%	Chevron Products Company	841 Chevron Way	94801

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08K89	E	A0010	6010	8/5/2022	8/5/2022	8/8/2022	FLARE AVG NET HEATING VALUE> 270 BTU/SCF IN 15 MIN BLOCK	Chevron Products Company	841 Chevron Way	94801
08M64	E	A0010	4228	10/18/2022	10/18/2022	10/20/2022	SRU TRAIN 2 EXCEEDED 3HR AVG NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
08K94	E	A0010	4227	8/10/2022		8/12/2022	SRU TRAIN 1 EXCEEDE 3 HR AVG NOX LIMIT. DEVIATION ONGOING.	Chevron Products Company	841 Chevron Way	94801
08M81	E	A0010	4228	10/26/2022	10/27/2022	10/28/2022	SRU TRAIN 2 EXCEEDED ITS 3-HR AVG	Chevron Products Company	841 Chevron Way	94801
08K30	I	A0010	6019	7/15/2022	7/18/2022	7/18/2022	ALKY FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08K46	I	A0010	4167	7/23/2022	7/25/2022	7/25/2022	O2 INOP 7/23 1050-7/25 0852. NOX INOP 7/24 0430-7/25 0853.	Chevron Products Company	841 Chevron Way	94801
08K71	E	A0010	4227	8/4/2022	8/4/2022	8/5/2022	SRU 1 TRAIN EXCEEDED 3 HR AVG NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
08L03	I	A0010		8/17/2022	8/18/2022	8/18/2022	V-701 H2S ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08K29	I	A0010		7/17/2022	7/18/2022	7/18/2022	ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08K99	I	A0010	6015	8/13/2022		8/15/2022	D&R FLARE MASS SPECTROMETER (BTU) BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08M85	E	A0010	4228	10/27/2022	10/27/2022	10/31/2022	SRU TRAIN 2 EXCEEDED 3 HOUR NOX	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
08L00	I	A0010	4072	8/11/2022	8/12/2022	8/15/2022	NOX ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08P63	I	A0010		12/25/2022		12/27/2022	F-1100 / F2100 TOTAL SULFUR ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08N87	E	A0010	4229	11/30/2022	11/30/2022	12/1/2022	SRU #3 TRAIN EXCEEDED 1 HR AVG SO2 LIMIT OF 250 PPM	Chevron Products Company	841 Chevron Way	94801
08L30	I	A0010	6019	8/28/2022	9/2/2022	8/30/2022	ALKY FLARE VENT GAS FLOW METER (59FI736) BECAME INOP.	Chevron Products Company	841 Chevron Way	94801
08L06	E	A0010	701	8/18/2022	8/19/2022	8/20/2022	V-701 FUEL GAS DRUM EXCEEDED ITS H2S CALENDAR DAY AVG	Chevron Products Company	841 Chevron Way	94801
08P78	E	A0010	4228	12/29/2022	12/30/2022	1/2/2023	SRU 2 TRAIN EXCEEDED 1 HOUR AVERAGE	Chevron Products Company	841 Chevron Way	94801
08P70	E	A0010	6016	12/28/2022	12/28/2022	12/30/2022	REGULATED MATL ROUTED TO FLARE FOR >15 MIN	Chevron Products Company	841 Chevron Way	94801
08L09	E	A0010	6010	8/17/2022	8/17/2022	8/20/2022	REGULATED MAT'L ROUTED TO FLARE FOR GREATER THAN 15 MIN	Chevron Products Company	841 Chevron Way	94801
08P69	E	A0010	4229	12/27/2022	12/27/2022	12/29/2022	SRU 3 TRAIN EXCEEDED 1 HR AVG SO2 LIMIT	Chevron Products Company	841 Chevron Way	94801
08N07	E	A0010	4228	11/3/2022	11/3/2022	11/7/2022	SRU 2 TRAIN EXCEEDED 3 HOUR AVERAGE	Chevron Products Company	841 Chevron Way	94801
08K44	I	A0010		7/22/2022	7/25/2022	7/25/2022	PSA2 TAIL GAS TOTAL SULFUR ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801

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08M70	E	A0010	4228	10/20/2022	10/20/2022	10/24/2022	SRU 2 TRAIN EXCEEDED SO2 LIMIT	Chevron Products Company	841 Chevron Way	94801
08P68	E	A0010	4228	12/26/2022	12/27/2022	12/29/2022	SRU TRAIN 2 WESP WAS DEENERGIZED	Chevron Products Company	841 Chevron Way	94801
08N09	I	A0010	4227	11/4/2022	11/7/2022	11/7/2022	SRU 1 TRAIN O2 NOX & CO ANALYZERS BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08L25	E	A0010	4228	8/27/2022	8/27/2022	8/29/2022	SRU TRAIN #2 WESP DEENERGIZED PRIOR TO PULLING ACID GAS FEED	Chevron Products Company	841 Chevron Way	94801
08L44	I	A0010	4038	9/2/2022	9/4/2022	9/6/2022	ANALYZERS WERE INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08M74	I	A0010	4285	10/23/2022	10/24/2022	10/24/2022	FCC V-65 FLUE GAS O2 ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08L43	I	A0010	4285	9/2/2022	9/3/2022	9/6/2022	ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08N45	E	A0010	4228	11/15/2022	11/15/2022	11/18/2022	SRU TRAIN 2 EXCEEDED 3 HOUR NOX	Chevron Products Company	841 Chevron Way	94801
08L33	I	A0010		8/29/2022	8/30/2022	8/31/2022	H2S ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08K14	E	A0010	4227	7/8/2022	7/8/2022	7/12/2022	THERMAL OXIDIZER OPERATED BELOW MINIMUM TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801
08M40	E	A0010		10/5/2022	10/5/2022	10/6/2022	F-1100 EXCEEDED 1 HOUR AVERAGE	Chevron Products Company	841 Chevron Way	94801

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08K25	E	A0010	4285	7/13/2022	7/13/2022	7/15/2022	F-300 STACK OPACITY EXCEEDED 30% 6-MIN AVG LIMIT	Chevron Products Company	841 Chevron Way	94801
08N58	I	A0010	4152	11/19/2022	11/21/2022	11/21/2022	F-100 NOX ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
08L61	E	A0010	4228	9/6/2022	9/6/2022	9/7/2022	ACID GAS FEED INTRODUCED 2 SRU TRAIN PRIOR TO ENERGIZING WES	Chevron Products Company	841 Chevron Way	94801
08L54	I	A0010	4059	9/5/2022	9/6/2022	9/7/2022	NOX AND O2 ANALYZERS BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08L45	I	A0010	6010	9/3/2022	9/4/2022	9/6/2022	FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08M32	E	A0010	4228	9/27/2022	9/27/2022	9/30/2022	SRU 2 TRAIN THERMAL OXIDIZER BELOW MIN TEMP	Chevron Products Company	841 Chevron Way	94801
08M77	E	A0010	4228	10/24/2022	10/24/2022	10/27/2022	SRU #2 TRAIN EXCEEDED 1 HR AVG SO2 LIMIT OF 250 PPM	Chevron Products Company	841 Chevron Way	94801
08L50	I	A0010		9/1/2022	9/8/2022	9/6/2022	ISOMAX COOLING WATER TOWER HC ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08M02	E	A0010	4228	9/17/2022	9/17/2022	9/19/2022	SRU #2 TRAIN THERMAL OXIDIZER OPERATED BELOW MIN TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801
08K20	I	A0010	6016	7/12/2022	7/13/2022	7/14/2022	GAS FLOW METER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08K35	E	A0010	4227	7/20/2022	7/20/2022	7/21/2022	ACID GAS FEED INTRODUCED PRIOR TO ENERGIZING THE WESP	Chevron Products Company	841 Chevron Way	94801

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08M69	E	A0010	4228	10/20/2022	10/20/2022	10/24/2022	SRU 2 TRAIN OPERATED BELOW MINIMUM TEMP	Chevron Products Company	841 Chevron Way	94801
08M61	I	A0010	4159	10/17/2022	10/19/2022	10/19/2022	THE F410/F420 NOX AND O2 ANALYZERS BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08M36	E	A0010	4228	9/30/2022	10/3/2022	10/4/2022	SRU #2 EXCEEDED 3 HR AVERAGE NOX, CORRECTED TO 0% O2 LIMIT	Chevron Products Company	841 Chevron Way	94801
08P53	E	A0010	4227	12/21/2022	12/22/2022	12/24/2022	SRU 1 TRAIN EXCEEDED 1 HR AVG SO2 LIMIT	Chevron Products Company	841 Chevron Way	94801
08M78	E	A0010	4228	10/24/2022	10/24/2022	10/27/2022	SRU #2 TRAIN EXCEEDED 3HR AVG NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
08K26	E	A0010	4285	7/13/2022	7/13/2022	7/15/2022	FCC TR SETS TRIPPED OFFLINE. RE-ENERGIZED.	Chevron Products Company	841 Chevron Way	94801
08K64	I	A0010	6010	8/2/2022	8/5/2022	8/4/2022	LSFO FLARE SAMPLE STATION BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08M92	E	A0010	4227	10/29/2022	10/31/2022	11/2/2022	SRU #1 TRAIN EXCEEDED IT'S 3 HR AVG NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
08M07	E	A0010	475	9/18/2022	9/18/2022	9/20/2022	V-475 FUEL GAS DRUM EXCEEDED 24 HR H2S LIMIT	Chevron Products Company	841 Chevron Way	94801
08P65	E	A0010	4227	12/27/2022	12/28/2022	12/29/2022	SRU #1 TRAIN EXCEEDED ITS CALENDAR DAY AVG CO LIMIT	Chevron Products Company	841 Chevron Way	94801
08N44	E	A0010	4227	11/15/2022	11/15/2022	11/18/2022	SRU TRAIN 1 EXCEEDED NOX 3 HOUR	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
08N05	E	A0010	4228	11/2/2022	11/3/2022	11/4/2022	SRU 2 TRAIN OPERATED BELOW MIN TEMPERATURE LIMIT	Chevron Products Company	841 Chevron Way	94801
08L77	E	A0010	4227	9/7/2022	9/8/2022	9/9/2022	SRU 1 TRAIN EXCEEDED CALENDAR DAY AVERAGE CO LIMIT	Chevron Products Company	841 Chevron Way	94801
08L23	E	A0010	6039	8/23/2022	8/24/2022	8/27/2022	AVG NET HEATING VALUE OF COMBUSTION ZONE <270 BTU/SCF	Chevron Products Company	841 Chevron Way	94801
08P67	E	A0010	4228	12/27/2022	12/28/2022	12/29/2022	SRU 2 TRAIN THERMAL OXIDIZER OPERATED BELOW MIN TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801
08L08	E	A0010		8/18/2022	8/19/2022	8/20/2022	V870 FUEL GAS DRUM EXCEEDED 100PPM CAL DAY TOTAL SULFUR LIM I	Chevron Products Company	841 Chevron Way	94801
08L85	E	A0010		9/12/2022	9/13/2022	9/15/2022	F-1361 EXCEEDED 8 HR AVERAGE NOX, CORRECTED TO 3% O2	Chevron Products Company	841 Chevron Way	94801
08L02	E	A0010	4228	8/15/2022	8/15/2022	8/18/2022	SRY 2 TRAIN OXIDIZER OPERATED BELOW MINIMUM TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801
08L34	I	A0010	6019	8/29/2022	9/7/2022	8/31/2022	ALKY FLARE MASS SPECTROMETER (BTU) BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08M14	I	A0010		9/20/2022		9/22/2022	ISOMAX COOLING WATER TOWER HYDROCARBON ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
08L66	E	A0010	4227	9/7/2022		9/8/2022	SRU #1 TRAIN THERMAL OXIDIZER OPERATED BELOW MINIMUM TEMP	Chevron Products Company	841 Chevron Way	94801
08K97	E	A0010	4227	8/15/2022	8/15/2022	8/15/2022	ACID GAS FEED WAS INTRODUCED PRIOR TO ENERGIZING WESP	Chevron Products Company	841 Chevron Way	94801

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08K91	E	A0010	4227	8/7/2022	8/7/2022	8/9/2022	SRU TRAIN 1 EXCEEDED 3 HR AVG NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
08P57	E	A0010	4228	12/21/2022	12/22/2022	12/24/2022	SRU 2 TRAIN EXCEEDED CALENDAR DAY AVG CO LIMIT	Chevron Products Company	841 Chevron Way	94801
08L04	I	A0010	6010	8/17/2022	8/18/2022	8/18/2022	LSFO FLARE MASS SPECTROMETER INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08N01	E	A0010		11/3/2022	11/3/2022	11/4/2022	F-2100 EXCEEDED NOX 1 HOUR AVERAGE	Chevron Products Company	841 Chevron Way	94801
08M50	I	A0010	4285	10/7/2022	10/8/2022	10/10/2022	FCC O2 ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08P79	E	A0010	4228	12/30/2022	12/31/2022	1/2/2023	THERMAL OXIDIZER OPERATED UNDER MIN TEMP	Chevron Products Company	841 Chevron Way	94801
08M80	I	A0010	4227	10/25/2022		10/27/2022	SRU #1 TRAIN SO2 ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08P02	E	A0010	4227	12/3/2022	12/4/2022	12/6/2022	SRU 1 TRAIN EXCEEDED 3 HOUR AVERAGE NOX, CORRECTED TO 0% O2	Chevron Products Company	841 Chevron Way	94801
08K27	E	A0010	4229	7/14/2022	7/14/2022	7/15/2022	SRU 3 TRAIN (S42290 EXCEEDED 1 HR AVG SO2 LIMIT	Chevron Products Company	841 Chevron Way	94801
08M79	E	A0010	4227	10/26/2022	10/26/2022	10/27/2022	ACID GAS FEED INTRODUCED TO SRU PRIOR TO ENERGIZING WESP	Chevron Products Company	841 Chevron Way	94801
08L83	E	A0010	4227	9/10/2022	9/10/2022	9/13/2022	SRU TRAIN 1 EXCEEDED 3HR AVG NOX LIMIT	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
08L96	E	A0010	4285	9/14/2022		9/16/2022	FCC TR SETS WERE DE-ENERGIZED	Chevron Products Company	841 Chevron Way	94801
08P41	I	A0010		12/19/2022	12/21/2022	12/21/2022	F-1100/F-2100 TOTAL SULFUR ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
08L60	E	A0010	4227	9/6/2022	9/7/2022	9/7/2022	SRU1 TRAIN WESP DEENERGIZED PRIOR TO PULLING ACID GAS FEED	Chevron Products Company	841 Chevron Way	94801
08P00	E	A0010	4227	12/2/2022	12/2/2022	12/6/2022	SRU 1 TRAIN EXCEEDED 1 HOUR AVERAGE SO2 LIMIT OF 250 PPM	Chevron Products Company	841 Chevron Way	94801
08K87	I	A0010	6019	8/6/2022	8/9/2022	8/8/2022	ALKY FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08N08	I	A0010	4038	11/4/2022	11/6/2022	11/7/2022	4 THEN WEST NOX & O2 ANALYZER WERE INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08P55	E	A0010	4228	12/20/2022	12/21/2022	12/24/2022	SRU 2 TRAIN EXCEEDED 1 HR AVE LIMIT	Chevron Products Company	841 Chevron Way	94801
08N10	I	A0010	4228	11/4/2022	11/7/2022	11/7/2022	SRU 2 TRAIN O2, NOX, CO & SO2 ANALYZERS BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08L32	E	A0010	4228	8/29/2022		8/31/2022	SRU 2 TRAIN THERMAL OXIDIZER OPERATED BELOW MIN TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801
08M22	E	A0010	4228	9/23/2022	9/23/2022	9/27/2022	SRU TRAIN 2 EXCEEDED 3 HR AVG NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
08N74	I	A0010	4285	11/24/2022	11/25/2022	11/28/2022	FCC V-65 FLUE GAS O2 ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801

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08K92	I	A0010	6013	8/8/2022	8/9/2022	8/9/2022	NISO FLARE MASS SPECTROMETER (BTU) BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08P64	E	A0010	4227	12/27/2022	12/28/2022	12/29/2022	SRU TRAIN 1 EXCEEDED 3 HR AVG NOX	Chevron Products Company	841 Chevron Way	94801
08L35	I	A0010	6019	8/29/2022	9/1/2022	8/31/2022	ALKY FLARE VENT GAS PRESSURE METER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08M93	E	A0010	4228	10/29/2022	10/30/2022	11/2/2022	SRU #2 TRAIN EXCEEDED IT'S 3 HR AVG NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
08M08	E	A0010	701	9/17/2022	9/18/2022	9/20/2022	V-701 FUEL GAS DRUM EXCEEDED 1 HR AVG TOTAL SULFUR LIMITS	Chevron Products Company	841 Chevron Way	94801
08N57	E	A0010	4228	11/20/2022	11/20/2022	11/21/2022	SRU TRAIN 2 EXCEEDED 3 HOUR AVERAGE	Chevron Products Company	841 Chevron Way	94801
08P54	E	A0010	4227	12/21/2022	12/22/2022	12/24/2022	SRU 1 TRAIN EXCEEDED ITS CALENDAR DAY AVG CO LIMIT	Chevron Products Company	841 Chevron Way	94801
08L78	E	A0010	4227	9/8/2022	9/8/2022	9/9/2022	SRU 1 TRAIN EXCEEDED 3 HR AVERAGE NOX	Chevron Products Company	841 Chevron Way	94801
08L14	I	A0010	4227	8/18/2022	8/22/2022	8/22/2022	SRU #1 TRAIN ANALYZERS INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08P35	E	A0010	4227	12/17/2022	12/17/2022	12/19/2022	SRU 1 TRAIN EXCEEDED 3 HOUR AVERAGE NOX, CORRECTED TO 0% O2	Chevron Products Company	841 Chevron Way	94801
08K93	I	A0010		8/8/2022		8/10/2022	H2S ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801

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08N32	I	A0010	4040	11/11/2022	11/14/2022	11/14/2022	4 RHEN EAST NOX AND O2 ANALYZERS INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08P40	I	A0010		12/19/2022	12/21/2022	12/21/2022	FUEL GAS DRUM TOTAL SULFUR ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08N46	E	A0010	4227	11/17/2022	11/18/2022	11/18/2022	SRU 1 TRAIN EXCEEDED ITS DAILY 12HR & HOURLY SO2 LIMIT	Chevron Products Company	841 Chevron Way	94801
08N56	E	A0010	4228	11/19/2022	11/19/2022	11/21/2022	SRU 2 TRAIN EXCEEDED 3 HOUR AVERAGE	Chevron Products Company	841 Chevron Way	94801
08K03	I	A0010	6013	7/9/2022	7/10/2022	7/11/2022	NISO FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08N00	E	A0010		11/3/2022	11/3/2022	11/4/2022	F-2100 DID NOT INJECT NH3 WHEN SCR CATALYST BED WAS > 500F	Chevron Products Company	841 Chevron Way	94801
08L27	I	A0010	6010	8/27/2022	8/29/2022	8/29/2022	LSFO FLARE MASS SPECTROMETER BECAME INOP.	Chevron Products Company	841 Chevron Way	94801
08L62	I	A0010	4227	9/5/2022	9/6/2022	9/7/2022	SRU #1 TRAIN SO2 LOW RANGE ANALYZER BECAME INOP.	Chevron Products Company	841 Chevron Way	94801
08K61	E	A0010	6016	8/2/2022	8/2/2022	8/3/2022	AVG NET HEATING VALUE OF COMBUSTION ZONE < 270 BTU/SCF	Chevron Products Company	841 Chevron Way	94801
08K31	I	A0010		7/17/2022	7/18/2022	7/19/2022	NOX ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08L13	I	A0010	4059	8/19/2022	8/22/2022	8/22/2022	FUEL GAS FLOW METER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
08L91	E	A0010	6016	9/12/2022	9/12/2022	9/15/2022	REGULATED MATERIAL WAS ROUTED TO THE FLARE > 15 MINUETS	Chevron Products Company	841 Chevron Way	94801
08M33	E	A0010	4228	9/27/2022	9/28/2022	9/30/2022	SRU 2 TRAIN EXCEEDED CALENDAR DAY AVG CO LIMIT	Chevron Products Company	841 Chevron Way	94801
08P03	E	A0010	4227	12/4/2022		12/6/2022	SRU 1 TRAIN EXCEEDED 3 HOUR AVERAGE NOX, CORRECTED TO 0% LIM	Chevron Products Company	841 Chevron Way	94801
08K63	I	A0010	6013	8/2/2022	8/3/2022	8/4/2022	NISO FLARE SAMPLE STATION BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08N04	E	A0010	4228	11/1/2022	11/2/2022	11/4/2022	SRU 2 TRAIN EXCEEDED 3 HOUR AVERAGE NOX, CORRECTED TO 0% O2	Chevron Products Company	841 Chevron Way	94801
08K86	E	A0010	4227	8/5/2022	8/5/2022	8/8/2022	ISRU TRAIN WESP DEENERGIZED	Chevron Products Company	841 Chevron Way	94801
08N88	E	A0010	4227	11/28/2022	11/28/2022	12/2/2022	OPERATING WITH ACID GAS FEED WHILE WESP DE-ENERGIZED	Chevron Products Company	841 Chevron Way	94801
08L94	E	A0010		9/14/2022	9/15/2022	9/16/2022	FUEL GAS DRUM EXCEEDED 50 PPM 24 HR AVERAGE H2S LIMIT	Chevron Products Company	841 Chevron Way	94801
08L11	E	A0010		8/18/2022	8/19/2022	8/20/2022	V-701 FUEL GAS DRUM EXCEEDED ITS H2S CALENDAR DAY AVG	Chevron Products Company	841 Chevron Way	94801
08M23	E	A0010	4228	9/24/2022	9/24/2022	9/27/2022	SRU TRAIN 2 EXCEEDED 3 HR AVG NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
08N38	E	A0010	4227	11/14/2022	11/14/2022	11/17/2022	SRU #1 TRAIN EXCEEDED 3 HR AVG NOX LIMIT	Chevron Products Company	841 Chevron Way	94801

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08L68	E	A0010	4228	9/6/2022	9/6/2022	9/8/2022	SRU TRAIN #2 EXCEEDED 3HR AVG NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
08M94	E	A0010	4228	10/31/2022	10/31/2022	11/2/2022	SRU #2 TRAIN EXCEEDED IT'S 3 HR AVG NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
08L69	E	A0010	4162	9/5/2022	9/8/2022	9/8/2022	F520 EXCEEDED IT'S DAILY FIRING RATE THROUGHPUT LIMIT	Chevron Products Company	841 Chevron Way	94801
08K90	E	A0010	4227	8/6/2022	8/6/2022	8/9/2022	SRU TRAIN 1 EXCEEDED 3 HR AVG NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
08K95	E	A0010	4285	8/11/2022		8/15/2022	ESP INLET TEMP WAS LESS THAN 550 F AT THE 1318 CLOCK HOUR	Chevron Products Company	841 Chevron Way	94801
08M03	I	A0010	6039	9/16/2022	9/19/2022	9/19/2022	RLOP FLARE MASS SPECTROMETER (BTU) BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08M86	I	A0010		10/28/2022	10/31/2022	10/31/2022	ANALYZERS BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08K45	I	A0010	4159	7/23/2022	7/25/2022	7/24/2022	O2 INOP 7/23 1057-7/25 0835. NOX INOP 7/24 1602-7/25 0835.	Chevron Products Company	841 Chevron Way	94801
08N24	E	A0010	4228	10/9/2022	11/10/2022	11/10/2022	SRU #2 TRAIN STACK EXCEEDED 3 HR AVG. NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
08K88	E	A0010	6010	8/5/2022	8/5/2022	8/8/2022	NET HEATING VALUE OF FLARE > 270 BTU/SCF IN A 15 MIN BLOCK	Chevron Products Company	841 Chevron Way	94801
08G91	E	A0010	6010	4/7/2022	4/7/2022	4/8/2022	AVG NET HEATING VALUE OF COMBUSTION ZONE < 270 BTU/SCF	Chevron Products Company	841 Chevron Way	94801

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08G93	E	A0010	6010	4/8/2022	4/8/2022	4/12/2022	FLARE > 15 MINUTES AVERAGE NET HEATING VALUE OF RSR BTU	Chevron Products Company	841 Chevron Way	94801
08H15	E	A0010	6010	4/23/2022	4/23/2022	4/26/2022	AVG NET HEATING VALUE OF FLARE >270 BTU/SCF FOR 15 MIN BLOCK	Chevron Products Company	841 Chevron Way	94801
08H16	E	A0010	6010	4/24/2022	4/24/2022	4/26/2022	AVG NET HEATING VALUE OF FLARE <270 BTU/SCF IN 15 MIN BLOCK	Chevron Products Company	841 Chevron Way	94801
08H24	I	A0010		4/28/2022		5/2/2022	ISOMAX COOLING WATER TOWER FLOW METER 78FI260A BECAME INOP	Chevron Products Company	841 Chevron Way	94801
08H41	E	A0010		5/6/2022	5/6/2022	5/9/2022	F2100 EXCEEDED 1-HR AVG NOX LIMIT OF 5 PPM	Chevron Products Company	841 Chevron Way	94801
08H50	E	A0010	4228	5/9/2022	5/9/2022	5/11/2022	SRU #2 TRAIN OPERATED WITH THE WESP DE-ENERGIZED	Chevron Products Company	841 Chevron Way	94801
08H60	E	A0010	4227	5/10/2022	5/12/2022	5/13/2022	SRU #1 TRAIN OPERATED WITH THE WESP DE-ENERGIZED	Chevron Products Company	841 Chevron Way	94801
08H58	E	A0010	4227	5/11/2022	5/11/2022	5/13/2022	SRU 1 TRAIN THERMAL OXIDIZER OPERATED BELOW MIN TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801
08H59	E	A0010	4228	5/11/2022	5/11/2022	5/13/2022	SRU #2 TRAIN THERMAL OXIDIZER OPERATED BELOW MIN TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801
08H61	E	A0010	4228	5/11/2022	5/13/2022	5/13/2022	SRU #2 TRAIN OPERATED WITH THE WESP DE-ENERGIZED	Chevron Products Company	841 Chevron Way	94801
08H56	E	A0010	4227	5/11/2022	5/11/2022	5/13/2022	SRU 1 TRAIN EXCEEDED 1 HR AVG SO2 LIMIT OF 250 PPM	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
08H57	E	A0010	4228	5/11/2022	5/11/2022	5/13/2022	SRU 2 TRAIN EXCEEDED 1 HR AVG SO2 LIMIT OF 250 PPM	Chevron Products Company	841 Chevron Way	94801
08H54	E	A0010	701	5/11/2022	5/11/2022	5/12/2022	V701 FUEL GAS DRUM EXCEEDED 1 HR AVG TOTAL SULFUR LIMIT	Chevron Products Company	841 Chevron Way	94801
08H68	E	A0010	4227	5/13/2022	5/13/2022	5/16/2022	SRU 1 TRAIN THERMAL OXIDIZER OPERATED BELOW MIN TEMP	Chevron Products Company	841 Chevron Way	94801
08H75	E	A0010	6016	5/13/2022	5/13/2022	5/17/2022	FCC FLARE EXCEEDED VISABLE EMISSIONS LIMIT OF 5 MINS	Chevron Products Company	841 Chevron Way	94801
08H74	E	A0010	6016	5/13/2022	5/13/2022	5/17/2022	AVG NET HEATING VALUE OF FCC FLARE > 270 BTU/SCF	Chevron Products Company	841 Chevron Way	94801
08H73	I	A0010	4285	5/15/2022	5/16/2022	5/17/2022	FCC OPACITY ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08H79	I	A0010		5/17/2022	5/18/2022	5/19/2022	D&R FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08H88	E	A0010	4227	5/22/2022	5/22/2022	5/23/2022	WESP WAS DE-ENERGIZED PRIOR TO PULLING ACID GAS FEED	Chevron Products Company	841 Chevron Way	94801
08H93	E	A0010	4227	5/23/2022		5/25/2022	SRU TRAIN 1 EXCEEDED 3 HOUR AVERAGE NOX	Chevron Products Company	841 Chevron Way	94801
08J09	I	A0010	6039	5/31/2022	6/3/2022	6/2/2022	RLOP FLARE MASS SPECTROMETER (BTU) BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08J12	I	A0010	6013	6/1/2022	6/2/2022	6/3/2022	NISO FLARE MASS SPECTROMETER FOR BTU BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
08J17	I	A0010	6016	6/3/2022		6/6/2022	FCC FLARE GAS FLOW & TEMP METERS BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08J24	I	A0010	6019	6/6/2022	6/7/2022	6/8/2022	ALKY FLARE MASS SPECTROMETER (BTU) BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08J30	I	A0010	6013	6/10/2022	6/13/2022	6/13/2022	NISO FLARE MASS SPECTROMETER (BTU) BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08J33	E	A0010		6/13/2022	6/13/2022	6/14/2022	F-1100 EXCEEDED 1 HOUR AVERAGE NOX	Chevron Products Company	841 Chevron Way	94801
08J39	E	A0010		6/15/2022	6/15/2022	6/16/2022	F1100 EXCEEDED IT'S 1 HR AVG NOX DURING THE 2100 CLOCK HOUR	Chevron Products Company	841 Chevron Way	94801
08J45	E	A0010		6/17/2022		6/20/2022	FUEL GAS DRUM EXCEEDED 100 PPM TOTAL SULFUR	Chevron Products Company	841 Chevron Way	94801
08J47	E	A0010	4285	6/17/2022	6/17/2022	6/20/2022	FCC TR SETS TRIPPED OFFLINE	Chevron Products Company	841 Chevron Way	94801
08J46	E	A0010	4285	6/17/2022	6/17/2022	6/20/2022	F-300 STACK OPACITY EXCEEDED 30% 6-MIN AVG	Chevron Products Company	841 Chevron Way	94801
08J50	E	A0010	4228	6/18/2022	6/18/2022	6/20/2022	SRU TRAIN 2 WESP WAS DEENERGIZED PRIOR TO PULING ACID GAS FE	Chevron Products Company	841 Chevron Way	94801
08J57	E	A0010	4228	6/18/2022		6/21/2022	SRUTRAIN 2 EXCEEDED 3HR LIMIT	Chevron Products Company	841 Chevron Way	94801
08J61	E	A0010	4228	6/22/2022	6/23/2022	6/24/2022	OPERATED BELOW MIN TEMP LIMIT	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
08J64	E	A0010	4229	6/23/2022	6/23/2022	6/25/2022	SRU 3 TRAIN EXCEEDED 1 HR AVG SO2 LIMIT OF 250 PPM	Chevron Products Company	841 Chevron Way	94801
08J69	I	A0010	6013	6/26/2022	6/27/2022	6/28/2022	NISO FLARE MASS SPECTROMETER (BTU) BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08J72	I	A0010		6/28/2022	6/29/2022	6/29/2022	H2 PLANT FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08J71	E	A0010	6015	6/29/2022	6/29/2022	6/29/2022	AVG NET HEATING VALUE OF FLARE > 270 BTU/SCF IN 15 MIN BLOCK	Chevron Products Company	841 Chevron Way	94801
08J74	I	A0010	6012	6/29/2022	6/30/2022	6/30/2022	SISO FLARE BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08J87	I	A0010	6019	6/30/2022	7/4/2022	7/5/2022	AKLY FLARE VENT GAS FLOW METER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08J86	I	A0010	6019	6/30/2022	7/4/2022	7/5/2022	ALKY FLARE MASS SPECTROMETER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08J82	I	A0010		7/1/2022	7/2/2022	7/5/2022	V701 H2S ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08J81	E	A0010	4227	7/1/2022	7/1/2022	7/5/2022	WESP DE-ENERGIZED PRIOR TO PULLING ACID GAS FEED	Chevron Products Company	841 Chevron Way	94801
08J83	I	A0010		7/3/2022	7/5/2022	7/5/2022	NOX ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08J91	E	A0010		7/3/2022	7/5/2022	7/7/2022	F1100 EXCEEDED 1 HOUR AVERAGE NOX	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
08J90	I	A0010		7/4/2022	7/5/2022	7/6/2022	TOTAL SULFUR ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08J85	I	A0010		7/4/2022	7/5/2022	7/5/2022	ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08J89	E	A0010	4227	7/6/2022		7/6/2022	SRU TRAIN EXCEEDED IT'S 3 HR AVG NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
08J92	I	A0010		7/6/2022	7/7/2022	7/7/2022	V-701 H2S ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08J93	E	A0010	4227	7/6/2022	7/6/2022	7/7/2022	ACID GAS FEED INTRODUCED TO S-4227 PRIOR TO ENERGIZING WESP	Chevron Products Company	841 Chevron Way	94801
08G21	E	A0010		3/14/2022	3/14/2022	3/16/2022	F-1100 EXCEEDED 1 HOUR AVERAGE NOX CORRECTED TO 3% O2 LIMIT	Chevron Products Company	841 Chevron Way	94801
08G56	I	A0010	701	3/22/2022	3/24/2022	3/24/2022	V70A H2S ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
08G54	E	A0010	6010	3/22/2022	3/22/2022	3/24/2022	AVG NET HEATING VALUE OF COMBUSTION ZONE < 270 BTU/SCF	Chevron Products Company	841 Chevron Way	94801
08G55	E	A0010	6010	3/22/2022	3/22/2022	3/24/2022	LSFO FLARE EXCEEDED VISIBLE EMISSIONS LIMIT OF 5 MINUTES	Chevron Products Company	841 Chevron Way	94801
08G57	I	A0010	4061	3/22/2022	3/23/2022	3/24/2022	F410/447 NOX AND O2 ANALYZERS BECAME INOP	Chevron Products Company	841 Chevron Way	94801
08G14	I	A0010	6015	3/12/2022	3/14/2022	3/14/2022	D&R FLARE MASS SPECTROMETER (BTU) BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
08G69	E	A0010	4228	3/28/2022	3/29/2022	3/31/2022	SRU 2 TRAIN EXCEEDED 3 HOUR AVERAGE NOX	Chevron Products Company	841 Chevron Way	94801
08G07	E	A0010	4285	3/9/2022		3/10/2022	FCC EXCEEDED ROLLING 7 DAY AVERAGE. NOX CORRECTED TO 0% O2	Chevron Products Company	841 Chevron Way	94801
08G68	E	A0010	4227	3/28/2022	3/28/2022	3/31/2022	SRU 1 TRAIN EXCEEDED 1 HOUR AVERAGE	Chevron Products Company	841 Chevron Way	94801
08G49	I	A0010	6039	3/21/2022	3/30/2022	3/23/2022	RLOP FLARE	Chevron Products Company	841 Chevron Way	94801
08G06	I	A0010	4285	3/7/2022	3/8/2022	3/9/2022	FCC OPACITY ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08G05	I	A0010	4285	3/7/2022	3/8/2022	3/9/2022	FCC OPACITY ANALYZER BECAME INOP	Chevron Products Company	841 Chevron Way	94801
08G67	E	A0010	4227	3/28/2022	3/28/2022	3/31/2022	THERMAL OXIDIZER BELOW MIN TEMP	Chevron Products Company	841 Chevron Way	94801
08G81	E	A0010	4339	4/3/2022	4/4/2022	4/5/2022	F-1110 EXCEEDED ITS DAILY FIRING RATE LIMIT OF 456 MMBTU/DAY	Chevron Products Company	841 Chevron Way	94801
08G64	I	A0010	4188	3/26/2022	3/29/2022	3/28/2022	ANALYZERS BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08F99	I	A0010	6019	3/5/2022	3/10/2022	3/7/2022	ALKY FLARE VENT GLAS FLOW METER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08G00	I	A0010	6016	3/5/2022	3/10/2022	3/7/2022	FCC FLARE VENT GAS FLOW METER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
08G66	I	A0010	6039	3/26/2022	3/30/2022	3/30/2022	RLOP FLARE MASS SPECTROMETER, THAT MEASURES BTU, BECAME INOP	Chevron Products Company	841 Chevron Way	94801
08G01	E	A0010	6016	3/4/2022	3/4/2022	3/8/2022	REGULATED MATERIAL WAS ROUTED TO THE FLARE >15 MINS AVERAGE	Chevron Products Company	841 Chevron Way	94801
08G35	E	A0010		3/21/2022	3/21/2022	3/21/2022	AVERAGE NET HEATING VALUE OF FLARE < 270 BTU/SCF 15 MINS	Chevron Products Company	841 Chevron Way	94801
08F91	E	A0010	4155	3/4/2022	3/4/2022	3/7/2022	EXCEEDANCE OF 3-HR AVERAGE NOX LIMIT	Chevron Products Company	841 Chevron Way	94801
08F94	E	A0010		3/4/2022	3/5/2022	3/7/2022	REFINERY EXCEEDED CALENDAR DAY NOX MASS EMISSIONS LIMIT	Chevron Products Company	841 Chevron Way	94801
08G80	E	A0010	4339	4/3/2022	4/4/2022	4/5/2022	F-1110 EXCEEDED DAILY FIRING RATE LIMIT	Chevron Products Company	841 Chevron Way	94801
08G65	E	A0010	4227	3/26/2022	3/26/2022	3/29/2022	SRU 1 TRAIN THERMAL OXIDIZER OPERATED BELOW MIN TEMP	Chevron Products Company	841 Chevron Way	94801
08G36	E	A0010	4227	3/20/2022	3/20/2022	3/21/2022	SRU #1 TRAIN THERMAL OXIDIZER OPERATED BELOW MINIMUM TEMP	Chevron Products Company	841 Chevron Way	94801
08F85	E	A0010		3/3/2022	3/4/2022	3/4/2022	FUEL GAS DRUM EXCEEDED IT'S 50 PPM 24 HR AVERAGE H2S LIMIT	Chevron Products Company	841 Chevron Way	94801
08F84	E	A0010		3/3/2022	3/4/2022	3/4/2022	V-475 FUEL GAS DRUM EXCEEDED 50 PPM DAY AVERAGE H2S LIMIT	Chevron Products Company	841 Chevron Way	94801
08F86	E	A0010		3/2/2022	3/3/2022	3/4/2022	FUEL GAS DRUM EXCEEDED ITS 160 PPM 3 HR AVG H2S LIMIT	Chevron Products Company	841 Chevron Way	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
08F87	E	A0010		3/2/2022	3/3/2022	3/4/2022	FUEL GAS DRUM EXCEEDED 1HR AVG TOTAL SULFUR 200 PPM LIMIT	Chevron Products Company	841 Chevron Way	94801
08G38	I	A0010		3/18/2022	3/22/2022	3/21/2022	TAIL GAS TOTAL SULFUR ANALYZER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08G26	E	A0010		3/16/2022	3/16/2022	3/17/2022	REGULATED MATERIAL WAS ROUTED TO HE FLARE > 15 MINUTES AVERA	Chevron Products Company	841 Chevron Way	94801
08G60	E	A0010	4228	3/24/2022	3/24/2022	3/25/2022	SRU 2 TRAIN EXCEEDED 3 HOUR AVERAGE NOX	Chevron Products Company	841 Chevron Way	94801
08G39	I	A0010		3/16/2022	3/30/2022	3/21/2022	H2 FLARE PILOT GAS FLOW METER BECAME INOPERATIVE	Chevron Products Company	841 Chevron Way	94801
08G25	E	A0010	4228	3/16/2022	3/16/2022	3/17/2022	SRU 2 TRAIN EXCEEDED THE 1HR AVERAGE SO2 LIMIT	Chevron Products Company	841 Chevron Way	94801
08G59	E	A0010	4227	3/24/2022	3/25/2022	3/25/2022	SRU TRAIN 1 EXCEEDED 3 HOUR AVERAGE NOX	Chevron Products Company	841 Chevron Way	94801
08G53	E	A0010	4227	3/23/2022	3/23/2022	3/24/2022	EXCEEDED 3 HR AVG NOX, CORRECTED TO 0% O2 LIMIT, 1100-1600	Chevron Products Company	841 Chevron Way	94801
08E57	B	A1840		1/3/2022	1/3/2022	1/3/2022	A SHUTOFF VALVE IS AUTOMATICALLY ACTIVATED WHEN FLARE SHUTS	West Contra Costa County Landfill	1 Parr Boulevard	94801
08L53	E	A1840		9/5/2022	9/6/2022	9/6/2022	POWER OUTAGE CAUSED GCCS SHUTDOWN	West Contra Costa County Landfill	1 Parr Boulevard	94801
08L52	B	A1840		9/5/2022	9/6/2022	9/6/2022	POWER OUTAGE CAUSED GCCS DOWNTIME	West Contra Costa County Landfill	1 Parr Boulevard	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
08G08	B	A1840		3/10/2022	3/10/2022	3/10/2022	GCCS DOWNTIME, DUE TO POWER SURGE TRIPPING BOTH BLOWERS	West Contra Costa County Landfill	1 Parr Boulevard	94801
08H02	B	A1840		4/17/2022	4/18/2022	4/18/2022	FLARE & LFG COLLECTION SYSTEM SHUTDOWN DUE TO COMPONENT FAIL	West Contra Costa County Landfill	1 Parr Boulevard	94801
08G30	B	A1840		3/18/2022	3/18/2022	3/18/2022	LFG GCCS DOWNTIME OCCURED DUE TO AIR COMPRESSOR FAILURE	West Contra Costa County Landfill	1 Parr Boulevard	94801
08G09	E	A1840		3/10/2022	3/10/2022	3/10/2022	POWER SURGE TRIPPED BOTH BLOWERS, FLARE WAS MANUALLY RESTART	West Contra Costa County Landfill	1 Parr Boulevard	94801
08G31	E	A1840		3/18/2022	3/18/2022	3/18/2022	LFG GCCS DOWNTIME DUE TO AN AIR COMPRESSOR FAILURE	West Contra Costa County Landfill	1 Parr Boulevard	94801
08H03	E	A1840		4/17/2022	4/18/2022	4/18/2022	FLARE & LFG COLLECTION SYSTEM SHUTDOWN DUE TO COMPONENT FAIL	West Contra Costa County Landfill	1 Parr Boulevard	94801
08H08	B	A1840		4/20/2022	4/21/2022	4/21/2022	LFG GCCS SHUTDOWN DUE TO COMPRESSOR MALFUNCTION	West Contra Costa County Landfill	1 Parr Boulevard	94801
08H11	B	A1840		4/21/2022	4/21/2022	4/22/2022	LFG FLARE SHUTDOWN DUE TO POWER FLUCTUATIONS	West Contra Costa County Landfill	1 Parr Boulevard	94801
08H12	E	A1840		4/21/2022	4/21/2022	4/22/2022	LFG SHUTDOWN DUE TO POWER FLUCTUATIONS	West Contra Costa County Landfill	1 Parr Boulevard	94801
08H09	E	A1840		4/20/2022	4/21/2022	4/21/2022	LFG GCCS SHUTDOWN DUE TO COMPRESSOR MALFUNCTION	West Contra Costa County Landfill	1 Parr Boulevard	94801
08H25	B	A1840		5/3/2022	5/3/2022	5/3/2022	POWER SURGE RESULTED IN BLOWER MALFUNCTION	West Contra Costa County Landfill	1 Parr Boulevard	94801

RCA Number	Type	Site Number	Source #	Start Date	Clear Date	Received Date	Description	Site Name	Street Name	Zip
08H26	E	A1840		5/3/2022	5/3/2022	5/3/2022	POWER SURGE RESULTED IN BLOWER MALFUNCTION	West Contra Costa County Landfill	1 Parr Boulevard	94801
08H72	E	A1840		5/16/2022	5/16/2022	5/16/2022	ENERGY PRODUCTION FACILITY WAS OFFLINE. ENGINES BECAME INOP	West Contra Costa County Landfill	1 Parr Boulevard	94801
08H98	B	A1840		5/29/2022	5/30/2022	5/30/2022	GCCS DOWNTIME DUE TO BLOWER MALFUNCTION	West Contra Costa County Landfill	1 Parr Boulevard	94801
08H71	B	A1840		5/16/2022	5/16/2022	5/16/2022	BREAKDOWN FOR LANDFILL GAS & COLLECTION & CONTROL SYSTEM	West Contra Costa County Landfill	1 Parr Boulevard	94801
08H99	E	A1840		5/29/2022	5/30/2022	5/30/2022	GCCS DOWNTIME DUE TO BLOWER MALFUNCTION	West Contra Costa County Landfill	1 Parr Boulevard	94801
08N37	B	A0057	1	11/16/2022		11/17/2022	HIGH VOC EMISSIONS FROM VAPOR RECOVERY UNIT	Richmond Products Terminal	1306 Canal Street	94804

Appendix F: CARB Clean Air Pathway Complaints

CARB enforces many areas related to mobile vehicles including engines, fuel containers, refrigerants, and windshield washer fluids. All these programs contribute to CARB's overall efforts to tackle emissions of all types from all sources.

Both tables contain results for actions within the PTCA Plan area.

Table 1: CARB mobile source inspection results, 2019-2022.

Table 2: CalEPA complaint investigation results 2019-2022.

Date	ID Number	City	Zip	Program	Action/Status
07/30/19	3017	Richmond	94804	Light Duty Vehicles	Referred Out
09/28/21	4634	Richmond	94804	Off-Road	NFA- In Compliance
07/31/19	3030	Richmond	94806	Periodic Smoke Inspection	Under Investigation
08/27/19	3143	Richmond	94802	Periodic Smoke Inspection	Referred Out
02/12/20	3579	Richmond	94804	Periodic Smoke Inspection	Under Investigation
02/14/20	3587	Richmond	94804	Periodic Smoke Inspection	Under Investigation
07/23/21	4517	Richmond	94806	Periodic Smoke Inspection	Under Investigation
10/28/21	4655	Richmond	94804	Periodic Smoke Inspection	Under Investigation
12/13/21	4715	Richmond	94801	Periodic Smoke Inspection	Under Investigation
01/09/20	3429	San Pablo	94806	Truck & Bus	Referred Out

Table 2: CalEPA Complaint Investigation Results 2019-2022

Date	ID Number	City	Zip	Program	Alleged Facility	Concern	Action/Status
3/3/2020	47292	Richmond	94804	Rail	Phillip 66	Train Idling	Closed/Anonymous
3/21/2020	47508	Richmond	94801	Oil & Gas	Chevron	Odor	Closed
2/25/2022	53267	Richmond	94801	Odor	Sewage Pipe Leak	Odor	Closed
5/2/2020	47745	Richmond	94801	Odor	Apartment Building	Marijuana Smoke	Closed/Anonymous
4/25/2019	42872	Richmond	94801	Oil & Gas	Chevron	Air	Closed/Anonymous
4/13/2019	42390	Richmond	94801	Oil & Gas	Chevron	Smoke	Referred
7/5/2019	44020	Richmond	94801	Permitting	Brothers Auto Body Shop & Auto Repair	Unpermitted	Referred
3/26/2021	50305	Richmond	94801	Odor	Not Applicable	Odor	Closed
7/27/2019	44153	Richmond	94801	Oil & Gas	Chevron	Flaring	Referred
11/1/2019	46368	Richmond	94806	Oil & Gas	Unknown	Refinery Leaks	Closed
2/25/2022	53470	Richmond	94801	Odor	Private Residence	Wood Burning	Closed
11/2/2020	49316	Richmond	94801	Oil & Gas	Chevron	Flaring	Referred
1/22/2020	46926	Richmond	94804	Rail	Chevron	Fugitive Dust	Referred
8/14/2020	48673	Richmond	94804	Oil & Gas	Chevron	Flaring	Closed
8/14/2020	48674	Richmond	94804	Oil & Gas	Chevron	Smoke	Closed
7/27/2019	44145	Richmond	94804	Oil & Gas	Chevron	Flaring	Closed
4/13/2022	53660	Richmond	94804	Employment Related	Unknown	Wood Burning	Closed
7/18/2019	44089	Richmond	94801	Odor	Honeybucket	Solid Waste	Closed
4/2/2019	42296	Richmond	94801	Oil & Gas	Chevron	Health	Referred
8/25/2021	51762	Richmond	94804	Burning	Private Residence	Smoke	Closed
12/20/2022	55865	Richmond	94806	Odor	West County Wastewater District	Fumes	Closed

Table 2: CalEPA Complaint Investigation Results 2019-2022

10/7/2019	46142	Richmond	94801	Odor	Unknown	Health	Closed/Anonymous
12/16/2022	55839	Richmond	94801	Odor	Unknown	Odor	Closed
12/9/2021	52619	Richmond	94803	Burning	Unknown	Wood Burning	Referred

Appendix G - Community Steering Committee

The information below describes the initial convening process for the Path to Clean Air Community Steering Committee.

A publicly held virtual meeting scheduled for April 19, 2021 (6: 00 pm to 8:00 pm) served as the first orientation meeting for the Path to Clean Air Steering Committee. Meeting [agenda](#) and [materials](#) including [web stream recording](#) are publicly available.

Below is the complete list of meeting attendees:

Present: Nancy Aguirre, Dr. Bret Andrews, Francisco Avila, Lizette Bernal, Amanda Booth, Y'Anad Burrell, Lucianna Castello, Suzanne Coffee, Patricia Daniels, Darlena David, Roberta Feliciano, Luz Gomez, Jim Holland, Lizbeth Ibarra, Hakim Johnson, Jeffrey Kilbreth, Philip Mitchell, Dr. Omoniyi Omotoso, Erika Ramirez, Jessica Range, Fabiola Reyes, Darlene Rios Drapkin, Kevin Ruano Hernandez, Dave Severy, Heidi Swillinger, Vernon Whitmore, and Micaela Zaragoza-Soto

Absent: Dr. Henry Clark and Arto Rinteela

Also Present: Jack Broadbent, Veronica Eady, Brian Bunger, Kristen Law, Kelly Malinowski, Anna Lee, Adan Schwarz, Greg Nudd, Joan Chaplick, Jessie Hernandez, Eric Bissinger, Dan Alrick, Elinor Mattern, Janet Johnson, Christy R., Criviere, Karen Buckley, Todd Osterberg, Katrinka Ruk, Oscar Garcia, Naama Raz-Yaseef, Malinda, Linda Whitmore, Malinda Lai, Matt Holmes, Deldi Reyes, Ranyee Chiang, Julia Luongo, Areana Flores, Katie George, and Andrews Soto

Membership

Prior to the first Steering Committee Convening in April 2021, the Air District Community Equity Health and Justice Committee on February 4, 2021, established a process to determine candidates for the Richmond-North Richmond-San Pablo (Path to Clean Air) Community Emissions Reduction Plan (CERP) Community Steering Committee. The meeting [agenda](#), [materials](#), and [web stream recording](#) is publicly available on the Air District website.

On February 19, 2021, a list of recommended candidates for the Richmond-North Richmond-San Pablo (Path to Clean Air) Area Community Emissions Reduction Plan Community Steering Committee were confirmed to bring to the Board of Directors for review and appointment. The [meeting agenda](#), [materials](#), and [web stream recording](#) is publicly available on the Air District website.

Community Steering Committee (CSC) Membership (as of September 2023)

Below is a complete list of CSC members, affiliations including community representation and CSC leadership roles.

Name	Affiliation/Sector
Nancy Aguirre	Resident
Alfredo Angulo-Castro	Youth/Student *Co-Chair
Y'Anad Burrell	Resident *Co-Chair
Marisol Cantu	Resident
Lucia Castello	Resident
Sandra Castaneda	Government
Suzanne Coffee	Resident
Roberta Felicano	Government
Michelle Gomez-Garcia	Youth/Student
Kevin Ruano Hernandez	Youth/Student
Lizbeth Ibarra	Youth/Student
Hakim Johnson	Industry
Michael Kent	Government
Jeffrey Kilbreth	Resident/Senior
Omoniyi Omotoso	Resident
Jessica Range	Resident
Simren Sandu	Youth/Student
Dave Severy	Resident
Heidi Swillinger	Resident
Franklin Ungo	Resident
BK White	Government
Stephanie Wright	Resident/Senior

Charter

Below is an updated version (June 2023) of the Charter that covers the following: Committee objectives, roles and responsibilities, meeting frequency, accessibility, and facilitation, including interpretation services. The group updated their Charter after the Air District voted to dissolve the Path to Clean Air Steering Committee on April 5, 2023, to transition from a Board governed committee to a community governed steering committee.

The CSC has been consistently meeting monthly and the schedule has shifted since the group convened in 2021. For all of 2023 the CSC met on the fourth Monday of the month in the evenings from 5:30 to 8:00pm. All meeting materials (English and Spanish), agendas, minutes, and recordings are posted on the Air District's website.

Path to Clean Air Community Steering Committee Charter (June 2023)

The Path to Clean Air in the Richmond-North Richmond-San Pablo Area Community Steering Committee Charter and Participation Agreement

Statement of Purpose

The purpose and goal of The Path to Clean Air Community Steering Committee is to remedy persistent air pollution exposures and reduce health risks and inequities associated with poor air quality for people who live, work, and play in and around the Richmond-San Pablo-North Richmond study area. This goal will be accomplished by identifying community priorities and specific improvements, and by working with Bay Area Air Quality Management District (BAAQMD) staff to determine effective implementation strategies to reduce air pollution exposures in this study area.

Assembly Bill 617 (Garcia, C., Chapter 136, Statutes of 2017) is a State-mandated program that uses a community-based approach to reduce local air pollution in communities around the State that continue to experience disproportionate impacts from air pollution.

The Path to Clean Air project is the region's first effort under the AB 617 program to develop a Community Air Monitoring Plan (CAMP) to identify and understand areas of elevated air pollution exposure in Richmond, North Richmond, and San Pablo communities. The CAMP Community Steering Committee adopted the branding and name "Path to Clean Air." With the completion of the Community Air Monitoring Plan, the Path to Clean Air project began the next phase of the AB 617 program—developing a Community Emissions and Exposure Reduction Plan (CERP). On March 3, 2021, the Air District Board of Directors voted to appoint a 31- community member Steering Committee to help guide the development of a Community Emissions Reduction Plan for the Richmond-North Richmond-San Pablo Area.

In January 2023 the CSC began the process to transition from being a government appointed board committee to a community led governed committee. At its February 2023 meeting, the CSC voted unanimously to recommend to the BAAQMD Community Equity Health and Justice (CEHJ) Committee and to the Board of Directors that the CSC be dissolved.

On March 29, the CSC presented at the CEHJ committee meeting, requesting to dissolve the steering committee. On April 5th, the BAAQMD Board of Directors unanimously voted to dissolve our board-appointed Community Steering Committee (CSC).

The make-up of the community led steering committee represents the diverse population of the Richmond-North Richmond-San Pablo Area and brings together an inclusive group with a range of knowledge and expertise. All of our members represent individuals who work, live or grew up in the area.

1. Steering Committee Activities

Path to Clean Air Richmond-North Richmond-San Pablo Community Steering Committee members will participate in the development of the CERP and act as liaisons between the community, stakeholders, and BAAQMD staff and Board by disseminating

information, making decisions, and providing input as appropriate. Community Steering Committee (CSC) members will also receive regular updates on the implementation of the Community Air Monitoring Plan, which will be incorporated as strategies into the Community Emissions Reduction Plan. The Richmond-North Richmond-San Pablo area CERP will need to be completed by the end of 2023. The implementation of the CERP will begin once the BAAQMD Board of Directors approval and review process begins in quarter one of 2024 (January - March) followed by CARB staff and Board review process in the second quarter of 2024 (April -June). The CSC is guided by Robert's Rules of Order as much as possible and is also committed to taking provisions of the Brown Act which promote and ensure public access, participation, and transparency.

2. Steering Committee Objectives

The Path to Clean Air Richmond-North Richmond-San Pablo Community Steering Committee CSC will serve as outlined in the Statement of Purpose. It will develop a Community Emissions and Exposure Reduction Plan that identifies and develops strategies to address areas of elevated air pollution exposure in the Richmond-North Richmond-San Pablo area. The CSC will disseminate information and consider input from the broader community. The goal is for the implementation of the CERP to begin in 2024.

3. Membership

CSC members will represent people who live in the Richmond-North Richmond-San Pablo area and other interested stakeholders affiliated with various sectors. These sectors can include community-based organizations, youth organizations, non-profits, faith leaders, education, government, health, and business representatives from the Richmond-North Richmond-San Pablo area. The voting CSC membership shall be composed of an odd number of members. The total CSC membership (voting and non-voting) shall range between 21 and 27. A minimum of 80% of voting members shall reside within the initial study area, and two non-voting members shall represent local businesses, local trade unions and/or industrial companies. All designated city and county government representatives on the CSC will be recognized as non-voting members. CSC will allow up to four designated city and county representatives.

4. Roles and Responsibilities

Co-chairs: The voting members of the CSC shall select two Co-chairs from among the CSC members. The Co-chair team will be responsible for developing meeting agendas, and for leading CSC meetings.

Community Steering Committee Members: CSC members will be responsible for assisting Air District and Co-chairs in developing the Richmond-North Richmond-San Pablo CERP, in accordance with the California Air Resources Board's Community Air Protection Blueprint [1]. They will identify the scope of issues to be considered; inform technical analyses to understand these issues; co-develop with the Bay Area Air Quality Management District strategies to solve the issues identified; and ensure continued accountability for CERP implementation.

When necessary, CSC members will select two steering committee members as board representatives to communicate informational updates to the Board of Directors.

Designated City and County representative members: The CSC will actively seek members employed by the governing bodies of Richmond, San Pablo, and North Richmond. At monthly CSC meetings, these members are expected to present relevant information on all governing-

body plans, policies, and votes that could impact the work of the CSC. They also will serve as liaisons to their respective councils and committees when deemed necessary by the CSC as a whole. Designated city and government representatives will be required to participate a minimum of 8 hours a month (examples include but not limited to committee participation, serving as a liaison to city council / committees, reviewing materials, providing feedback to CERP chapters). These designated city and county representatives will be non-voting members. These members will also not receive a stipend for their participation.

5. Standard Steering Committee Meeting Procedures

Decision Making: No action items will proceed without a quorum of voting members (quorum equals half of the total number of voting members plus an additional member). Steering Committee members may choose to abstain themselves from decisions at any time. In accordance with Political Reform Act guidance members must recuse themselves from decisions where there is a conflict of interest in which they stand to benefit financially in any way. If recusal or abstention results in less than a quorum of voting members, then the item cannot proceed.

Open Meetings: The CSC meetings will be open to the public. Community input is welcome and encouraged. Meeting materials will be posted on the BAAQMD website.

Meeting Schedule and Agendas: Co-chairs will develop CSC meeting Agendas with input from Air District staff. Individual CSC members may submit items for placement on the agenda at least 10 calendar days before the meeting for which the item has been requested.

Steering Committee agendas and meeting materials (including Spanish translation) will be posted on the District's website at least 72 calendar hours prior to the meeting. Meeting minutes will also be posted on the District's website. Meeting minutes will be approved by a show of hands vote at the start of every monthly CSC meeting.

Committees: CSC members are encouraged to participate and contribute to on-going committee work to the best of their ability. Committee work is part of the 8-hour minimum expected of all designated city and county representatives.

Problem to Solutions Ad Hoc Community Concerns (5 Writing Groups)

- Public Health and Exposure
- Fuel Refining Support Facilities, Storage, and Distribution
- Vehicles and Trucks, Streets and Freeways, Logistics, and Warehouses
- Marine and Rail
- Commercial and Industrial Sources Near Communities

Problem to Solutions Ad Hoc Cross Cutting Strategies (7 Writing Groups)

- Land use
- Promoting Urban Greening
- Website
- Compliance & Enforcement
- Community Engagement
- Legislative
- Underreported Dangers

Other committees: Governance, Community Engagement and Outreach, Technical Assessment, Community Description

6. Amendments

The Committee Charter and Participation Agreement can be amended when a quorum of voting members are present and a majority of members vote in favor to amend.

7. Accessibility

CSC meetings and other outreach events associated with the committee must be held at transit-accessible facilities that can accommodate members covered by the Americans with Disabilities Act.

8. Accommodation

Language interpretation services will be provided as needed with a minimum of (six) 6 business days in advance of the request.

9. Dissemination of Materials

All final documents produced or submitted in connection with the CERP will be considered public information records and subject to the provisions of the California Public Records Act.

10. Website

BAAQMD website will be updated twice a month, in preparation for the next CSC meeting (uploaded material for discussion) and after each CSC meeting, to include meeting summaries, notes, and optimally meeting recordings. The AB 617 webpage for the Path to Clean Air will include news, events, project timelines, goals and accomplishments.

11. Participation Principles

The following are principles, goals, and expectations of conduct for CSC members: CSC members will work collectively and cooperatively with all stakeholders within the community—people who live in the study area, businesses and organizations, youth groups, schools, local, regional, and State governments, health agencies and faith-based organizations—to ensure all represented parties are heard and can agree on an outcome that protects public health.

This will include:

a. Providing strategic guidance, vision, and oversight, such as:

- Informing the development of the Richmond-North Richmond-San Pablo Area Community Emissions Reduction Plan.
- Tracking progress of the work using agreed-upon indicators at CSC and subcommittee levels.
- Improving data collection and reporting for community education to inform development of emission and exposure reduction strategies.
- Identifying effective goals to bring about reduced health risk in the Richmond-North Richmond-San Pablo Area study area.

b. Providing leadership and accountability by:

- Identifying obstacles to achieving the goal and developing solutions to overcome them.
- Considering how individual members' organization or those in their network can align to the common goals and principles of the CSC.
- Serving as a vocal champion of the program's collective impact and effort in the communities.
- Working towards consensus while recognizing that not everyone will agree on every issue, and resolving conflicts in a positive, swift, and constructive manner.
- Approaching a committee member who misses more than 3 monthly steering committee meetings within a 12-month period. The committee co-chairs will meet with the specific member to assess their continuation as a member of the steering committee on a case-by-case basis.

c. Play an active role by:

- Attending a minimum of 9 out of the 12 CSC monthly meetings (in their entirety) for the year.
- Attending community summits and town hall meetings as they are scheduled through the development of the Community Emissions Reduction Plan and implementation.
- Participating according to the Charter. Provision will be made for members to participate electronically.
- Participating and contributing to on-going committee work to the best of one's ability is encouraged by all members.
- Reviewing materials prior to meetings and coming prepared for engaged discussion, active listening, and respectful dialogue.

The Path to Clean Air Community Steering Committee established a Vision and Principles statement in 2021 and the statement was updated in 2023. The statement can be found [here](#) and is copied below.

Vision and Principles (September 2023)

The Vision Statement and Principles

Vision Statement

We envision that all people grow and live in neighborhoods, with human-centered infrastructure planning, including space for our communities to safely be together free of emission sources and air pollution. The effects of air pollution are known to cause severe health risks that include asthma, cancer, heart disease and other serious long-term health conditions. We envision removing barriers to health equity for all residents, as well as a significant reduction of pollution-driven respiratory illness rates in children. We aim to accomplish this by using effective communication strategies to inform people of elevated health risks in real time, by developing community led efforts to monitor emissions, by holding industry and all polluters accountable, and by strategizing a measurable reduction in emissions and exposure.

Principles

Collaborative and Involved Stakeholders

Serve as effective leaders in collaborating with elected officials to become engaged, accountable, and reflective of our communities' best wishes. Empower long term relationships between grassroots organizations, businesses, and local governments.

Community and Equity-Centered

Through an equity-centered lens, community voices will be at the forefront of this process. The communication tools used to reach community members will be diverse, inclusive, and ensure an understanding of the process.

Understandable Information and Data-Driven

Building on data from the community air monitoring plan to inform community members about the short and long-term effects of health as a result of poor air quality in their neighborhoods. Share information in a format that the community can understand including the use of popular education tools, youth voices, and media to ensure decision making is data driven.

Led by Strategy Goals and Prioritizes Effective Strategies

Prioritize the most effective emissions reduction and monitoring strategies to eliminate sources of pollution to the highest extent possible in a manner that is sustainable for the long-term.

Follow a Transparent Process and Commit to Restorative Investments

Transparency through real-time communication with community members about progress and updates, with an emphasis on ensuring the information reaches everyone at all socioeconomic levels. A commitment to restorative investment in communities that have been disproportionately harmed by environmental injustice.

Appendix H - Outreach and Community Engagement

Public Process

Air District Public Hearing on final PTCA Plan

The Air District Board of Directors will consider the approval of the Path to Clean Air (PTCA) Plan at a public hearing after the CSC has adopted the plan. The Community Equity Health and Justice (CEHJ) Board Committee will hold a public meeting in advance of the Board public hearing to determine a recommendation on adoption of the PTCA plan. Details about these two meetings will be provided herein after they are held.

Translation and Interpretation

All meeting materials for the Path to Clean Air steering committee meetings, workshops, public board meetings and board committee meetings related to the CSC were translated and language interpretation services were made available in accordance with the CSC Charter. The Draft PTCA Plan and final approved Plan were translated into Spanish and made publicly available on the Air District website.

Dedicated Public Website

Path to Clean Air project webpages are located [here](#). Information about the PTCA CSC and process related to the PTCA Plan are publicly available including:

- a. All CSC monthly meetings from April ,19, 2021 to present include Spanish translated materials and language interpretation services also offered in Spanish.
- b. All meeting materials and recordings of CSC monthly meetings are available on the Air District website under [News and Event/Calendar](#) and are also located under AB 617 Community Protection Program under [Richmond/San Pablo](#).
- c. The contact information for the appropriate staff member is listed at the bottom of all PTCA webpages.
- d. Outreach Material and Distribution
 - i. All materials were posted to the Air District website and emailed to the Community Steering Committee 72 hours (about 3 days) in advance of the meeting and again on the day of the meeting.
 - ii. Richmond-North Richmond-San Pablo area – Community Health Protection Program (includes link to CARB's Community Air Protection Program main webpage and point of contact information)
 1. Community Air Monitoring information linked to the Path to Clean Air can be found [here](#) (includes links to all relevant air quality data for the community, point of contact information)

2. Community Emissions Reduction Work to the Path to Clean Air Plan can be found [here](#). The webpage includes up-to-date outreach calendar and notices for workshops and community steering committee meetings, point of contact information, and draft materials that will be shared at air district workshops and public board hearings.

3. [Air Pollution and Community Asset Mapping Project](#) of the Path to Clean Air project area can be found [here](#). The webpage includes background information on the mapping project (i.e., archived project links), how the information helped inform the PTCA Plan and up-to-date staff member contact information.

Outreach Summary

Community Steering Committee (CSC)

The CSC met monthly from April 2021 through December 2023, with a few exceptions. All meetings were announced on the dedicated public website at least 72 hours prior to the meeting and all meetings had a quorum of CSC members in attendance (see [Charter](#) for definition of quorum). Outreach to recruit and select new CSC members followed the CSC [Charter](#), and staff and CSC leadership worked with new members to onboard them to the project.

The table below covers Community Steering Committees, Public Workshops, and Public Board of Directors meetings for the entirety of the CERP development through September 2023 (for up-to-date meeting materials from October – December 2023 and the Plan approval please see [here](#)).

Event Name	Date & Time	Location	Agendas/ Meeting Summaries	Outreach mechanism
Community Equity Health and Justice Committee Meeting	4/1/2021 9:30AM – 5:00PM	Web Stream Only	Agenda Minutes	BAAQMD Website
Board of Directors Meeting	4/7/2021 8:30AM – 5:00PM	Web Stream Only	Agenda Minutes	BAAQMD Website
Path to Clean Air CERP Steering Committee Meeting	4/19/2021 6:00PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Community Equity Health and Justice	5/6/2021	Web Stream Only	Agenda	BAAQMD Website

Event Name	Date & Time	Location	Agendas/ Meeting Summaries	Outreach mechanism
Committee Meeting	9:30AM – 5:00PM		Minutes	
Path to Clean Air CERP Steering Committee Meeting	5/17/2021 6:00PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Board of Directors Meeting	6/16/2021 9:30AM – 5:00PM	Web Stream Only	Agenda Minutes	BAAQMD Website
Path to Clean Air CERP Steering Committee Meeting	6/21/2021 6:00PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Board of Directors Meeting	7/7/2021 9:30AM – 5:00PM	Web Stream Only	Agenda Minutes	BAAQMD Website
Path to Clean Air CERP Steering Committee Meeting	7/19/2021 5:30PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Board of Directors Meeting	8/4/2021 9:30AM – 5:00PM	Web Stream Only	Agenda Minutes	BAAQMD Website
Path to Clean Air CERP Steering Committee Meeting	8/16/2021 5:30PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Board of Directors Meeting	9/1/2021 9:30AM – 5:00PM	Web Stream Only	Agenda Minutes	BAAQMD Website
Path to Clean Air CERP Steering	9/20/2021	Web Stream Only	Agenda	BAAQMD Website

Event Name	Date & Time	Location	Agendas/ Meeting Summaries	Outreach mechanism
Committee Meeting	6:00PM – 8:00PM			
Board of Directors Meeting	10/6/2021 9:00AM – 5:00PM	Web Stream Only	Agenda Minutes	BAAQMD Website
Community Equity Health and Justice Committee Meeting	10/7/2021 9:30AM – 5:00PM	Web Stream Only	Agenda Minutes	BAAQMD Website
Path to Clean Air CERP Steering Committee Meeting	10/18/2021 6:00PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Path to Clean Air CERP Steering Committee Meeting	11/15/2021 6:00PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Community Equity Health and Justice Committee Meeting	12/2/2021 9:30AM – 5:00PM	Web Stream Only	Agenda Minutes	BAAQMD Website
Path to Clean Air CERP Steering Committee Meeting	12/13/2021 6:00PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Board of Directors Meeting	1/19/2022 9:00AM – 5:00PM	Web Stream Only	Agenda Minutes	BAAQMD Website
Path to Clean Air CERP Steering Committee Meeting	1/24/2022 6:00PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Board of Directors Meeting	2/16/2022	Web Stream Only	Agenda Minutes	BAAQMD Website

Event Name	Date & Time	Location	Agendas/ Meeting Summaries	Outreach mechanism
	9:00AM – 5:00PM			
Path to Clean Air CERP Steering Committee Meeting	2/28/2022 5:30PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Community Equity Health and Justice Committee Meeting	3/3/2022 9:30AM – 5:00PM	Web Stream Only	Agenda Minutes	BAAQMD Website
Path to Clean Air CERP Steering Committee “Clean Air Affair” Town Hall	3/15/2022 6:00PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Board of Directors Meeting	3/16/2022 9:00AM – 5:00PM	Web Stream Only	Agenda Minutes	BAAQMD Website
Path to Clean Air CERP Steering Committee Meeting	3/21/2022 5:30PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Board of Directors Meeting	4/6/2022 9:00AM – 5:00PM	Web Stream Only	Agenda Minutes	BAAQMD Website
Path to Clean Air CERP Steering Committee Meeting	4/25/2022 5:30PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Community Equity Health and Justice Committee Meeting	5/5/2022 9:30AM – 5:00PM	Web Stream Only	Agenda Minutes	BAAQMD Website

Event Name	Date & Time	Location	Agendas/ Meeting Summaries	Outreach mechanism
Path to Clean Air CERP Steering Committee Meeting	5/16/2022 5:30PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Board of Directors Meeting	6/1/2022 9:00AM – 5:00PM	Web Stream Only	Agenda Minutes	BAAQMD Website
Path to Clean Air CERP Steering Committee Meeting	6/27/2022 5:30PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Path to Clean Air CERP Steering Committee Meeting	7/18/2022 5:30PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Board of Directors Meeting	7/20/2022 9:00AM – 5:00PM	Web Stream Only	Agenda Minutes	BAAQMD Website
Path to Clean Air CERP Steering Committee Meeting	8/15/2022 5:30PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Board of Directors Meeting	9/7/2022 9:00AM – 5:00PM	Web Stream Only	Agenda Minutes	BAAQMD Website
Path to Clean Air CERP Steering Committee Meeting	9/19/2022 5:30PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Board of Directors Meeting	10/5/2022 9:00AM – 5:00PM	Web Stream Only	Agenda Minutes	BAAQMD Website

Event Name	Date & Time	Location	Agendas/ Meeting Summaries	Outreach mechanism
Path to Clean Air CERP Steering Committee Meeting	10/17/2022 5:30PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Board of Directors Meeting	11/2/2022 9:00AM – 5:00PM	Web Stream Only	Agenda Minutes	BAAQMD Website
Path to Clean Air CERP Steering Committee Meeting	11/28/2022 5:30PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Community Equity Health and Justice Committee Meeting	12/1/2022 9:30AM – 5:00PM	Web Stream Only	Agenda Minutes	BAAQMD Website
Board of Directors Meeting	12/21/2022 9:00AM – 5:00PM	Web Stream Only	Agenda Minutes	BAAQMD Website
Path to Clean Air CERP Steering Committee Meeting	1/30/2023 5:30PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Board of Directors Meeting	2/15/2023 9:00AM – 5:00PM	Web Stream Only	Agenda Minutes	BAAQMD Website
Path to Clean Air CERP Steering Committee Meeting	2/27/2023 5:30PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Community Equity Health and Justice Committee Meeting	3/29/2023 9:00AM – 5:00PM	Air District Headquarter 375 Beale Street	Agenda Minutes	BAAQMD Website

Event Name	Date & Time	Location	Agendas/ Meeting Summaries	Outreach mechanism
		San Francisco, CA 94105 AND Web Stream		
Board of Directors Meeting	4/5/2023 9:00AM – 5:00PM	Air District Headquarter 375 Beale Street San Francisco, CA 94105 AND Web Stream	Agenda Minutes	BAAQMD Website
Path to Clean Air CERP Steering Committee Meeting	4/24/2023 5:30PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Path to Clean Air CERP Steering Committee Meeting	5/15/2023 5:30PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Path to Clean Air CERP Steering Committee Meeting	6/26/2023 5:30PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Path to Clean Air CERP Steering Committee Meeting	7/24/2023 5:30PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website
Path to Clean Air CERP Steering Committee Meeting	8/28/2023 5:30PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website

Event Name	Date & Time	Location	Agendas/ Meeting Summaries	Outreach mechanism
Path to Clean Air CERP Steering Committee Meeting	9/25/2023 5:30PM – 8:00PM	Web Stream Only	Agenda	BAAQMD Website

Community Outreach and Engagement Standing Committee

A Community Outreach and Engagement standing committee was established in the summer of 2023 and was co-led by two CSC members with the support of Air District staff. The Committee supported the development of all outreach materials, factsheets, FAQs, and presentation decks during final development and public review of the draft PTCA Plan.

The CSC monthly meetings from May - September 2023 covered strategy for public outreach, process, and approach to public engagement. A PTCA timeline/ process to develop the PTCA Plan was consistently communicated throughout the monthly CSC meeting.

Outreach materials were reviewed from June – September 2023 at monthly steering committee meetings which also included Committee updates on presentations to neighborhood groups, local agencies, and non-governmental organizations. An overview of all final materials and the outreach tracking sheet can be found in the [October 23, 2023, CSC meeting](#).

In addition to presenting to neighborhood groups, the Community Outreach and Engagement Committee provided a series of presentations from August 2023 through March of 2024 on the Draft PTCA Plan. During these presentations, members educated community members regarding the Plan, inspired participants to action to support the Plan through the public comment period and encouraged members of the public to increase their understanding of AB 617, Draft PTCA Plan and the role of the PTCA steering committee. The steering committee also attended events and conducted individual on-line engagement (i.e., email blasts, meet and greet requests to NGOs, Healthcare provider, Medical Association, and workplace announcements) to promote the Draft PTCA Plan.

The table below highlights the presentations that took place over this seven-month period, led by steering committee members.

Date of Presentation	Name of Organization	Organization Type
9/19/2023	City of San Pablo Youth Commission	Youth / Government
9/28/2023	Santa Fe Neighborhood Council	Residents

Date of Presentation	Name of Organization	Organization Type
10/03/2023	Rich City Rides	Active Transportation Advocacy
10/26/2023	Hazmat Commission	Government
10/26/2023	West County Mayors and Supervisors	Government
11/16/2023	Environmental Protection Agency (EPA) and Department of Toxic and Substances Control (DTSC)	Government
11/28/2023	West County Democratic Club	Democracy
11/29/2023	East Richmond Heights Neighborhood Council	Residents
12/18/2023	Contra Costa Equity Committee	Government
12/19/2023	Richmond City Council	Government
1/08/2024	Richmond Neighborhood Coordinating Council	Residents
1/16/2024	San Pablo City Council	Government
1/22/2024	United Steel Workers Local 5	Labor
2/15/2024	Communities for a Better Environment	Environmental Advocacy
03/05/2024	North Richmond Municipal Advisory Council	Government

On December 13, 2023, the Air District and the Path to Clean Air (PTCA) Community Steering Committee [released](#) the Draft PTCA Community Emissions Reduction Plan. That same day, the Plan opened for public review and comment, which ended on January 19, 2024. The Air District

held a public workshop on the Draft PTCA Plan on January 11, 2024. All materials and a recording of the workshop can be accessed under "Meetings, Events and Recordings" section of the [Community Emissions Reduction Plan web page](#).

The Air District provided three documents that were made publicly available and presented to the CSC on February 26 which include:

1. [A summary of responses and comments by theme for the Draft PTCA Plan](#)
2. [A table which distills all comments and Air District responses](#)
3. [Public comment emails and draft letters \(redacted\)](#)

Appendix I: Applicability Analysis for California Environmental Quality Act

The California Environmental Quality Act (CEQA) is a state law that requires public agencies to consider the environmental impacts of certain projects they undertake or approve. For projects that are subject to CEQA, the statute imposes specific legal requirements that agencies must follow before carrying out or approving the project. This appendix evaluates whether CEQA applies to this project – the Community Emissions Reduction Plan (CERP) for the Richmond-North Richmond-San Pablo area. As explained in more detail later in this discussion, Bay Area Air Quality Management District (Air District) staff have reviewed all aspects of the CERP and determined that it is exempt from CEQA, for multiple reasons.

First, as an overall matter, the CERP is being adopted to benefit the environment and the health of residents of the Richmond/San Pablo community, and all of the action items within the CERP support this goal. Therefore, adoption of the CERP is exempt from CEQA review under Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment. This exemption applies to actions taken by regulatory agencies, as authorized by law, to “assure the maintenance, restoration, enhancement, or protection of the environment.” The Air District is a regulatory agency charged with the protection of air quality in its jurisdiction. Because the goal of the CERP is to protect air quality and public health, its adoption fits within the category of actions subject to this exemption.

Second, all of the individual strategies set forth in the CERP would be exempt if they were implemented on their own, apart from adoption of the CERP. For example:

Strategies that would either not cause any physical changes to the environment or involve such minimal physical changes that it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. These strategies fall within the common sense exemption in CEQA Guidelines section 15061(b)(3). Examples include actions that involve encouraging local governments to establish vegetative buffer zones (Urban Greening actions 1.1, 1.3), advocating for municipalities to modify their zoning or land use regulations (Land Use actions 1.1, 1.3), and developing model policies or ordinances for possible future adoption by other entities (Mobile actions 1.2, 1.4, 4.2; Health action 3.4).

Strategies that call for feasibility and planning studies, which are exempt under Public Resources Code section 21150 and CEQA Guidelines section 15262. (“A project involving only feasibility or planning studies for possible future actions which the agency . . . has not approved, adopted, or funded does not require the preparation of an EIR or negative declaration but does require consideration of environmental factors.”) Examples include preparing an initial feasibility assessment and needs analysis for a Truck Management Plan (Mobile action 3.1), conducting a study to identify areas that would benefit most from street sweeping initiatives (Mobile action 4.1), and investigating the feasibility of a Bay Area Indirect Source Rule or zero-emission vehicle zones (Marine & Rail action 1.4).

Strategies that would result only in the modification of existing facilities or the construction of new minor facilities, which are exempt under CEQA Guidelines sections 15301 (“Existing Facilities”; class 1) and 15303 (“New Construction or Conversion of Small Structures”; class 3). These strategies include the installation of air filters and monitoring equipment, the construction of electric vehicle charging stations, or the maintenance of existing roadways.

Strategies that call for information collection, inspections, enforcement, education, and workplace regulations, which are exempt under CEQA Guidelines sections 15306 (“Information Collection”; class 6), 15309 (“Inspections”; class 9), 15321 (“Enforcement Actions by Regulatory Agencies”; class 21), 15322 (“Educational or Training Programs Involving No Physical Changes”; class 22), and 15324 (“Regulations of Working Conditions”). These categorical exemptions would exempt CERP strategies that include activities like air quality monitoring or other data collection, performance inspections or compliance checks, certain enforcement actions involving permit enforcement or revocation, development of webpages or community outreach campaigns, and changes to air district staffing or coordination practices.

The Air District also considered the strategies included in the CERP that will involve undertaking rulemaking activities to address specific air quality concerns. These rulemakings include proceedings to further reduce public health impacts from toxic air contaminants, to finalize a methodology to account for health risk from Particulate Matter (PM), and to address Nitrous Oxides (NO_x) emissions from combustion sources at petroleum refineries. These rulemaking proceedings could potentially be subject to CEQA review when they occur, depending on the nature of any rules the Air District may propose to adopt in them. At this point, however, the CERP merely calls for these proceedings to be initiated in the future, generally following a period of study to determine how to approach a particular issue. The CERP has not identified, let alone committed to, any particular type of new or more stringent rule or regulation that would be developed or adopted in these rulemaking proceedings. Given that it is uncertain what the result of those regulatory proceedings would be, it is not possible at this stage to determine whether they could result in significant environmental impacts. Therefore, CEQA review is not required because the nature and extent of any environmental impacts would be too speculative for evaluation at this point. When Air District initiates a specific rulemaking process, it will determine whether and what level of CEQA review is required.

Appendix J: List Of Community Concerns For The Path To Clean Air Community Emissions Reduction Plan

This document is a summary of community concerns that have been recorded from Air District public engagement and compliance and enforcement efforts, for use of the Path to Clean Air Community Steering Committee.

Background

The California Air Resources Board Community Air Protection Blueprint underlines, “Most importantly, underpinning AB 617 is the understanding that community members must be active partners in envisioning, developing, and implementing actions to clean up the air in their communities.” The starting point for envisioning, developing, and implementing actions and strategies to reduce emissions and exposure in the Path to Clean Air focus area is identifying priority community concerns.

This document is a compilation of community concerns that have been collected from 2018 through 2021. It is important to acknowledge that just because an individual facility or source has been documented as a community concern that does not confirm it is a problem that will require strategies and actions to achieve air pollution emissions and exposure reductions. These concerns have been identified from the following three efforts:

- The **Community Assets and Air Pollution Mapping Project**, which was an extensive public engagement effort for the current Path to Clean Air Community Steering Committee (CERP CSC) (April 2021 – present), was led by six nonprofit organizations from across the focus area. These nonprofits organized and conducted outreach resulting in over 500 comments from the public regarding local pollution concerns, areas where people gather, and community strengths. Concerns were identified from this list if 5 or more mentions in either the comments or survey responses were received. To learn more, see the results from the mapping project and query individual word searches at this page: <https://rspcerp.mysocialpinpoint.com/ptca-mapping-project#/>.
- The **Community Air Monitoring Plan Community Steering Committee (CAMP CSC)** worked from April 2019 through July 2020 to develop a community air monitoring plan, designed to collect air quality data to provide real-time air quality information to the public and to inform the development of the CERP and other Air District programs. As a part of this work, the CAMP CSC discussed their concerns about sources of air pollution during discussions, small group activities, and mapping exercises. During the mapping activities, the CAMP CSC and other community members added additional air pollution concerns and community assets to maps of the area that showed the locations of large, permitted pollution sources, existing air monitoring stations, and places where people gather, which are near sources of air pollution.

As part of their outreach and engagement efforts, the CAMP CSC also convened a community summit in November 2019 to gather additional information from the public about the community's concerns and to provide updates on ongoing air monitoring. The air pollution concerns provided by the CAMP CSC and the community during these activities and discussions were documented in notes as well as the resulting maps and are summarized in the community concerns sections below. The summaries in this document are from the original notes and maps from these CAMP CSC meetings and community mapping activities. You can read the [2020 Community Air Monitoring Plan](#) to learn more about the community engagement efforts and air pollution concerns identified from that project.

- The Air District responds to and investigates all air quality complaints. Resolving air pollution concerns is one of the Air District's highest priorities. The Air District received 1,171 complaints in the Path to Clean Air area from 2018 – 2020 through the [Air District Air Quality Complaint Program](#) and this document highlights the potential types of concerns in Richmond/San Pablo. Sources of air quality complaints were included in this document if they received over 10 public complaints during this timeframe.

The Community Emission Reduction Plan Community Steering Committee (CERP CSC) Clean Air Affair Town Hall: On March 15th, the Path to Clean Air Community Steering Committee hosted a town hall to hear from all residents – documented or not – about how air pollution has impacted our community. The Town Hall had over 40 local residents participate in the discussions, and the notes from the breakout room listening activities are captured below. You can read the notes from the breakout groups on [these Jamboards](#).

How will this community input be used to form key issues?

The information about air pollution community concerns from these three efforts are summarized in community concerns in this document. For ease of use, these concerns have been grouped into the following six main categories that were major recurring themes:

- Addressing Public Health and Reducing Exposure
- Fuel Refining, Support Facilities, Storage, and Distribution
- Industrial and Commercial Sources Near Communities Odors and Smells
- Odors from Industries
- Vehicles and Trucks, Streets and Freeways, and Logistics
- Marine and Rail

The Air District will work with the CERP CSC to gather information, including community history, modeled data and air pollution measurements, as well as Air District compliance and enforcement data, and other sources of information to further understand these concerns. All this data will be analyzed so there is a common understanding of the causes of air pollution exposure and emissions concerns, the extent and scope of how these concerns impact the health and quality of life for people in the focus area, and viable actions and strategies that can be taken to meaningfully reduce air pollution exposure and protect public health.

This list of community concerns will be used as a foundation for creating a key issues list, which will be the basis of our work to develop strategies and actions to achieve air pollution emissions and

exposure reduction. Below you will read about different community concerns, grouped into six recurring themes.

Community Concern: Addressing Public Health and Reducing Exposure

Health-related words and physical reactions to air pollution were the most commonly recurring theme throughout the Community Assets and Air Pollution Mapping Project. This section also includes concerns about populations that may be more vulnerable to air pollution, and other issues where additional work can be done to prevent exposure.

How was this identified as a community concern?	
Community Assets and Air Pollution Mapping Platform	Community Air Monitoring Plan Steering Committee
<ul style="list-style-type: none"> • 'Health' was mentioned 70 times • 'Asthma' was mentioned 69 times • 'Can't breathe' was mentioned 52 times • 'Lungs' were mentioned 31 times • 'Sick' was mentioned 16 times • 'Respiratory' was mentioned 12 times • 'Cough' was mentioned 10 times • 'Allergy' was mentioned 9 times • 'Inhaler' was mentioned 7 times • 'Headache' was mentioned 5 times • 'Oxygen' was mentioned 5 times • 'Wildfire' was mentioned 10 times. • 'Wood smoke' was mentioned in 8 comments 	<p>Community member exposure during wildfire smoke episodes, during facility incidents, and to poor indoor air quality were identified as concerns during the development of the monitoring plan, as well as poor air quality at outdoor recreational spaces or where students walk or wait for the bus.</p>
Town Hall Breakout Groups	
<ul style="list-style-type: none"> • Concern of losing morning usage of bike path since Marin will be creating a new (3rd) vehicle lane. • Solar panels (affordable) with batteries, hybrid cards, EV, get rid of electrical outages from PG&E • Need more information disseminated about health impacts from pollution (air+water), especially in these communities. info is just being made available • Kids can use technology WELL, so we should get them aware of the tools they can use • Escalation of wildfires - sun never came out, streetlights never went off (a couple of years ago); felt like the world coming to an end • The wildfires were the worst air pollution while living here. the red electrical storms and last year, there was a lot of ash that fell on my yard and plants. • There are a lot of sites that need remediation. There used to be gas stations, or laundromats, or short-term infrastructure and started to get mold and other unhealthy conditions. • Seniors having a lot of respiratory issues. • How many children are suffering from asthma and how many school days are missed from asthma? We could use more health education for communities. • The camp fires from unhoused encampments. • Can we contact women who were pregnant during Richmond fire and see if their children had any health issues? 	

What specific issues has the Air District heard are of concern?

- **Wildfire smoke:** Exposure to wildfire smoke poses a significant risk to public health, especially for children and other groups particularly vulnerable to air pollution. Increased local awareness about the health effects of wildfire smoke is needed, as are resources that provide recommendations for protecting public health. There needs to be more alternatives to assist people in finding ways to help reduce their exposure during wildfire smoke episodes.
- **Residential wood smoke:** Residential wood smoke emissions (PM and organic gases) that comes from people burning wood in their homes and yards can cause negative health effects, especially for people with respiratory issues like asthma. See the Air District's [Impacts of Wood Burning Brochure](#).
- **Indoor Air Quality:** Increased knowledge and information about the impact of poor indoor air quality is needed, including explanations of why older housing and poor ventilation contributes to exposure to harmful pollutants and chemicals.
- **Unhoused people:** Cumulative health impacts of air pollution is of particular concern for unhoused people since there are fewer ways for them to limit their exposure.
- **Sensitive receptors:** It is important to understand the location of where people gather or live who are especially susceptible to air pollution.
- **Incompatible land uses:** There are concerns about the construction of new housing and public spaces near sources of pollution and other incompatible land uses like freeways.
- **Lack of trees and urban vegetation:** Many areas in the focus area, especially in lower income neighborhoods, have few trees and urban vegetation. Trees and urban vegetation when present can reduce local air pollution and urban heat island effects.
- **Lack of bike infrastructure:** People expressed the challenges of safely biking in the city without adequate bike routes and complete streets.
- **Health data and causes of respiratory health issues:** Community members have asked about connections between respiratory issues and air pollution and have requested neighborhood-level data for where there are high rates of asthma

Community Concern: Fuel Refining, Support Facilities, Storage, and Distribution

Community members expressed concern about how neighborhoods across the Path to Clean Air project area are impacted by sources of air pollution from the Chevron refinery sources/operations (including non-stack sources such as tank storage, bioreactor, current or former refinery ponds). This thematic area also includes other related businesses that support the processing, distribution, and storage of fuel and fuel-related products.

How was this identified as a community concern?	
Community Assets and Air Pollution Mapping Platform	Community Air Monitoring Plan Steering Committee
<ul style="list-style-type: none"> • 'Chevron' is mentioned in 84 comments • 'Refinery/refineries' are mentioned 62 times • 'Flare/flaring' are mentioned 24 times, • 'Fire' relating to Chevron is mentioned 9 times 	<p>The facilities associated with fuel or chemical production listed below were all identified as air pollution concerns during the development of the monitoring plan. Of particular concern were the air toxics emissions from these facilities, as well as associated truck traffic along Canal Boulevard.</p>
Air District Complaint (>10 complaints in 3-year period)	Town Hall Breakout Groups
<ul style="list-style-type: none"> • 403 complaints alleged the Chevron refinery between 2018 and 2020. • 64 complaints alleged AAK Oil between 2018 and 2020. • 11 complaints alleged Chemtrade LLC between 2018 and 2020. 	<ul style="list-style-type: none"> • Flaring. Visibly being able to see them. There are times when I'm driving it looks like a house is burning but then I realize it's just flaring. That really pulls on people's fear (flaring was a frequently recurring comment). • I am aware during an acute event like a fire or flaring then when I am outside like running or riding bike - or when I visit other communities and feel the difference in how it is to breath there as opposed to here in Richmond • Smoke coming out of the many refineries in the Richmond community. The smell is sometimes unbearable, and I tend to go inside to avoid it. • Leaks that have happened as well. • Oil leaking in our local beach.

What specific issues has the Air District heard are of concern?

- **Chevron Richmond Refinery:** Chevron is a large petroleum refinery that processes crude oil into fuels and other products, producing emissions of fine particulate matter (PM_{2.5}), air toxics such as benzene, and greenhouse gases such as methane. Sources of concern at Chevron include:
 - o Flaring, which may involve visible emissions triggered by equipment malfunctions and/or process upsets and other upset conditions and short-term incidents,
 - o Bioreactor ponds, which produce an odor characterized as "tarry" and "hydrocarbon soup"
 - o Evaporative emissions from tanks, loading racks, and cooling towers,

- Ocean-going vessel activities at the long wharf (cross-cutting with the Marine and Rail community concern category)
- Contaminated land clean-up sites, which can be a source of PM_{2.5} emissions from soil excavation and hydrocarbon emissions from evaporative processes
- Process heaters, which provide heat to various process streams and are a source of criteria pollutant and air toxic emissions
- The fluidized catalytic cracking unit (FCCU), which is currently the largest PM_{2.5} source at Chevron and is also a source of air toxics like hydrogen sulfide and formaldehyde.
- **Chevron Richmond Technology Center:** This is a petroleum research center. Sources of emissions include gasoline dispensing, tanks, solvent cleaning, and engines.
- **Chemtrade West LLC:** Chemtrade is a large sulfuric acid production facility that supports the Chevron Refinery operations. Its operations result in emissions of PM_{2.5}, sulfuric acid, and carcinogens such as benzene and formaldehyde. The Air District received several complaints about this facility in 2018. An audit of the Continuous Emissions Monitoring System (CEMS) at the facility in March 2021 led to discovery of multiple violations (including ~350 lb/day of underreported SO₂) and a more in-depth investigation of the CEMS. More information regarding the Stipulated Order can be found [here](#).
- **Fuel storage and distribution facilities:** These facilities are a concern because fugitive Volatile Organic Compound (VOCs), many of which are also Toxic Air Contaminants (TACs) can be emitted from inadequately sealed tanks. They are also a concern because of truck traffic associated with fuel storage and distribution. This includes businesses like Plains All American, Richmond Products Terminal (also known as BP West Coast Products LLC, and Kinder Morgan LP), the P66 Terminal, Amtecol, TransMontaigne, IMTT, and AAK Oil.
- **Gas stations:** Gasoline dispensing facilities include publicly accessible gas stations, as well as private fueling operations. Evaporative emissions of VOCs, many of which are toxic compounds, can occur when the facility supply is being topped off, from components of the storage system, or from gasoline pumps used for refueling.

Community Concern: Industrial and Commercial Sources Near Communities

Emissions of air pollutants from some businesses and activities can have a significant exposure impact on the nearby areas, even if they contribute a small percentage of the region's total emissions of that pollutant. This can be especially true for businesses located near where people live or spend time. There are also larger industrial operations that contribute to both local and area-wide impacts, depending on the activity at the facility generating the emissions. Some emissions are not collected by an air pollution control device or emitted from a stack and are referred to as fugitive emissions. Since these emissions occur at ambient temperatures and near the ground, they can have significant near-facility impacts. Common types of fugitive emissions are 1) VOC emissions from evaporation of fuels, solvents, or paints and 2) PM emissions from stockpiles of materials or disturbed surfaces.

How was this identified as a community concern?	
Community Assets and Air Pollution Mapping Platform	Community Air Monitoring Plan Steering Committee
<ul style="list-style-type: none"> • 'Smoke' was mentioned in 60 comments • 'Burn/burning' was mentioned in 16 comments • 'Leak' was mentioned 14 times • 'Dust' was mentioned 5 times 	The sources listed below were identified as concerns during the development of the monitoring plan. Metal scrap and recycling facilities, Levin Terminal, aggregate facilities, auto body shops along 23rd street, construction, and other sources of off-road diesel emissions and fugitive dust were of particular concern, especially sources near where community members live or spend time.
Air District Complaint (>10 complaints in 3-year period)	Town Hall Breakout Groups
<p>13 complaints alleged Kaiser Permanente between 2018 and 2020.</p> <p>There were 11 dust-related complaints and 2 smoke related complaints alleging Gold Bond Building Products, LLC between 2018 and 2020.</p>	<ul style="list-style-type: none"> • Park Blvd near the landfill or the Recycle plant near Jackson - there are small and large industrial activities. I wonder about County oversight. • The landfill is used as a transfer station and can impact the community. • Industrial fires. There was a fire at Simms metal and there was so much released in the air. • Fine black dust that appears in neighborhood (this comment was shared from a few community members) • Rise of sea level (release of pollutants due to change of sea level) and its effect on harmful pollutants that are currently in an area away from the sea • Chemical explosion that happened in North Richmond that harmed many. "Anything could blow at any time".

What specific issues has the Air District heard are of concern?

- **Solid waste and recycling facilities:** These facilities are often unloading, sorting, storing, and hauling solid waste and recycling materials and can be a significant source of PM and diesel truck traffic. West Contra Costa County Landfill and waste transfer station is a particular concern, as well as other waste management and recycling facilities in the area. These operations are cross-cutting among the community concern categories, in that they are also sources of odors (see the Odor community concern for odor-specific concerns).
- **Scrap Metal facilities:** Scrap metal facilities include metal recycling and shredding operations, pick-and-pull dismantling operations, and welding and metal fabricators, which can be a source of fugitive PM and VOC emissions, smoke from fires, and diesel exhaust. Facilities of concern identified during the Community Air Monitoring Plan outreach included Sims Metals and facilities near Brookside Drive in North Richmond.

- **Auto body shops:** Auto body shop operations, such as painting, stripping, and sanding, can release some toxic air pollutants and VOCs. Facilities identified during the Community Air Monitoring Plan outreach included the cluster along 23rd Street in the Iron Triangle neighborhood as a particular concern.
- **Aggregate facilities or materials handling:** Common industrial aggregate activities include crushing, conveying, screening, stockpiling, and hauling of stone, sand, gravel, or other types of rocks. All these activities can generate significant dust that can blow off-site into nearby communities. Facilities of concern include Eagle Rock, Rocks Unlimited, and NorCal Perlite.
- **Cemex Concrete batch plant:** Particulate matter is generated from the concrete production process as well as the diesel emissions of hundreds of trucks and concrete mixers that serve plant operations.
- **Gold Bond Building Products, LLC (formerly National Gypsum Company):** Gold Bond Building Products, LLC (formerly New NGC) is a concern because its stockpiles of gypsum have no covers or enclosures, which results in dust emissions (PM) from stockpiles (potentially) drifting offsite.
- **Levin Terminal:** Levin Terminal's coal handling and transport operations result in both fugitive dust (PM) and diesel particulate emissions, which can impact nearby communities.
- **Restaurants, food trucks:** Restaurants and food trucks cook with large amounts of oils and other organic matter, which is aerosolized and ventilated from the kitchen in the form of exhaust. This exhaust carries the organic aerosol produced in the cooking process into the urban environment. Charbroiling of meats and other foods also results in incomplete combustion. Smoke and vapors generated contain VOC and PM that consist of aldehydes, organic acids, alcohol, nitrogen and sulfur compounds, and polycyclic aromatic hydrocarbons (PAHs).
- **Industrial facilities:** VOCs and PM are also emitted by food processing facilities, such as commercial kitchens, bakeries, wineries, breweries, coffee roasteries. Other types of industrial facilities identified as a concern with VOC emissions included facilities that work with solvents or paints, and businesses that clean truck containers.
- **Backup generators (BUGs):** As of 2022, 142 permitted backup generators, or BUGs, can be found at focus area facilities including factories, offices, data centers, the County landfill, government buildings, hospitals, sewage treatment plants, and other facilities. BUGs are a source of local diesel PM emissions, a toxic air contaminant. Backup generators are tested regularly (up to 50 hours per year) to ensure they work as intended. And the use of BUGs as backup power sources is anticipated to grow as Public Safety Power Shutoffs (PSPSs) become more frequent occurrences. State requirements further limit non-emergency hours of existing BUGs that may utilize less modern engine technologies. Facilities with BUGs of concern include Kaiser Hospital, the West Contra Costa County Landfill, waste transfer facilities, and other waste management/recycling facilities. Wastewater treatment plants have large backup generators that are a source of diesel pollution, such as the West County Wastewater treatment plant, or the East Bay Municipal District wet-weather treatment facility.
- **Dry cleaners:** The main source of toxic air pollutants from dry cleaners is the solvent used in the cleaning process.
- **Construction and heavy diesel equipment:** Diesel PM emissions from construction equipment can be a major contributor to localized air pollution, especially when large construction projects are adjacent to neighborhoods. The Community Air Monitoring Plan

outreach also identified equipment used by Caltrans, especially near the toll area near the Richmond-San Rafael Bridge, as a concern.

- **Contaminated soil from hazardous waste clean-up sites:** These sites must be carefully managed through containment or cleanup to prevent hazardous materials from being made airborne and causing harm to humans, wildlife, or the environment. Local sources of concern include the AstraZeneca cleanup site, DDT (Originally developed as an insecticide, it was banned in 1972 for its environmental impacts) in the Santa Fe Channel from the United Heckathorn cleanup site, and other historically contaminated areas.
- **Dust from construction, demolition, nurseries, and vacant lots:** Construction sites, demolition activities, undeveloped land, and nurseries can be sources of PM when wind or activities loft dust into the air, and it is blown off-site. Wind-blown dust from these sources can contribute to respiratory and other health problems.
- **Track out dust on local roadways:** Mud and dirt can be “tracked out” onto a paved road from a construction site, quarry, landfill or other disturbed surface. This material – referred to as “trackout” – contributes to particulate pollution because vehicle traffic on the paved road will pulverize the mud and dirt into smaller particles (known as silt), and then turbulence from vehicles can entrain the silt into the air where it functions as an air pollutant.

Community Concern: Odors from Industries

Odors from industrial activities are a major concern throughout the different neighborhoods in the Path to Clean Air area. Certain land use types are more likely to result in odor impacts, including wastewater treatment plants; landfill, recycling, and composting facilities; petroleum refineries; chemical plants; and food services. Odors can have a major quality of life and health risk impact. Reactions to odors can range from psychological, to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). Learn more about environmental odors and health effects at this Agency for Toxic Substances and Disease Registry [Environmental Odors FAQ page](#).

Odors from industrial activities are a major concern throughout the different neighborhoods in the focus area, which is why the Air District complaint system is a vital reporting tool for addressing odor-related concerns. Humans can detect smells of compounds at very low concentrations, which can be difficult to measure using typically deployed instruments. This thematic area summarizes different odor-related issues that have been collected from the Air District complaint system, as well as outreach and public engagement efforts.

How was this identified as a community concern?	
Community Assets and Air Pollution Mapping Platform	Community Air Monitoring Plan Steering Committee
<ul style="list-style-type: none"> • ‘Smell’ was mentioned 93 times • ‘Gas’ was mentioned 36 times • ‘Chemical smell’ was mentioned 11 times • ‘Fumes’ were mentioned 10 times 	The odors experienced near the sources listed above in addition to unattributed odors near Miller/Knox Regional Shoreline, along the Bay Trail, and the harbor were identified as concerns during the development of the

How was this identified as a community concern?	
Community Assets and Air Pollution Mapping Platform	Community Air Monitoring Plan Steering Committee
	monitoring plan. Community members also listed the upcoming cannabis processing facility (Power Plant) as a future concern for odors.
Air District Complaint (>10 complaints in 3-year period)	Town Hall Breakout Groups
<ul style="list-style-type: none"> • 192 odor complaints alleged the City of Richmond Wastewater Treatment Plant between 2018 and 2020. • 74 odor complaints alleged West Contra Costa County Landfill between 2018 and 2020. • 63 odor complaints alleged AAK Oil between 2018 and 2020. • 167 complaints alleged unidentified odor issues between 2018 and 2020. 	<ul style="list-style-type: none"> • On warm days you can still smell the landfill. North Richmond always had problems with the landfill. • Smells from landfill are heightened during the wildfires. • Odors certain days of the year and times of day. • Sense of odors are desensitized because people get used to the odors.

What specific issues has the Air District heard are of concern?

- **West Contra Costa County Landfill:** Odors from the West Contra Costa County Landfill have been reported from the facility’s compost piles, which have been observed to be overheating, and the piles are generating odors. This results in the stockpiles generating strong rancid odors that drift offsite and impacts neighborhoods in the Point Richmond area. The landfill facility is cross-cutting among community concerns, in that it is also a source of localized emissions (i.e. fine particulate matter and VOCs).
- **City of Richmond Wastewater Treatment Plant (operated by Veolia):** This wastewater treatment plan is a concern because of its odors (sewage, hydrogen sulfide, rotten eggs smell), and emissions of hydrogen sulfide and ammonia, which has been a significant source of community air quality complaints.
- **Fuel refining, storage and distribution:** These operations are cross-cutting among community concerns. In addition to the concerns about the facilities described under the Fuel Refining, Support Facilities, Storage, and Distribution community concern category, there are also odors issues. Odors can come from facilities including businesses like Chevron Refinery, Plains All American, Kinder Morgan, P66 Terminal, Amtecol, TransMontaigne, and IMTT.
- **AAK Oil:** This is a vegetable oils company that is a specific source of concern with 63 community complaints of rancid-oil odors and observed housekeeping issues.
- **Unidentified:** 167 of the odor complaints from 2018-2020 did not allege a particular source. This is an issue that also appeared frequently in the Community Assets and Air Pollution Mapping project as an issue, as well as with the Community Air Monitoring Plan, including near Miller/Knox Regional Shoreline, the harbor area, and along the Bay Trail.

- **Cannabis growing and processing:** There are concerns about anticipated odors in new areas from a new cannabis processing facility (The Power Plant) currently under construction.

Community Concern: Vehicles and Trucks, Streets and Freeways, and Logistics and Warehouses

The Path to Clean Air project area has many sources of vehicle and truck traffic that impact neighborhoods throughout the focus area via a multitude of mechanisms. Goods movement hubs and logistics centers act as magnet sources that draw in vehicles and require use of heavy-duty diesel equipment, causing mobile source emissions. Travel on I-580 and I-80, busy and congested traffic in neighborhoods and public spaces, and trips to and from warehouses and other truck-related businesses result in significant emissions.

How was this identified as a community concern?		
Community Assets and Air Pollution Mapping Platform	Community Air Monitoring Plan Steering Committee	Town Hall Breakout Groups
<ul style="list-style-type: none"> • 38 comments mentioned 'cars' • 19 comments mentioned 'freeways' • 15 comments mentioned 'traffic' • 14 comments mentioned 'trucks' • 10 comments mentioned 'exhaust' • 10 comments mentioned 'smog' • 10 comments mentioned 'vehicle' • 7 comments mentioned 'congestion' • 6 mentioned 'Parkway' • 6 comments mentioned 'idle/idling' • 5 comments mentioned 'highway' 	<p>The sources of air pollution listed below related to emissions from cars and trucks, from warehouses and other truck-related businesses, and dust from the roadways themselves were identified as concerns during the development of the monitoring plan.</p>	<ul style="list-style-type: none"> • There are multiple massive fulfillment centers and warehouses that are expecting hundreds of vehicles in and out per day. That is a serious threat to health in North Richmond and Richmond (there were a few comments that mentioned warehouses). • Unintended impact of the bypass is that traffic is being rerouted and causing pollution in the area. • Traffic on bridge backup days is pretty bad. • Cut through traffic trying to get around the lights on the Richmond Parkway. • Number of trucks driving through the neighborhood and neighborhood streets. • When traffic is backed up on Fred Jackson Way and I have to walk down that road or ride my bike home my lungs burn.

How was this identified as a community concern?		
Community Assets and Air Pollution Mapping Platform	Community Air Monitoring Plan Steering Committee	Town Hall Breakout Groups
		<ul style="list-style-type: none"> Finally being able to breathe when far away from major highways

What specific issues has the Air District heard are of concern?

- **Freeways:** Highways with lots of diesel traffic have higher levels of pollution like diesel PM and black carbon, which can increase the risk of heart attacks and stroke and cause hypertension, asthma, chronic obstructive pulmonary disease (COPD), bronchitis and various types of cancer. Neighborhood exposure to emissions from freeways, including housing, schools, and other public spaces like parks is a recurring community across the focus area.
- **Diesel truck traffic and idling:** Diesel trucks idling for extended periods in residential areas or near places where people gather (e.g., gas delivery along Canal, PG&E trucks idling at the intersection of Ohio and Richmond Parkway) can contribute significantly to pollution exposure. Traffic, including start and stop traffic, results in increased local concentrations of vehicle tailpipe emissions such as toxic diesel PM since emissions are typically higher as trucks accelerate.
- **Local traffic and idling on congested surface streets:** Traffic jams and congestion resulting from traffic apps that re-route traffic through residential roads, leading to more vehicle emissions within the neighborhood. One example identified from the Community Assets and Pollution Mapping Project and the Community Monitoring Plan CSC is cars diverting off the Richmond Parkway when it gets backed up during rush hours (3 - 7ish), creating a bottleneck on Fred Jackson Way in North Richmond. Local traffic is also worsened by at grade rail crossings, and near the City of Richmond fleet yard (13th and Greenway) and similar facilities.
- **Warehouses, truck related businesses and goods movement:** Warehouses and truck-related businesses can be a significant source of diesel exhaust from many daily truck trips and create safety issues when they drive through residential areas. Amazon trucks and warehouse, UPS, USPS, FedEx, PG&E, Veolia, and Rubicon were all mentioned as sources of concern.
 - One area of particular concern is the development of the Hilltop Mall site. The new owners of the 77-acre site, Prologis, are a logistics company and in public comments to the City Council, community members have expressed concern that the mall would become a logistics headquarters, adding to the heavy truck traffic. The neighborhood surrounding the mall is largely residential and has a few schools as well. The mall itself is zoned as mixed-use commercial; a logistics center would require re-zoning for industrial use.
- **Exposure to traffic emissions from routes to schools** Students are exposed to diesel PM and other traffic emissions on their routes to schools since they need to walk long distances to

get to a bus stop. These routes also have safety issues due to heavy traffic, indicating the need for alternative routes for students and other pedestrians.

- **Transportation sources at bus yards, BART, Amtrak:** Public transportation hubs at bus yards, BART, Amtrak also contribute to diesel and gasoline exhaust emissions in areas where many people spend time.
- **Re-entrained road dust from dirt roads and paved streets:** Paved road dust refers to emissions of PM from dirt, brake and tire wear material, and road surface material that is made airborne as cars and trucks drive on the roadway or as wind resuspends the material. Paved road dust emissions can be higher in areas with dust tracked onto the roadway from facilities, and from traffic on unpaved roads.

Community Concern: Marine and Rail

From massive cargo ships to smaller harbor craft such as ferries and tugboats, marine vessels impact California's air quality, especially in communities near ports. Over the past 10 years, California has enacted regulations to limit the pollution generated from these vessels, helping improve air quality in port-adjacent communities, but this marine activity is still a source of air pollution and local community concern. Locomotive diesel exhaust is made up of particulate matter, smog-forming oxides of nitrogen, sulfur dioxide, greenhouse gases and toxic chemicals. Marine and rail equipment tend to have quite long useful lives, meaning that they can be older and dirtier equipment that is less likely to have been upgraded and replaced despite the existence of more modern technology.

How was this identified as a community concern?		
Community Assets and Air Pollution Mapping Platform	Community Air Monitoring Plan Steering Committee	Town Hall Breakout Groups
<ul style="list-style-type: none"> • 28 comments mentioned 'train' • 5 comments mentioned 'tugboats' as a concern. 	<p>The marine and rail sources of air pollution listed below were identified as concerns during the development of the monitoring plan.</p>	<ul style="list-style-type: none"> • Richmond lives close to the port and gets a lot of particulate exposure. Very visible. • Port sources are also a large contributor • There is a rail freight line that runs right behind the terra hills mobile manor senior park; according to her research it is an illegally close distance to the residences

What specific issues has the Air District heard are of concern?

Marine

- **Tugboats:** Tugboats operating offshore may have older engines and be a significant source of Diesel PM. Visible smoke emitted from vessels has been noted as a particular concern.
- **Ferries:** Ferries operating offshore and idling at dock produce Diesel PM emissions.
- **Ocean Going Vessels operations:** Ocean-going ships are the major contributors to several air pollutants, nitrogen oxides (NO_x), sulfur dioxide (SO₂), PM, hydrocarbons, carbon monoxide and greenhouse gases. Ocean going vessels dock at the Chevron long wharf and support Levin Terminal, Eagle Rock, auto warehousing companies, and fuel distribution facilities.
- **Other marine diesel sources:** Equipment at port terminals, including barges, dredgers, and cargo handling equipment, which all can generate particulate matter, including diesel PM emissions.

Rail

- **General Rail activities:** Rail in general produces combustion emissions from locomotives, as well as PM from rail grinding and other non-combustion sources. Rail grinding is a maintenance of way vehicle or train used to restore the profile and remove irregularities from worn tracks to extend its life and to improve the ride of trains using the track. They also contribute to trash and other issues along rights-of-way. There are also issues of safety (train alerts) and transparency (e.g., community may want to know what is being transported through neighborhoods).
- **Rail cars transporting coal and petroleum coke:** In addition to the community concerns about coal dust from storage piles and activities at Levin Terminal, community members were concerned about dust falling from rail cars carrying coal or petroleum coke (petcoke) as they transport the material through North Richmond and Richmond. Petroleum coke, also known as petcoke, is a final carbon-rich solid material that is derived from oil refining and is used for fuel.
- **Rail yards:** Rail yards are a source of diesel exhaust from line-haul locomotives, switching locomotives, and cargo handling equipment (e.g., BNSF, BART, Amtrak)
- **Rail switching:** Diesel PM is emitted by the activity of making up and breaking up trains, or directing them onto different tracks, which can take a long time. This activity also can block street traffic, increasing emissions from idling cars and trucks.

Appendix K: Path to Clean Air Strategy Writer’s Guide

The **Writer’s Guide** is a tool developed with the Path to Clean Air (PTCA) Community Steering Committee (CSC) to guide strategy writing and review. The guide also includes criteria to assess whether strategies meet feasibility criteria and align with the PTCA Visions and Principles.

STRATEGY AND ACTION TABLES

Strategy Tables	
Strategy ID	<i>Alpha-numeric ID</i>
Strategy Name	<i>Brief descriptive name</i>
Key Issue Addressed	<i>The Key Issue(s) addressed by the strategy.</i>
Objective	<i>What the strategy is meant to achieve, overarching goal of the strategy</i>
Feasibility	<i>How the strategy does or does not meet the feasibility criteria</i>
Vision and Principles	<i>How the strategy does or does not meet the Vision and Principles criteria</i>
List of Actions	<i>Actions to achieve the strategy objective</i>

Action Tables	
Action ID	<i>Numeric ID</i>
Action Name	<i>Brief descriptive name</i>
Type of Action	<i>Type of action e.g., regulatory, enforcement, incentives, further research, education/outreach</i>
Lead Action Implementer	<i>The agency, organization, or group primarily responsible for implementing the action</i>
Related Existing Program, Policy, or Initiative	<i>Programs, policies, or initiatives that relates to or aligns with the action</i>
Partners in Implementation	<i>Partners who will work to help implement the action</i>
Key stakeholders	<i>Stakeholders in action implementation, e.g., those most burdened, most likely to benefit, and who may be subject to unintended consequences</i>
Potential Obstacles	<i>Potential obstacles to implement action and plan for overcoming</i>

Action Tables	
Action Initiation Timeframe	<i>Timeframe to initiate action</i>
Action Intervention Point*	<i>Point in Causal Chain of Air Pollution and Health action intervenes</i>
Action Impact Timeframe	<i>Timeframe for the action impact to be observed</i>
Measure/Metric	<i>How progress on action implementation will be evaluated</i>
Estimate of Emission and/or Exposure Reduction	<i>Can emissions or exposure reduction be quantified during/after implementation?</i>

STRATEGY CRITERIA

Feasibility: Can the strategy be implemented successfully today? If you identify obstacles to implementation, can you also identify options to overcome these or change the strategy or action to increase the chance of success?

Funding: can the strategy be implemented with existing or expected funding sources?

Political support: is there a high likelihood of political support for the strategy?

Technical: how much certainty is there that the strategy can be implemented and achieve the expected benefits with existing technology or know-how?

Authority/Legality: can the strategy be implemented within existing authorities of the lead or partners?

Champion: does the strategy have a champion that will help ensure its success?

Timeline: will the community benefit from this strategy within a reasonable timeframe, i.e., for strategies that will have long timelines, are they worth the wait?

Alignment with Vision & Principles: Does the strategy align with the [PTCA Vision and Principles](#)?

Vision: Does the strategy, and particularly the objective, reflect the needs of the people who have been disproportionately harmed by environmental injustice? (expected racial and social equity outcomes)

Principle #3: Is the strategy based on, or does it reflect, the information we have about racial and social disparities, and their root causes, and if not, what information do you need? (analysis of information)

Principle #2: Does the strategy center the stakeholders who benefit and/or are burdened to be included, at what level of participation, and will this participation be meaningful (see definition of meaningful participation in glossary above)? (stakeholder inclusion)

Principle #5: Does the strategy further or create disparities or inequities in communities that have been disproportionately harmed? (who is burdened)

Principle #5: Does the strategy lead to investment, or dismantle barriers, in communities that have been disproportionately harmed by environmental injustice? (who benefits)

Principle #4: Does the strategy achieve the highest emissions and exposure reductions possible in a matter that is sustainable for the long-term? (strategies and implementation)

Principle #4: Will strategy implementation result in unintended consequences for communities most disproportionately harmed by environmental justice? [e.g. increased property value, leading to gentrification] (strategies and implementation)

Principles #1, 3 and 5: (evaluation and accountability)

- o Are the metrics and measures understandable to community?
- o Are the metrics and measures data-driven and evidence based?
- o Will the metrics and measures demonstrate progress towards addressing longstanding disproportionate injustices and inequities?

***Causal Chain of Air Pollution and Health**

see PTCA CSC [Technical Assessment presentation #2](#) or [PTCA CSC Nov 15, 2022 Meeting](#)



Attachment A: Summary of Public Comments and Staff Responses for Draft Path to Clean Air (PTCA) Plan

February 20, 2024

Background

On December 13, 2023, the Air District and the Path to Clean Air (PTCA) Community Steering Committee released the Draft PTCA Community Emissions Reduction Plan (Draft PTCA Plan). The public comment period extended for five weeks from December 13, 2023 until January 19, 2024. The following document summarizes the public comments. A total of 48 public comments were received which covered 223 specific comment topics. The commenters had the following breakdown of affiliations.

- Thirty-eight (38) individuals
- Six physicians or nurses
- Two community-based organizations (Communities for a Better Environment and Sunflower Alliance)
- One industry (Chevron)
- One local jurisdiction (City of Richmond City Council)

Attachment 1 contains a table of all commenters and their affiliation. Attachment 2 contains a response to each comment received. Copies of all emails and comment letters received are included as Attachment 3 to this document.

Approach to Reviewing and Summarizing Public Comments

After logging all comments into a spreadsheet, and assigning a theme, Air District staff evaluated each discrete comment to determine if a substantive or non-substantive change to the Draft PTCA Plan was needed and provided a response to each comment. As put forward in the “Path to Clean Air Strategy Review Process Guidance” a substantive change is defined as:

Significant **modifications that change the meaning, intent, or direction of a strategy or action**; identifies new action implementation leads; modifies the timeline for implementation or impact; adds new findings or factual information.

Key Themes

The key themes that emerged included suggestions related to the Draft PTCA Plan’s strategies and actions, calls for more certainty about plan implementation, comments related to air pollution health and need for popular education, and comments and questions about the technical analysis. Each of these themes are summarized below. The comment summaries are grouped by the key themes as follows:

- Strategies and actions
- Implementation
- Health and education

- Technical basis

Summary responses to comment themes are provided below.

Strategies and Actions

Strengthen and Accelerate Reductions

Commenters commended commitments to update specific refinery regulations. Commenters asked for inclusion of legislative strategies to put limits on exports and require fuels be made from cleaner feedstocks. Additional comments asked for updates to regulations addressing the fuel refining process and for requirement of specific best available control technology. Commenters asked for enhancements to Rule 11-18 health risk assessment benchmarks, focused on tightening thresholds and upgrading certain facilities in the Rule 11-18 workload priority. Comments addressed specific sources such as unfiltered fireplaces and called out specific industrial facilities to be added to the Draft PTCA Plan's facilities of concern. Finally, comments related to odors reporting, asking for check boxes for health-related symptoms.

Summary Response to Comment Theme

Please refer to the Draft PTCA Plan Chapter 7 *Key Issues and Strategies*. Fuel Refining (FR) strategy 4 includes actions to reduce exposure and public health impacts from Toxic Air Contaminants (TACs) emitted by the fuel refining sector. Actions of note include FR 4.1 'amend Rule 11-18' (health risk-based rule) and FR 4.5 'evaluate and implement target single-source category controls.' We note that for Rule 11-18, facilities were assigned a ranking based on the current prioritization score. These rankings are a guide and will be reassessed each year. Fuel Refining strategy 5 lists actions to reduce exposure from particulate matter and other criteria air pollutants emitted by the fuel refining sector. Actions of note include FR 5.1 'implement Rule 6-5' (reduce emissions of particulate matter from petroleum refinery fluidized catalytic cracking units (FCCU)) and FR 5.5. initiate rule development to evaluate controls to reduce SO₂ emissions and Secondary PM⁴⁵ generated by Chevron and related industries in the PTCA area'. Please also refer to Public Health (H) action H 2.5 'reduce exposure to wood burning'.

Improve Understanding of Emissions and Their Impacts

A variety of comments were put forward to improve understanding of emissions and their impacts. Commenters made specific suggestions about which pollutants to monitor and equipment to use, including calling for studies of new measurement technology. Commenters called for a comprehensive analysis of emissions and health impacts from major flaring events, like the one that occurred on November 27, 2023, as well as better alerts during flaring events. Commenters also called for specific actions for dust from contaminated clean-up sites and coordination with the California Department of Public Health on air monitoring improvements.

Summary Response to Comment Theme

Please refer to Fuel Refining (FR) action FR 3.14 which includes improvements to emissions monitoring for Chevron and related fuel refining facilities. In response to comments calling for specific monitoring technology, please refer to Fuel Refining strategies 2 and 3 (actions FR 2.4, FR 3.13, FR 3.14) that will consider the use of Fluxsense and other technologies. In response to comments calling for a comprehensive assessment of emissions from flaring events, please refer to Appendix C *Supplemental*

Technical Information – Emissions and Modeling which includes a detailed analysis of potential flaring impacts, which includes impacts under worst-case conditions rather than specific historical events. Please also refer to Fuel Refining strategy 2 related to providing more information and improving communication during and after incidents, specifically actions FR 2.2, FR 2.4 and FR 2.5. The Air District recognizes that contaminated sites undergoing cleanup and remediation are important concerns in the community. The Air District coordinates routinely with other state agencies (such as Department of Toxic Substances Control) and federal agencies (such as Environmental Protection Agency) that have jurisdictional authority or oversight with site cleanup and remediation. The Air District is continually working to improve these partnerships to help enhance monitoring study design, data accessibility, and communication of air monitoring results.

Strengthen Compliance and Penalties / Improve Transparency and Reporting

Comments centered on more effective penalties and enforcement to improve industry practices and further emissions reductions. Commenters also called for making inspection documents public (for inspections of large industrial plants). Conversely, industry commented that enforcement should not be a public process.

Summary Response to Comment Theme

Please refer to Fuel Refining strategy 3 for legal, enforcement and accountability actions. Further, please refer to Fuel Refining strategy 2 for flaring actions related to improvements to the Community Warning System and improvements to the Air District's incident response program.

Fuel Refining and Flaring

Commenters expressed appreciation for the updated flaring regulations included in the Draft PTCA Plan, however, there were repeated comments for more definitive goals and timelines for action around flaring events. Commenters wanted better flaring incident response strategies and accountability from Chevron. Commenters asked about best practices related to controlling flaring incidents and information on flaring standards in other countries.

Summary Response to Comment Theme

Please refer to the objectives for Fuel Refining strategy 2 to reduce flaring events to the lowest levels possible (in terms of frequency and emissions), including during emergencies/upset, via more consistent and competent operations, with an ultimate goal of zero routine or planned flaring.

Warehouse Development, Active Transportation and Truck Impacts

Commenters expressed concern around warehouse developments within their community, in addition to truck and car traffic diverting from the Richmond Parkway to residential neighborhoods. Commenters also requested more public electric vehicle (EV) charging stations be made available. Finally, commenters supported more strategies for active transportation options such as cycling and walking.

Summary Response to Comment Theme

Please refer to Vehicles and Trucks, Streets and Freeways, Logistics and Warehouses (Mobile) strategies 3.1 and 3.2 actions related to a Truck Management Plan (TMP) to address issues related to trucks traveling on residential streets. In addition, please refer to Mobile strategies 1.3 and 1.4 for potential regulatory approaches to guide development of truck attracting businesses and further study of a Bay

Area Indirect Source (Magnet Source) Rule to regulate indirect sources (i.e., warehouses, distribution centers) that attract mobile sources of pollution. See Mobile strategy 5.3 which includes education, outreach, and incentives to support the transition of light-duty vehicles towards electrification. Additionally, businesses and fleets within the Draft PTCA Plan area may be eligible for Air District incentive or grant funding to help offset the cost of the electrification infrastructure. To learn more about Air District funding programs please visit <https://www.baaqmd.gov/funding-and-incentives/businesses-and-fleets/infrastructure>.

Port Electrification

Commenters expressed the need for shore power electrification at the Chevron wharf.

Summary Response to Comment Theme

Please refer to Marine and Rail strategy 2.1, which discusses the implementation and enforcement of CARB's At-Berth Regulation, with the intention of reducing emissions from ocean-going vessels.

Climate Mitigation

Comments around climate mitigation were focused on incorporating strategies to address impacts of sea level rise in the San Francisco and San Pablo Bay as an impact of sea level rise could include an increase in polluted groundwater.

Summary Response to Comment Theme

Climate mitigation measures to address sea level rise in the San Francisco and San Pablo Bay are not included in the Draft PTCA Plan.

Legislative Authority

Comments related to legislative authority called for stronger action at the state level to aid in pollution reduction, enforcement, and regulation of industries. Commenters noted statewide policy addressing use of best-available technology, setting limits on fuel refining permitting, cleaner emissions, and reducing flaring activities could strengthen implementation of the Draft PTCA Plan.

Summary Response to Comment Theme

Please refer to Chapter 9 *Implementation and Reporting* of the Draft PTCA Plan. A Legislative Ad Hoc Committee, whose purpose will be to organize Community Steering Committee (CSC) support for legislative proposals that protect public health and reduce air pollution, is proposed. During the implementation phase of the PTCA Plan the Legislative Ad Hoc Committee, if formed, would work together to discuss statewide policy opportunities for emissions reduction, and, if necessary, advocate for legislation.

Broader Applicability of Draft Plan Strategies

Comments called for refinery regulations to apply across the Air District's jurisdiction and for measures adopted in one plan to be replicated in other communities.

Summary Response to Comment Theme

Air District rules and regulations are regional in nature; they apply across the entire Bay Area jurisdiction. Therefore, any updates made to Air District regulations would inherently be applied to all relevant sources in the Bay Area, not just those in the PTCA area. Measures included in community plans from within and outside the Bay Area were considered in developing the Draft PTCA Plan, and the PTCA Plan will be shared publicly to inform other communities.

[Just Transition and Community Benefits Policy](#)

Commenters are in support of the Just Transition and Community Benefits Policy strategies. Commenters noted that further clarity was needed in regard to oversight of the Community Benefits Policy strategy and the inclusion of community members in the process.

Summary Response to Comment Theme

Please refer to Fuel Refining strategy 1 and strategy 3 in Chapter 7 and Appendix A *Detailed Action Descriptions* for specific action details related to the Just Transition and Community Benefits Policy strategies.

[Implementation / Process](#)

[Timeline](#)

Commenters asked for a more concrete timeline for implementation.

Summary Response to Comment Theme

Please refer to the strategies in Chapter 7 and detailed actions in Appendix A which include estimated timelines. Please also refer to Chapter 9, which describes the proposed implementation approach.

[Accelerated Goals and Targets](#)

Commenters noted a lack of specific emission reduction targets and inadequate discussion of critical success factors. Commenters also questioned the feasibility of achieving reduction goals. Comments included asking for a target of reducing TACs by 30-50% by 2025.

Summary Response to Comment Theme

Please refer to the objectives for Fuel Refining strategy 4 which include reducing exposure burden from TACs to the lowest level feasible and reducing Toxicity Weighted Emissions from the fuel refining sector with a goal of a 30-50% reduction before 2035. See also Appendix A which includes metrics for all actions. Furthermore, Goal #2 in the Draft PTCA Plan in Chapter 3: *Vision and Principles and Plan-levels Goals* states that “In pursuit of reducing historically high rates of asthma, cancer, and other chronic health conditions, our plan seeks to lower our community’s disproportionate exposure to air pollution by reducing toxic emissions from local sources by 30-50% by 2035.”

[Accountability: Comments Addressing Chevron Accountability](#)

Comments demanded more accountability from Chevron in protecting public health. Commenters asked for Chevron to further regulate its emissions in the PTCA area and urged Chevron senior officials to participate in plan implementation. Many commenters expressed a desire to further impose fines on

Chevron. The commenters noted the failed promise of the Chevron Modernization Plan (2014) that was meant to reduce emissions but has not done so.

Summary Response to Comment Theme

Please refer to Fuel Refining strategy 3 which includes numerous accountability actions related to transparent inclusive updates, improved enforcement approaches, and improved fence-line and community monitoring.

[Accountability: Comments Addressing Air District and Other Agency Accountability and Partnerships.](#)

Commenters asked for the Air District to take a more active role in emissions reductions, especially as it relates to the Chevron Modernization Plan, serve as regional conveners of community, labor, and industry sectors towards renewable energy goals, all while improving the health of the community. Further, the Air District was implored to further regulate emissions with more ambitious goals and targets. Additional comments implored the accountability of other agencies, including the California Air Resources Board. Commenters shared a desire to begin implementation hastily and expressed the need for more coordination with the public health sector, the Richmond City Council, and the Contra Costa County Hazardous Materials Commission.

Summary Response to Comment Theme

Please refer to Chapter 9 which discusses the role of the Air District during implementation and notes the many agencies whose partnership will be needed to ensure success.

[Funding/Budget](#)

Commenters asked about the total budget for implementing the actions in the Draft PTCA Plan and where the funding will come from. Comments also included suggestions for potential sources of funding (including funding from polluters and funding from the government and imposing taxes to fund specific actions such as fireplace filters).

Summary Response to Comment Theme

Please refer to Chapter 7 and Appendix A where potential funding sources (such as incentives and grants) are discussed. Further work to identify specific funding sources will occur during implementation as discussed in Chapter 9.

[Engagement](#)

Engagement comments related to finding unconventional ways to reach people to expand involvement in this work including suggestions for improved engagement materials and presentations on the Draft PTCA Plan. Commenters also called for a summary table of strategies to be shared.

Summary Response to Comment Theme

As noted in Chapter 9, the CSC and its committees, including the Community Engagement Standing Committee, will continue to leverage personal and professional networks to engage community during implementation.

Health and Education

Comments noted the need to educate the community about air pollution and its health impacts on the body. Commenters provided personal accounts and physicians' patient's accounts of health issues from living in the study area (i.e., childhood and adult asthma, respiratory issues, etc.). More research was requested, including analysis of how COVID is transmitted through poor air quality, indoors and out.

Summary Response to Comment Theme

Please refer to Health strategy 2.1 which includes increasing access to home retrofit programs, Health strategy 2.2 which includes supporting transition to electric appliances and Health strategy 2.3 which calls for improving rental standards to include indoor air filtration. In addition, see Land Use (LU) strategy 1 and Urban Greening (UG) strategy 1. The goal of LU 1 is to focus on land use regulations, conditions of approval, and to create protective zones to reduce the cumulative impact and concentration of polluting sources within the PTCA area. The goal of UG 1 is to reduce exposure at the neighborhood level through increased tree canopies in priority areas.

Technical Basis

Emissions Data and Analysis

Commenters expressed a need to better understand the increase in TACs from the Chevron Refinery, including calling on improvements to the Chevron Refinery Modernization Plan. Commenters asked for a list of all permitted facilities and a list of all refinery combustion sources.

Summary Response to Comment Theme

Please refer to Attachment 2 for information regarding air pollution trends and permitted sources.

Modeling Data and Analysis

Comments related to the modeling data and analysis asked if pollutants were mischaracterized and noted that data was provided without citation.

Summary Response to Comment Theme

Please refer to Attachment 2 for information regarding interpretation of modeling results and data sources.

Monitoring Data and Analysis

Comments related to the monitoring data and analysis stated that the Air District should be wary of drawing conclusions of limited pollutant data sets. Comments stated that certain monitoring data was omitted. Comments further stated that data from ground level monitors should not be used for certain analyses. Comments also stated the rules for which compliance is achieved with ground level monitors.

Summary Response to Comment Theme

Please refer to Attachment 2 for information regarding monitoring data and analyses.

Enforcement Data and Analysis

Comments called out exclusion of woodsmoke complaints, requested a list of all emission-related penalties and further information about specific permit violations. Comments were also made about the number of inspectors assigned to the Chevron Richmond facility and about the facility's notices of violations.

Summary Response to Comment Theme

Comments related to exclusion of woodsmoke and the number of inspectors at the Chevron Richmond facility are respectfully noted. Requests for further information about specific penalties and permit information should be made via the to the Air District's Public Records Act requests portal: <https://www.baaqmd.gov/contact-us/request-public-records>.

Attachment 1: Table of Commentors and their Affiliation

First Name	Last Name	Organization
Tarnell	Abbott	Richmond resident
Emily	Adamson	Physician at Lifelong Medical's William Jenkins Clinic
Yadira	Alvarez	Unknown
Floy	Andrews	Attorney in Richmond, CA
Maureen	Brennan	Contra Costa County Hazardous Materials Commission member
Y'Anad	Burrell	PTCA CSC co-chair, resident, Glasshouse Communications
Angel	Chavarin	Resident
Leticia	Chavez	North Richmond resident
Claudia	Citroen	Richmond resident
Suzanne	Coffee	PTCA CSC member, resident
Karen	De La Cruz	Resident, youth council
Steve	Early	Richmond resident, author of Author of Refinery Town: Big Oil, Big Money, and the Remaking of an American City (Beacon Press, 2017)
Gail	Eierweiss	Resident
Scott	Gelfand	Richmond resident
Megan	Goetz	Lifelong Medical Care, Americorps Fellow
Manuel	Gomez	Resident
Suzanne	Gordon	Point Richmond resident
Brent	Green	Unknown
Martha	Gruelle	Resident
Julie	Harris	Nurse in El Sobrante
Janis	Hashe	Richmond resident
Gary	Hurlburt	President and Executive Director, Richmond Tennis Association
Brenda	Illescas	Resident
Joel	Iniguez	Unknown
Trina	Jackson-Lincoln	City of Richmond City Council Liaison and Project Coordinator
Martine	Johanessen	NorCal Staff Researcher, Communities for a Better Environment
Janet	Johnson	Co-coordinator, Sunflower Alliance
Catalin	Kaser	Resident
Jeannette	Kortz	Unknown
Alison	LaBonte	A La Bonte advisors
Daniel	Lanis	Resident
Jackelyn	Ledesma	Richmond resident
Diana	Martinez	Resident
Jan	Mignone	Richmond resident
Carla	Morales	Resident
Jennifer	Mourelatos	Lifelong Medical Care Director
Niyi	Omotoso	PTCA CSC member and physician
Todd	Osterberg	Chevron
Hazel	Padilla	Resident

Summary of Comments and Responses
February 20, 2024

First Name	Last Name	Organization
Jaime	Perez	Richmond resident
Joseph	Puleo	Resident
Jacob	Rico	Resident
Laurie	Swiadon	East Richmond Heights resident
Sally	Tobin	Resident
Priya	V	Richmond resident
Kanwal	Waknis	Physician at Lifelong Medical's William Jenkins Clinic
Jan	Warren	Resident (Walnut Creek)
Susan	Wehrle	Richmond resident

Attachment B: Full Text of All Comments Submitted on the Public Draft Path to Clean Air

From: [Angel Chavarin](#)
To: [Air Quality Planning](#)
Subject: (PTCA) path to clear air
Date: Thursday, January 18, 2024 12:03:06 PM

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I like this plan to address air pollution in our community
-Angel Chavarin

From: [Emily Adamson](#)
To: [Air Quality Planning](#)
Subject: Path To Clean Air
Date: Thursday, December 21, 2023 11:31:17 AM

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To Whom It May Concern,

My name is Dr. Emily Hunter-Adamson and I am a family medicine physician providing primary care to underserved residents of Richmond at Lifelong Medical's William Jenkins clinic. It is well known among healthcare providers in the Richmond area that asthma rates in particular are very high among the community we serve and that this is likely very deeply connected with the levels of air pollution the residents of these areas face on a daily basis. As I raise my own infant daughter, I am grateful for the privilege that I have for her to live in an area free of refineries and other industrial emissions that would increase her risk for poor health outcomes. My heart aches for the kids I see daily in clinic with preventable chronic health conditions that they suffer from simply because they must live in areas that have been deemed acceptable for high levels of air pollution.

On behalf of my patients, I would like to express my extreme support for the Path to Clean Air, and for any plan to dramatically reduce or eliminate fossil fuel emissions and transition of the area to green energy. I believe it is an essential piece for equity and good health for the residents of Richmond and for our planet.

Thank you for your time,
Dr. Hunter-Adamson

From: [Laurie Swiadon](#)
To: [Air Quality Planning](#)
Subject: wood smoke complaints
Date: Thursday, December 14, 2023 12:14:06 PM

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Dear Planners,

In my neighborhood of East Richmond Heights, I dread the onset of cold weather every year because of the fireplace users who don't have EPA filters and are numerous and stubborn. Many people burn really stinking toxic materials as well as wood in my neighborhood, and my lungs and eyes are extremely sensitive. I have offered to buy EPA fireplace filters for these people very nicely, as I want to continue good relationships with my neighbors, and so far, only one family agreed to stop burning the wood (next to my house).

I noticed that the reduction plan contains the following language: "Air quality complaint confirmation rates exclude woodsmoke complaints."

Woodsmoke is toxic not just to sensitive people with reactive lungs, like me, and asthma, but everybody. What can we do to protect our population from these negative effects? I call for a ban on unfiltered fireplace burns. And maybe create a new tax to provide for installation of EPA-certified fireplace inserts for everyone who requests one. PLEASE!!

Sincerely,
Laurie Swiadon

[REDACTED]

From: [Niyi Omotoso](#)
To: [Air Quality Planning](#)
Subject: Public comment for PTCA draft plan
Date: Saturday, January 6, 2024 3:28:53 PM

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I wholly support the PTCA plan. As a physician working with families with multiple generations with asthma and heart disease, and seeing their health impacted by the air pollution, I support the just transition principle set in the plan and strategies on public health to address this health inequity.

From: [Yadira Alvarez](#)
To: [Air Quality Planning](#)
Subject: Clean Air
Date: Monday, January 8, 2024 9:36:16 AM

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I support the intention of this plan!!

[Sent from Yahoo Mail for iPhone](#)

From: [Kanwal Merchant](#)
To: [Air Quality Planning](#)
Subject: Path to Clean Air Plan
Date: Wednesday, January 10, 2024 8:55:22 AM

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Hello,

My name is Kanwal Merchant Waknis. I am a physician working in Richmond. I would like to comment on the "Path to Clean Air Plan". I want to express my support for this plan overall, in order to improve the air quality and health outcomes of my patients, all living in the area. Specifically I appreciate Chapter 7 - Strategy 4 Large Industrial Sources. I believe that reducing particulate matter and toxic air contaminant emissions from large facilities will help to reduce health hazards.

Thank you,
Kanwal Merchant Waknis, MD
[REDACTED]

From: [Jeannette Kortz](#)
To: [Air Quality Planning](#)
Subject: My Comments Regarding the North Richmond-Richmond-San Pablo Community Emissions Reduction Plan
Date: Thursday, January 11, 2024 1:13:15 AM

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Hello,

I have concerns regarding this plan. To me it does not go far enough to protect these communities. Please see my comments below. We need:

1. A full analysis of the emissions and health impacts of major flaring events - like the one we had on Nov 27th (4 flares spewing full bore for 12 hours plus additional flaring for 2 days)
2. A plan to reduce flaring 75% by next year. Get back to pre-Modernization project levels and aim for industry best practice levels.
3. A plan to reduce the top toxic contaminants by 30-40% with milestones between now and 2035 with critical success factors (PM and the top ten toxic contaminants)
4. A plan to force Chevron to participate actively in this emissions reduction process
5. A plan to improve our understanding of individual emission health risks
6. A plan to investigate legislative strategies for reducing pollution such as limits on exports or requirements to process cleaner crude oil with lower sulfur content. (Should Chevron get to pollute our community so that it can export jet fuel to China? Should Chevron get to refine dirtier oil in order to save \$5 or \$10 per barrel?)

Thank you for your time. I hope you will address my concerns.

Kind regards,

Jeannette Kortz



From: [julie Harris](#)
To: [Air Quality Planning](#)
Subject: AB 617; The Path to Clean Air Richmond, North Richmond & San Pablo DRAFT Community Emissions Reduction Plan
Date: Tuesday, January 16, 2024 6:45:39 PM

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AB 617; The Path to Clean Air Richmond, North Richmond & San Pablo DRAFT Community Emissions Reduction Plan

PLEASE PLEASE pass it, do it, make it happen.

I am a retired Registered Nurse in El Sobrante with pollution-related COPD. Also helping to raise three small grandchildren in El Sobrante. Witnessing scary numbers of kindergarteners and preschoolers with asthma in West Contra Costa Unified School District classrooms. Make our air healthier, PLEASE.

Sincerely,
Julie Harris
El Sobrante

From: [Brent Green](#)
To: [Air Quality Planning](#)
Subject: Toxic Air, Public Health, & AB617
Date: Wednesday, January 17, 2024 10:05:47 AM

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The Plan (AB 617) must be strengthened prior to sending it for CARB approval.
Among several urgent needs are:

- Stronger regulation of emissions
- More effective penalties & enforcement
- More accountability for major sources
- More accountability for BAAQMD
- More accountability for CARB
- Better help for major project reviews
- Better monitoring of emission spikes & flaring events with better alerts

Chevron MUST partner in good faith to address urgent public health issues from emissions.

As a public health professional we are ALL affected.

Thank you in advance.

Brent Green, Ph.D., MPH

From: [Floy Andrews](#)
To: [Air Quality Planning](#)
Subject: Richmond-North Richmond-San Pablo Community Emissions Reduction Plan
Date: Wednesday, January 17, 2024 8:46:41 PM

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January 17, 2024

Attn: Planning and Climate Protection Division
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

Dear Planning and Climate Protection Division:

After years of effort expended by so many on the AB 617 Community Planning Committee in West Contra Costa County, as well as BAAQMD staff and many others, it's disappointing that even now we cannot articulate the true cost of a refinery like Chevron's on our community members' health.

We know PM2.5 emissions impact the human respiratory system as well as many other biological functions. After years of administrative review, BAAQMD finally set a date certain by when the local refineries, including Chevron, must install wet gas scrubbing technology, after the full-force advocacy of environmental groups, healthcare providers, local community leaders and members, elected officials and so many others. This is, however, only one step on the path to clean air and health in our communities.

At present, we still have no clear understanding of the impacts of so many other toxic contaminants refineries release into the air—the same air we breathe all day and at night as we sleep. Chevron is my neighbor in Richmond. Every year, on many occasions in the dark fall and winter months, I wander outside in the late or early hours of the night and notice a strong and pungent odor. What is the cause? Why only in the dead of night? I have never experienced such odors living anywhere but here, next to Chevron. My suspicions run wild, especially with the lack of information and data. How can I learn what contaminants are present in the air in my garden?

We know refineries exhaust toxins like sulfuric acid, benzene, nickel, manganese, arsenic, hydrogen cyanide, hydrogen chloride, formaldehyde, acrolein and cadmium. But

we haven't demanded adequate investment in research to understand how these chemicals, independently and especially in combination, impact human health. Where is the science?

As an attorney experienced in environmental issues, I have watched as the scientific and industrial hygienist communities have identified health concerns associated with many, many chemicals we had previously assumed were perfectly safe. We know that living next door to the Chevron refinery can result in elevated chronic health problems, even though cancer rates remain close to regional norms. Now we need to know which chemicals or combination of chemicals are the source of our community's health problems. Getting funding from the US EPA for this work is critical. It should be a top priority for BAAQMD, senior management at Cal EPA, CARB and OEHHA. Personally, I believe the polluter should bear a substantial portion of the cost of this effort.

I ask: Is it fair or right that local populations living adjacent to Chevron bear the cost, in terms of poorer health, for the fossil fuel economy Chevron's operations support, while Chevron's investors earn outsized returns on capital in the form of profits?

Sincerely,

Floy Elizabeth Andrews
Attorney (SBN 187375)

[REDACTED]
[REDACTED]
[REDACTED]

From: [Joel Iniguez](#)
To: [Air Quality Planning](#)
Subject: My community
Date: Thursday, January 18, 2024 9:22:19 AM

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Good morning hope this finds you well I'm sending this because I would like this plan to address air pollution in my community
Sent from my iPhone

Comments on AB 617 Draft CERP Plan

Gail Eierweiss

Fri 1/19/2024 3:42 PM

To: Air Quality Planning <aqplanning@baaqmd.gov>

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Thank you for the opportunity to comment on the draft plan. I appreciate the hours of work by both staff and community members. I attended the workshop, and I have read the 170 page document and some of the appendices. In particular, I am glad that the plan specifically calls for a 35-50% reduction in exposure for our disproportionately harmed residents over the next 10 years and that it also includes a focus on exposure reduction in our community through urban greening, traffic control, street sweeping, residential ventilation improvements, etc. We need it all.

I have lived in Richmond for 12 years and have followed the Chevron modernization plan from the beginning. I have seen the manifold increase in flaring that has become such a significant issue for our community SINCE the modernization project went online. I appreciate the data provided about individual emissions and their various sources - and the confirmation that our air has gotten significantly worse since 2018. I have also seen the complete lack of progress in either doming the Chevron storage tanks, or bringing shore power to the Chevron tankers. Any issue that has involved Chevron has seemed ignored or adjudicated in the company's favor. As a result of what I have witnessed living here, I put forward the following comments for your consideration:

- 1. Please include a plan for a 75% reduction in flaring at the Chevron facility in Richmond by 2026 at the latest.** This was a request made clearly by the Richmond City Council last May. Flaring has been increasing at an alarming rate ever since the " Modernization Project" went online in late 2018. BAAQMD approved the project in 2014. BAAQMD needs to fix the problem now - its credibility in the community is on the line here. In your document, there are no specific plans or goals.. There must be an aggressive and bullet proof plan to bring flaring down to a level equal to or lower than pre-Modernization project levels. What are the best practice numbers for refinery flaring incidents? What are the standards in Europe and Japan?
- 2. We need more focus on the toxic air contaminants - better data, analysis and milestones.** The plan says that BAAQMD does not know what toxic elements are released in these major flaring events. Or what emission reductions will be delivered by Rule 11-18. These deficiencies are not ok. There was a significant flaring event Nov 27 and there has been no public information describing what the emissions were, their potency, or their dispersal. No counter to Chevron's assertion that there was "no health impact." Nor does there seem to be much focus on the health impacts from the changes in "regular" operational emissions. There is more focus on PM2.5, NOx and DPM than on sulfuric acid, nickel, hydrogen cyanide, etc. Since "Modernization" there have been increases in 8 of the 10 most dangerous TAC emissions for chronic health, and yet the Plan is silent about the possible health impacts. How damaging was a 225% increase in sulfuric acid from 2019 to 2021? Did these emissions go up even more in 2022 and 2023? How long before we know? We need to better understand the sources and health risks of these top ten pollutants so that we can be focused on the most important


emission reductions and on the strategies that will deliver them. Maybe Chevron has to process lower sulfur crude for us to hit our goals. We need more analysis to get to a solid plan for 2027, 2030 and 2035.

3. We need to get the community involved to combat Chevron's delaying tactics. Chevron is battling in court against the Cat Cracker wet scrubber rule that is a top priority. BAAQMD wishes they weren't. Please explain in the plan what we can do to defeat Chevron's tactics. I'm very uncomfortable that such an important legal matter is being handled behind closed doors with little public input or organized pressure for "the system" to do the right thing. There should be buses full of people going to Sacramento to demand that this delay is put to an end. Same thing for the shore power issue.

4. Make the plan more accessible and goal-oriented. It really is overwhelming as well as somewhat fragmented. Few will read 700 pages. We need a clear way of understanding the total plan and how it will deliver our goals. I think we need two things. Firstly, we need a better slide deck that is simpler and more focused on goals, milestones and critical success factors. The City Council would appreciate this as well, and if it was presented at a City Council meeting, many residents would hear it - many Richmond residents tune in to watch City Council meetings. I can think of no better single forum for presenting the plan. Secondly, to make the complete plan more accessible, I strongly suggest that summary tables be added that allow the reader to see all of the emission reduction strategies together (including flaring!) and all of the non-emission reduction strategies in another. Each table would need columns for milestones, critical success factors, responsible agency and funding needs. And the emission reduction strategies table would need milestone reduction goals. Ideally, no more than 5 or 6 pages.

Thanks again for all the effort put into this

Gail Eierweiss
Richmond resident



Draft PTCA Community Emissions Reduction Plan

Jenny [REDACTED]

Fri 1/19/2024 7:06 PM

To: Air Quality Planning <aqplanning@baaqmd.gov>

[REDACTED] [Learn why this is important](#)

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Hello,

I am writing to express my support for the draft Path to Clean Air Community Emissions Reduction Plan. Thank you for engaging with the community to prepare a thoughtful and detailed report of the air quality issues that affect Richmond and surrounding communities, and identifying strategies to address them. The following are recommendations for an already excellent plan:

1. Strategy Mobile 5: Consider including an action that incentivizes and supports the development of electric vehicle (EV) charging for public use. This could be through shared infrastructure or land use zoning that encourages new multi-family development to include EV charging infrastructure if that development includes vehicular parking spaces.
2. Strategy Mobile 6: consider including actions that would encourage the development of infrastructure that makes walking and biking safer, and therefore a more desirable mode of transportation (for example, high visibility crosswalks , protected bike lanes, etc).
3. Overall, include strategy metrics that track whether implementation of the action led to more equitable outcomes.

Too often good plans, like this one, do not receive the institutional, political, and financial support necessary to implement the strategies identified. I hope that once the implementation plan is complete the decision making bodies of the affected communities within the CERP boundary take up this work with haste and full support.

I know these comments are coming after the 5 pm deadline, but hope you will consider them nevertheless.

Thank you,
Jenny Delumo
Richmond Resident

Comments, Richmond-N. Richmond-San Pablo PTCA CERP

Janet at Sunflower Alliance [REDACTED]

Fri 1/19/2024 1:33 PM

To: Air Quality Planning <aqplanning@baaqmd.gov>

📎 1 attachments (315 KB)

SFA AB617 CERP comment 240119.pdf;

[REDACTED] [Learn why this is important](#)

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Good afternoon,
Please find Sunflower Alliance's comments on the AB 617 PTCA CERP, attached. I would appreciate an email confirming receipt.
Thank you!
~janet

--
Janet Scoll Johnson
pronouns: she/her
Co-Coordinator, Sunflower Alliance
Co-Chair, Richmond Shoreline Alliance

I actively occupy and benefit from stolen land of the Ohlone Chochenyo people, who looked after this land for centuries and still live here. I advocate and support efforts for Indigenous land to be returned to Indigenous ownership and management. Learn more at <https://sogoreate-landtrust.org>.



January 19, 2024

Attn: Planning and Climate Protection Division
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105
Sent via email to:
aqplanning@baaqmd.gov

Re: Comments on Draft PTCA Community Emissions Reduction Plan (CERP)

Dear BAAQMD staff and AB 617 CERP Steering Committee members,

Sunflower Alliance supports the efforts of the Richmond-North Richmond-San Pablo Path to Clean Air (PTCA) Community Steering Committee (CSC) and the Community Emissions Reduction Plan (CERP). We are especially encouraged by the CERP's focus on transparency and just transition planning.

In the comments that follow, we begin with some important oil refinery emission reduction measures that include those shared by the Wilmington Carson, West Long Beach (WCWLB) CERP. We then address other community concerns, notably air monitoring during remediation of contaminated sites and upgrading the priority of the City of Richmond Wastewater Treatment Plant. Our recommendations are noted in **bold**.

1. Refinery-related recommendations.

1.a) **Since the WCWLB CERP was one of the first developed in California, we recommend that some measures secured in it be considered by the Richmond Steering Committee for inclusion in the Richmond CERP.** We urge the CSC and BAAQMD to advocate with California Air Resources Board (CARB) to require that **measures adopted in one community be replicated in others**, so that each community does not have to reinvent the wheel.¹

The follow-up implementation of the WCWLB CERP has resulted in development of new refinery regulations in the South Coast that will cut substantial oil refinery emissions for a number of primary pollutants. **We recommend that BAAQMD follow SCAQMD's lead, as follows:**²

¹ California Environmental Justice Alliance, May 27, 2020, CARB, "An approach that focuses on reducing pollution in specific sectors and reducing overall cumulative emissions burdens will help ensure that impacted communities not selected for CERPs are not left further behind." and "Statewide, sector-based approaches tied to strong regulatory guidelines can mitigate harms such as these and lead to emissions reductions."

² Table 5b-2: Refinery Emission Reduction Goals by 2030, WCWLB CERP, p. 5b-5, available at <https://ww2.arb.ca.gov/sites/default/files/2020-01/Final%20CERP%20WCWLB.pdf>.² Table 5b-2: Refinery Emission Reduction Goals by 2030, WCWLB CERP, p. 5b-5, available at: <https://ww2.arb.ca.gov/sites/default/files/2020-01/Final%20CERP%20WCWLB.pdf>.

1.a.1) **Adopt a plan to cut refinery emissions by substantial percentages.** The adopted WCWLB CERP included a commitment to cut a minimum of 50% of refinery emissions of Nitrogen Oxides (NOx), Volatile Organic Compounds (VOCs), and Sulfur Oxides (SOx) by 2030, or earlier if feasible.

1.a.2) **A commitment to adopt tightened refinery regulations to accomplish the following emissions reductions:**

1.a.2.1) NOx – South Coast reductions are achieved primarily through an updated Refinery Boilers and Heaters regulation (SCAQMD Rule 1109.1). This rule requires addition of Selective Catalytic Reduction (SCR) on most refinery heaters, boilers, and other combustion units. **We recommend that BAAQMD adopt a similar regulation.**

1.a.2.2) **We recommend that BAAQMD adopt an updated Refinery Storage Tank Regulation to address fugitive VOCs.** In the South Coast, a Fluxsense study published in 2017 found that every oil refinery measured had far higher VOC emissions (including benzene) than were included in the emissions inventory.³ Most reductions in the South Coast will be achieved by updating the Refinery Storage Tanks regulation (Proposed SCAQMD Rule 1178).⁴ The SCAQMD draft Rule 1178 includes the following requirements:

- adding a second roof to external floating roof tanks;
- vapor recovery for fixed roof tanks (cutting 98% of emissions);
- weekly OGI (Optical Gas Imaging) to identify leaks on all tanks.

We recommend that BAAQMD carry out a complete Fluxsense-type study of refineries in the project area and perform OGI imaging to identify storage tank leaks.

1.a.2.3) SOx – This was achieved in the South Coast area primarily through Refinery Flare Rule tightening (SCAQMD Rule 1118). Through this process, the WCWLB CERP CSC received detailed data from specific refinery flaring events and their causes over the previous three years. **We recommend the adoption of refinery flaring prevention measures included in their plan:**

- improve Flare Minimization Plans;
- tighten requirements to carry out root cause analysis;
- impose much higher fines;
- ensure refineries have sufficient compressor capacity;
- slow down planned flaring; and
- provide better public access to flaring data and other measures.

In addition, to further reduce refinery flaring **we recommend that the District provide a list of refinery flaring events and root causes to evaluate what kinds of events are causing flaring and how to prevent them.**

³ "Emission Measurements of VOCs, NO₂ and SO₂ from the Refineries in the South Coast Air Basin Using Solar Occultation Flux and Other Optical Remote Sensing Methods"

<https://www.courthousenews.com/wp-content/uploads/2017/06/FluxSense-Study.pdf>

<https://www.cbecal.org/wp-content/uploads/2017/05/CBE-Decoder-Socal-Refinery-Study-Emissions-Underreported.pdf>

⁴ <https://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/proposed-rules/rule-1178>

1.a.3) The WCWLB CERP also provided the community with a list of all oil refinery combustion sources (boilers, heaters, furnaces, etc.) that included their size, emissions, and whether they were controlled with SCR or not, which helped the community and SCAQMD prepare for the rule-making process. **We recommend that a similar list be provided to the PTCA CSC.**

1.b) **Improved enforcement:** Regulations require a commitment to strong enforcement to ensure emissions reductions from all regulations are achieved. **We recommend the following:**

- Ensure the concerted implementation of the Draft PTCA Plan Fuel Refining Strategy Actions 3.13, 3.14 & 3.15 for more robust fence line and community monitoring of refinery emissions from Chevron and other major industrial sites.
- Most importantly, support Strategy Actions: 3.13, to improve Refinery Air Monitoring and Data Accessibility;
- 3.14, to improve refinery fence line and community air monitoring programs; and
- 3.15, to improve source emissions monitoring and reporting for sources at the Chevron Refinery and fuel refining–related facilities.

1.c) **The Air District should install CCD cameras pointed at refinery flare stacks.** This will provide the community and the Air District with accessible visual documentation of the flaring behind their complaints, and there will be a historical record of each flaring event.

1.d) **The Air District should make sure that all complaints of reported (and possible) particulate matter depositions are followed up with CAM-17 testing.** In the past, there has been inconsistent and arbitrary use of different data analysis methods of heavy metals and particulate matter; at times, no analysis has been performed. This inconsistency can prevent the accurate identification of the specific metal types emitted by the emission source (i.e., its metals signature, or speciation). This inconsistency will then, by default, tend to nullify a complaint's validity or defeat its potential ability to help identify the emission source. When responding to complaints of visible particulate matter depositions in refinery communities, BAAQMD uses “semi-quantitative” and inferior heavy metal detection methods (i.e. EDS/Energy Dispersive X-ray Spectroscopy) that are known to lack the more accurate, regulatory-level metals speciation capabilities of the CAM-17 method (i.e. ICP-MS/Inductively Coupled Plasma Mass Spectrometry). At times, refinery community members have been forced to pay, at considerable expense, for regulatory-level CAM-17 samples testing. Yet at other times, government agencies performed CAM-17 on deposits, as when both BAAQMD and the Contra Costa Health Department responded to the Thanksgiving 2022 Martinez PBF refinery releases.

1.e) **The Air District should adopt more sensitive methane detection methods.** Fugitive methane not only poses explosive risks, it is also an ozone-forming compound and so contributes to respiratory disease. A recent airborne laser flyover study conducted by BAAQMD in collaboration with the Jet Propulsion Laboratory and Stanford researchers found 6 to 23 times higher levels of methane than previously estimated by the US EPA, CARB or BAAQMD.⁵ The airborne laser survey assessment significantly surpassed the findings from traditional methods using EPA Methods 21 (Optical Gas Imaging, or OGI) and 18 (Flame Ionization Detection, or FID).

⁵ Guha et al. Assessment of Regional Methane Emissions Inventories through Airborne Quantification in the San Francisco Bay Area. <https://pubs.acs.org/doi/10.1021/acs.est.0c01212>

The EPA and Aeris Technologies, a company based in the Bay Area, have developed an advanced methane detector known as the MIRA Pico, which potentially enables detection from beyond the refinery fence line in certain scenarios and distinguishes landfill methane from natural gas methane. This ultrasensitive device can identify methane plumes from over 100 yards away at parts per billion concentrations, a significant improvement over the parts per million sensitivity of EPA Methods 21 and 18, which require close proximity to potential leaks. The MIRA Pico is particularly effective in distinguishing natural gas leaks.⁶

The capabilities of the MIRA Pico underscore the limitations of EPA Method 21, which although generally superior to Method 18, is still not designed for both remote and standoff leak detection and cannot map the extensive boundaries of methane plumes effectively.

1.f) Along with the WCWLB CERP Community Steering Committee, **we recommend that the CERP consider adding a measure to begin planning refinery phaseout.** As part of California's Greenhouse Gas (GHG) Scoping Plan, the state will need to begin reviewing the phasedown of oil refining statewide. In 2035, gas-fired vehicles will not be sold in California. Refinery phasedown will result in eliminating harmful local air pollution and global climate-destroying GHGs.

2. Other recommendations.

2.a) Increased monitoring for VOCs. The Richmond-N.Richmond-San Pablo area is highly industrialized. For this reason **we recommend that the CSC request that BAAQMD perform regular and frequent VOC monitoring of all sites that process plastics or use solvents or other petrochemicals in their processes.**

2.b) Shore Power: **Shore power must be available by 2027, and all vessels must use shore power by 2032.**

2.c) Improved air monitoring and reporting at toxic cleanup sites. **We recommend that BAAQMD advocate with the California Department of Toxic Substances Control (DTSC) and/or USEPA to improve air monitoring and reporting at cleanup sites, as follows:**

- air monitoring data be reported in real time and be presented in a form that is understandable and readily accessible to all community members;
- monitor for smaller particle size (PM 2.5 vs the current PM 10);
- timely analysis to determine if dust particles carry contaminants of concern.

We recommend that the Air District and CSC (1) ask the CA Dept of Public Health what improvements in air monitoring they suggest, and (2) how can DPH better follow up with a community for “harm” after a suspected dust release at a contaminated site. In the two-year unsuccessful remediation at Richmond’s Superfund-qualified AstraZeneca site starting in 2004-2005, more than 300 community members in the downwind Harbor Front Tract small business area reported serious, life-threatening illnesses (many thyroid cancers, endocrine-related health issues, etc. including deaths). During the cleanup operation, street lights turned on during the day; visibility was reduced to something seen in the worst CA wildfire areas of 2020. The community was so traumatized that when the CA Dept of Health several years later knocked on doors at the behest of the Richmond Southeast Shoreline Area Community Advisory Group, community members still remaining in the area would not talk to them.

⁶ MIRA Pico Mobile LDS Natural Gas Leak Detection System w/GPS by Aeris Technologies.
https://aerissensors.com/wp-content/uploads/2019/12/MIRA-PicoMobile-LDS_191208_FINAL_quartz.pdf

2.d) Rule 11-18: Reprioritize the City of Richmond Wastewater Treatment Plant. **We recommend that the Air District upgrade the Rule 11-18 priority of this facility from “Medium” to “Top.”**⁷

From December 4 through 6, 2023, sensors recorded hydrogen sulfide (H₂S) concentrations greater than 60 ppb, the limit set by Richmond’s Water Resource Recovery Program; these levels reached a high of 345.6, nearly six times the limit. Nor was this an isolated event: at a special Richmond City Council meeting called to address the problem, a community member noted that the facility exceeded the 60 ppb threshold more than a hundred times in 2023.⁸

Richmond residents have experienced health impacts even at levels below the 60 ppb alert limit. Washington Elementary School is located only 1/3 of a mile from the facility, as is a residential neighborhood.

Thank you for your consideration. If you have questions, please feel free to contact us at action@sunflower-alliance.org

Sincerely,

Janet Scoll Johnson
Co-Coordinator, Sunflower Alliance

⁷

https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/hra-facilities/20231231_rule_1118_phase_ii_facilities_2023-pdf.pdf?rev=751be65001334e438c8c454b1303070e

⁸ <https://www.ci.richmond.ca.us/ArchiveCenter/ViewFile/Item/13568>

From: [Jan Mignone](#)
To: [Air Quality Planning](#)
Subject: Comments on Path to Clean Air
Date: Friday, January 19, 2024 8:09:20 AM

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BAAQMD Members,

I was born and raised in Richmond and have had contact with this city for over 65 years. I have lived all around the Bay Area when I did not live in Richmond. I returned to Richmond in 2007 and in 2010 was diagnosed with asthma. There are days when it hurts to breathe and I must stay in the house. I enjoy walking my dog and being out in the parks in Richmond. Please make sure you do all you can do to protect our air and make it breathable for all.

Jan Mignone
Richmond, CA

comments on draft PTCA community emissions reduction plan (CERP)

Jan Warren [REDACTED]

Fri 1/19/2024 4:42 PM

To: Air Quality Planning <aqplanning@baaqmd.gov>

📎 1 attachments (16 KB)

Comments on Draft Richmond PTCA.docx;

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Attn: Planning and Climate Protection Division of BAAQMD,

Date: January 19, 2024

Attn: Planning and Climate Protection Division BAAQMD,

Comments on Draft Richmond/N.Richmond, San Pablo Path to Clean Air Plan (PTCA)

Plan does a great job of educating the community, showing the history and ongoing harm from pollution that has negatively impacted the health of residents for generations.

The organization of areas of concern, visuals, key concerns, and areas of pollution are easy to follow.

In general, there needs to be more specific timelines for the action suggestions under strategies. As an example, strategy 1 uses the words evaluate, advocate, analyze. Under strategy 2 similar words are used: undertake, conduct, and evaluate. Under strategy 4, only 2 out of 6 strategies have a hint of specificity; implement rule 11-18. Let's add no later than (date?), particularly since BAAQMD has been working on an amendment to this reg for years. Check each action item to make sure it is actionable.

Under strategy 5, please add Veolia wastewater treatment plant since excessive ongoing flaring of hydrogen sulfide continues, with no public notifications to the public, enforcement measures, or assurance that the causal issues have been resolved.

While the flaring rule was originally incorporated as a safety feature, it has become an excuse to hide causes. Add to this plan that within a specific period of time the location, date of flaring, notice when BAAQMD was notified, amount of fine, date and specific action(s) taken to remedy the cause of flaring. This information should be easily available to the public and the incident updated.

In Chapter 5 it is stated that PM 2.5 and certain toxic air contaminants (TACs) have not improved over the past 10 years. The Richmond community has worked on the PTCA for 3 years. Now the plan talks about implementation over the next 10 years.

Under #4 actions on page 100, add/rephrase "during the year after final adoption of PTCA work to put a timeline on the action implementation statements.

Under #5 actions rephrase the objective to reduce the fuel refining section by 30-50%, to breakdown the term fuel refining to VOCs, TACs, GHGs, with each of their own target percentage reductions. Add a baseline to measure the reductions by 2035.

Name the role BAAQMD can play to bring members of the community, labor, and industry together to address how to move to renewable energy, maintain living wage jobs, and

improve the health of the community?

Because Richmond/N Richmond and San Pablo are impacted individually and cumulatively by freeways, port, rails, and large industrial plants, add inspections of these areas to document visible, and odorous sites that need to be documented, addressed, and if needed, referred to other agencies. Implement as part of BAAQMD outreach to engage and give stipends to young adults in the community to engage with the community on what they're experiencing that is affecting their health. Document and share with BAAQMD for follow-up how to address.

Update odor rule to adapt the reporting form to include check off boxes. People can't always describe what they're experiencing; however, they know what they're feeling. Add terms like headaches, nausea, eye irritation, breathing difficulties, metallic taste in mouth, heavy air. Ask those on PTCA to help describe other experiences.

Portable H2S monitors could be used in neighborhoods that are consistently reporting these types of experiences. Monitoring in general needs lots of improvements. Seek a grant to get handheld monitoring units for people to borrow for a week or two at a time to use in their kitchen to test the indoor health. Have them document on a created form the results. For those who participate and have asthma, help them fill out forms to get clean air filtering devices, etc.

Find more ways to go to where the people meet. Pay community ambassadors to educate, listen, and find out what people most need and want. Then seek grants and work with the community to implement the programs.

The Mobile 3 strategy actions for goods movement looks like a good start.

The Mobile 4 strategy actions for street sweeping needs some promoting, or incentivizing. I recently heard about a city that had access to some environmental funds and so they bought a street sweeping machine. It's now not being used because people wouldn't move their cars. These machines can go around if it's just a few cars not moved. If it's most of the cars that aren't moved, or the street is too narrow to go around, it won't work.

I believe it was Richmond who got a grant for elderly and/or disabled to access a pick up to ride in a clean, new EV within a central area. The zero emission bus fleets by 2040 is great.

It would have been helpful at the recent January 11 workshop a way could have been allowed to add public comments that were actually kept. I couldn't find my notes.

Thanks for the opportunity to share some comments. Every time I've read through this plan I've seen something else. I trust after it is adopted work will continue to implement the priorities first, while continuing to engage the local community for improvements.

Jan Warren

Walnut Creek, CA 94598

FW: Path to Clean Air public comment

Diana Ruiz [REDACTED]

Fri 1/19/2024 4:58 PM

To: Air Quality Planning <aqplanning@baaqmd.gov>

See below.

Diana

From: Maureen Brennan [REDACTED]

Sent: Friday, January 19, 2024 4:54 PM

To: Diana Ruiz [REDACTED]

Subject: Path to Clean Air public comment

[REDACTED] [Learn why this is important](#)

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1/19, 2024

I hope I am sending my public comment to the right address, for the "Path to Clean Air" draft. Please forward as needed.

I've read through the draft and find it formative and comprehensive. I appreciate the thoughtful work that has gone into this document. I also like that the studies spread the blame around, as it were. It's not just the refinery with toxic emissions, but a variety of sources, that create health harms. I have to remind my colleagues on the Hazmat Commission, that AB617 is state law. It's time we support the law, and stop denying it's existence. I think the study group has done a great job identifying the problem, and have come up with a variety of very workable solutions. Thanks.

Maureen Brennan, Rodeo CA
[REDACTED]

Path to Clean Air comments

Martha Gruelle [REDACTED]

Fri 1/19/2024 3:10 PM

To: Air Quality Planning <aqplanning@baaqmd.gov>

[REDACTED] [Learn why this is important](#)

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Friends,

I am a Richmond resident and live within 2 miles of most of the stacks at the Chevron Richmond refinery. I appreciate that under AB 617, serious efforts are underway to reduce the health impacts of air pollution in our community. The unacceptably high levels of asthma among our kids is just one distressing example of these effects.

Yet I am concerned that the BAAQMD is not completely fulfilling the promise of the AB 617 process:

- Flaring at the refinery is quite frequent and has increased. We need a full accounting of the effects of these events, and we need action by Chevron to greatly reduce the number of flaring events to industry-low levels.
- There are high levels of multiple toxics from the refinery. We need a serious plan to reduce the most dangerous rather quickly. Chevron needs to take positive action on this, whether or not they find it convenient.
- Discussions of toxic air contaminants and their health effects get very technical, very fast. The Richmond community has a right to plain-English (and Spanish) explanations of what we are facing when we breathe every day.

Richmond City Council also provided comments, in the form of a council resolution, in May 2023. At the very least, these comments from our elected leaders should be thoroughly addressed in the final report.

Thank you for your work and your attention to these comments.


Martha Gruelle
[REDACTED]

PTCA CERP Comment Letter

Martine Johannessen [REDACTED]

Fri 1/19/2024 12:49 PM

To: Air Quality Planning <aqplanning@baaqmd.gov>
[REDACTED]

 1 attachments (326 KB)

CBE PTCA CERP Comment Letter.pdf;

[REDACTED] [Learn why this is important](#)

CAUTION: This email originated from outside of the BAAQMD network. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear BAAQMD team,

Thank you for the opportunity to comment on the draft PTCA CERP. I am submitting the attached letter on behalf of Communities for a Better Environment. Thank you for your consideration!

All the best,
Martine



January 19, 2024

(Submitted via electronic mail to aqplanning@baaqmd.gov)

Re: Draft Path to Clean Air Community Emissions Reduction Plan

Dear BAAQMD and the Community Steering Committee,

Thank you for the opportunity to comment on the draft Path to Clean Air (PTCA) Community Emissions Reduction Plan (CERP). We want to first commend the work that the Community Steering Committee (CSC) has completed in collaboration with BAAQMD since 2018, and the great achievement of publishing this plan. Given the tight turnaround for public comment and the winter recess, Communities for a Better Environment (CBE) is submitting comments focused on the *Fuel Refining, Storage Facilities, Support, and Distribution* section in *Key Issues and Strategies*. In the future, we strongly encourage BAAQMD to present the plan within one week of releasing the draft and expand the public comment window beyond 30 days to ensure the public has time to thoroughly read, digest, and comment on hundreds of pages of dense content.

The following comments are informed by CBE's decades of experience organizing and working alongside community leaders in Richmond to achieve environmental health and justice, as well as technical knowledge of the oil refining process, feasible emissions reductions, and reduction commitments in the South Coast Wilmington-Carson-West Long Beach (WCWLB) and South LA CERPs.

First, we want to celebrate the plan's strengths. We were pleased to see Key Issue #4 in *Fuel Refining, Storage Facilities, Support, and Distribution*: "Move towards a Just Transition." We wholeheartedly agree that a transition away from fossil fuels that centers community health and the impacts of the transition on workers and communities is imperative to the future of Richmond. We support the inclusion of this critical framework in the Richmond-North Richmond-San Pablo Plan.

We also commend BAAQMD and the CSC for including commitments to update specific refinery regulations namely (1) refinery combustion sources (i.e., boilers, heaters, and other combustion sources) and (2) flare regulations. These commitments suggest promising collaboration between Air Districts across the state. Regarding combustion sources, the South Coast Air District demonstrated that these regulatory agreements were achievable through their updated and adopted Boilers & Heaters regulation, which will result in an over 75% reduction in

NOx.¹ Regarding flaring, we appreciate BAAQMD updating its flare regulation as the South Coast rewrites its own regulation, expected for adoption in April or May. The South Coast is also using BAAQMD's flare reporting system as a model to improve its public reporting of flare emissions online, indicating that tools and strategies can move effectively across districts.

There are weaknesses, however, in the *Fuel Refining, Storage Facilities, Support and Distribution Section* that should be updated to strengthen the PTCA CERP. One key refinery regulation in the South Coast CERP for Wilmington, Carson, and West Long Beach is missing from the PTCA CERP – an updated Refinery Storage Tanks regulation, newly adopted by SCAQMD last year.² Storage tanks are major sources of VOCs including toxic benzene emissions, which have been shown in multiple venues to be grossly underestimated. **We urge BAAQMD to add a commitment to update its Refinery Storage Tanks regulation, reviewing the already-adopted South Coast update and others as measures to include in Bay Area rule updates.**

SCAQMD also hosted and published the Fluxsense study in 2017, which corrected historical underestimates of VOC emissions,³ finding that VOCs (including benzene) were drastically underestimated at every single refinery in the jurisdiction.⁴ Similar results were found

¹ SQAQMD staff found an overall 7.7 to 7.9 tons per day reduction out of approximately 10 tons per day, in other words a 77 to 79% reduction. (“Certify the Final Subsequent Environmental Assessment for Proposed Rule 1109.1,” November 5, 2021, <https://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-Nov5-034.pdf?sfvrsn=6>, 1; “Rule 1109.1 - Landing Rule for Refineries Working Group Meeting #1,” <https://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1109.1/pr1109-1-wgm1-final.pdf?sfvrsn=20>, slide 12).

² South Coast Air Quality Management District, “Rule 1178: Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities,” Proposed Amended Rule 1178 § (September 2023), <https://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1178/par-1178-draft-rule-language-final.pdf?sfvrsn=6>.

³ Johan Mellqvist et al., “Emission Measurements of VOCs, NO₂ and SO₂ from the Refineries in the South Coast Air Basin Using Solar Occultation Flux and Other Optical Remote Sensing Methods,” April 11, 2017, [https://www.aqmd.gov/docs/default-source/fenceline_monitoring/project_1/fluxsense_scaqmd2015_project1_finalreport\(040717\).pdf](https://www.aqmd.gov/docs/default-source/fenceline_monitoring/project_1/fluxsense_scaqmd2015_project1_finalreport(040717).pdf).

⁴ VOCs were found to be on average six times higher, and benzene on average 34 times higher compared to the District inventory. The Fluxsense study found that the standard EPA emissions assessment (the “TANKS” model) couldn’t account for tank degradation over time. See Johan Mellqvist et al., “Emission Measurements of VOCs, NO₂ and SO₂ from the Refineries in the South Coast Air Basin Using Solar Occultation Flux and Other Optical Remote Sensing Methods,” p. 94-5, which states: “the observed discrepancies between measured emissions and reported inventories (based on the AP-42 standard (US-EPA 2013)) are considerably higher than what can be explained by measurement uncertainties or short-term sampling alone...Refineries and tank farms are complex environments with a large number of installations and numerous potential emission sources (e.g. tank seals, valves, gauges, flares, vapor recovery units, etc.). Many of these components can show degrading performance over time, and to accurately account for the impact of non-ideal performance in emissions inventory reporting is, we believe, an impossible task.”

Also see CBE’s decoder of Fluxsense study: Julia May, “Full Report on Innovative Study Now Available – LA Oil Refineries’ VOC & Benzene Emissions Grossly Underestimated,” April 20, 2017, <https://www.cbecal.org/wp-content/uploads/2017/05/CBE-Decoder-Socal-Refinery-Study-Emissions-Underreported.pdf>.

in Texas⁵ and other regions, and affirmed by many experts.⁶ **The Bay Area would greatly benefit from carrying out the same Fluxsense study for Chevron and other Bay Area refineries to understand and verify the full scope of emissions.** Still, the commitment to update the Refinery Storage Tanks regulation should not wait for the completion of that study. As stated previously, BAAQMD can begin by reviewing measures in other state regulations such as the recently upgraded South Coast Storage Tanks rule.

Another issue in the *Fuel Refining, Storage Facilities, Support, and Distribution* section is the lack of specific emission reduction targets that have been set and achieved in other parts of the state (specifically, the other major refinery region of California – the South Coast District). The Richmond-North Richmond-San Pablo Plan does not include commitments for percentage reductions in emissions for refineries in the area, namely the Chevron Refinery. By contrast, the WCWLB CERP included a measure to cut emissions *50% or more in NOx, SOx, and VOC emissions by 2030 or sooner* if feasible for all the refineries in the region.⁷ **We urge adding these targets, and strengthening the PTCA CERP’s existing PM 2.5 reduction goal of “30-50% by 2034” to match the other reduction goals – 50% or more by 2030.** In fact, a 50% emission reduction is likely too low at this juncture, since South Coast rulemaking has shown much higher reductions were achievable.⁸ BAAQMD should consider more ambitious reduction targets of 75% or higher.

⁵ Johansson et al., “Emission Measurements of Alkenes, Alkanes, SO₂, and NO₂ from Stationary Sources in Southeast Texas over a 5 Year Period Using SOF and Mobile DOAS,” *Journal of Geophysical Research: Atmospheres* 119 (January 4, 2014), <https://doi.org/10.1002/2013JD020485>.

⁶ For example, Daniel Hoyt and Loren H. Raun found that emissions factors provided unreliable results, causing consistent underestimation of emissions, particularly at storage tanks. As Hoyt and Raun put it, “*The results of this study indicate estimated emissions were never higher and commonly lower than the measured emissions. At one source location, VOC emissions were found to be largely representative of those measured (i.e., the catalytic reformer), but more often, emissions were significantly underestimated (e.g., up to 448 times greater than estimated at a floating roof tank). The sources with both the largest relative error between the estimate and the measurement and the largest magnitude of emissions in this study were a wastewater treatment process, an aromatics concentration unit and benzene extraction unit process area, and two sets of tanks.*” See Daniel Hoyt and Loren H. Raun, “Measured and Estimated Benzene and Volatile Organic Carbon (VOC) Emissions at a Major U.S. Refinery/Chemical Plant: Comparison and Prioritization,” *Journal of Air & Waste Management* 65, no. 8 (June 11, 2015): 1020–31.

⁷ Refineries include 2 Tesoro, 2 Phillips 66, and 1 Valero refinery. The “Minimum emission reduction goal by 2030 or earlier if feasible” is given at 50% for VOCs, NO_x, and SO_x, in the WCWLB CERP. See South Coast Air Quality Management District, “Community Emissions Reduction Plan,” September 2019, <https://ww2.arb.ca.gov/sites/default/files/2020-01/Final%20CERP%20WCWLB.pdf>, p. 5b-5.

⁸ For example, SCAQMD’s combustion regulation (i.e., Rule 1109.1, the Boilers & Heaters rule) showed a 95% reduction in NO_x was achievable through meeting BARCT (Best Available Retrofit Control Technology) SCR controls, according to SCAQMD, “Rule 1109.1 - Refinery Equipment,” <https://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1109.1/pr1109-1-wgm4.pdf?sfvrsn=6>. As stated in Footnote 1, SCAQMD staff reported a 77 to 79% reduction in the adopted regulation Governing Board packet. See “Certify the Final Subsequent Environmental Assessment for Proposed Rule 1109.1,” November 5, 2021, <https://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-Nov5-034.pdf?sfvrsn=6>, p. 1 and “Rule 1109.1 - Landing Rule for Refineries Working Group Meeting #1,” <https://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1109.1/pr1109-1-wgm1-final.pdf?sfvrsn=20>, slide 12).

In addition, we urge BAAQMD to update its refinery regulations to achieve these emission reduction percentages District-wide, not only in the PTCA CERP area, so that all residents in the Air District will be protected by technology and requirements *already demonstrated as achievable in the South Coast*. SCAQMD did not stop at implementing new rulemaking solely for the refineries in the cities covered by the WCWLB CERP; it extended rulemaking to the whole South Coast District, to include the Torrance and Chevron El Segundo refineries.⁹ In the Bay Area, extending BAAQMD rulemaking beyond the cities covered by the PTCA CERP is particularly critical for neighboring communities including Rodeo, Martinez, and Benicia, which are greatly impacted by oil refineries and their emissions, but have not been selected for a similar CERP process.

We want to reinforce this point, as updating refinery rulemaking District-wide is also consistent with CARB's updated AB617 Community Air Protection Blueprint.¹⁰ The Blueprint highlights the importance and urgency of best available retrofit technology for refineries, encouraging “Air District development of expedited schedules to implement best available retrofit pollution controls on certain industrial sources by 2023, including facilities such as oil refineries, cement plants, glass manufacturers, and oil and gas operations” for “communities impacted by stationary sources.” These technology requirements are also mandated by state Health & Safety Code § 40920.6(c). Although the 2023 statutory deadline has already passed, it is still imperative for the PTCA CERP to include best available retrofit control technology for refinery equipment, commit to implementing these technologies quickly, and expand these standards District-wide.

Finally, we want to emphasize that while the majority of this letter has focused on strengthening and clarifying regulations for existing refineries, we support the CERP not only as a way to reduce emissions and exposure to those emissions, but as part of the path towards a larger transition *away from fossil fuels*, and towards a Richmond, North Richmond, and San Pablo beyond Chevron. As such, Just Transition principles – decommissioning the fossil fuel industry while centering community health and the impact on workers and local communities – should guide the implementation of the entire plan, particularly the distribution of economic and technological resources, not just those strategies listed under Key Issue #4, Just Transition. **Language similar to that included in FR 3.9 (Development of a Community Benefits Policy guided by criteria based on Just Transition principles) would be a welcome addition throughout the CERP, and the implementation process, better linking the wide range of goals to a Just Transition.** One example could be in FR 5 (Reduce Exposure to and Health Impacts from PM2.5 and other CAPs Emitted by Refineries). BAAQMD could connect these strategies to FR 3, and the broader Just Transition goal by including a commitment to greater public accountability and input on these reductions (1) making all newly collected data on

⁹ SCAQMD, “Proposed Rule 1109.1: Emissions of Oxides of Nitrogen from Petroleum Refineries and Related Operations,” <https://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1109.1/pr1109-1-presentation---community.pdf?sfvrsn=6>, slide 4.

¹⁰ CARB, Community Air Protection Blue Print, October 2018. https://ww2.arb.ca.gov/sites/default/files/2020-03/final_community_air_protection_blueprint_october_2018_acc.pdf.

refinery emissions publicly accessible in multiple languages (e.g., Spanish, Mandarin, Lao) including notices and public records and (2) working with the Just Transition Subcommittee specifically to explore how the outcomes of emissions and related public health studies could legally and politically support a transition away from fossil fuels District-wide.

Given the outsized impact of oil refineries, particularly the Chevron Refinery, on air pollution and community health, we believe that updating the plan to include all of these measures is critical. We celebrate the milestone reached to get to this point of an important public process and thank you for your consideration.

Sincerely,

Martine Johannessen

NorCal Staff Researcher

Communities for a Better Environment

Kerry Guerin

Attorney & Just Transition Fellow

Communities for a Better Environment

Lazuli Trujano

Richmond Community Organizer

Communities for a Better Environment

Comments on Path to Clean Air draft plan

Suzanne Coffee [REDACTED]

Fri 1/19/2024 4:44 PM

To: Air Quality Planning <aqplanning@baaqmd.gov>

[REDACTED] [Learn why this is important](#)

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As a member of the CSC I consider it a great honor and privilege to have been part of this process. I believe that the commitment to represent the voice and the needs of the community is its greatest strength of this plan. There are a multitude of strategies laid out in this plan and even with my inside view as a CSC member I know it is going to take time to take it all into consideration. It is a complex problem and there is no direct path, but I believe this plan with its multiple strategies has the potential to have highly effective results long term because it engages with the the problem in so many ways. Not the least of with is the commitment to engaging with the community. Many people living in the project area, myself included, are unaware of the extent and affects of air pollution in our community. I believe in order to continue to improve air quality and hold polluters accountable we will have to have a greater demand for change from the public. I believe the engagement and education of the public as strategy will be a driver of many of the changes that will lead to cleaner air in our future.

Public Comment Submission - AB 617 Community Emissions Reduction Plan

Trina Jackson-Lincoln [REDACTED]

Fri 1/19/2024 2:27 PM

To: Air Quality Planning <aqplanning@baaqmd.gov>
[REDACTED]

📎 2 attachments (567 KB)

Jimenez Martinez BAAQMD List of Improvements Letter - AB617.pdf; List of Requested Improvements to the D...sions Reduction Plan for Richmond.pdf;

[REDACTED] [Learn why this is important](#)

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Hello,

On behalf of the City of Richmond, the attached Cover Letter and List of Improvements the Draft AB 617 Community Emissions Reduction Plan for Richmond, San Pablo, and North Richmond from the Richmond City Council is being sent for review and consideration.

Best regards,

Mrs. Trina Jackson-Lincoln
City Council Liaison and Project Coordinator
Richmond City Council Office





Office of the Richmond City Council

January 18, 2024,

Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

Subject: Public Comments on Path to Clean Air (PTCA) Community Emissions Reduction Plan Submission

To whom it may concern,

At the January 16, 2024, meeting of the Richmond City Council, the City Council approved a list of improvement requests; and directed staff to submit them to Bay Area Air Quality Management District before the deadline for Public Comments on January 19, 2024.

The Community Emissions Reduction Plan (CERP) Steering committee is committed to work in collaboration with Bay Area Air Quality Management District (BAAQMD) to create this draft plan. Due to the community engagement work, this draft plan is the first community plan to name Just Transition of all 19 communities across the state, to bring the local union into regulatory practices, to ask for community benefits policy, and to ask for a 35 percent – 50 percent reduction in exposure for disproportionately harmed residents in 10 years.

While the draft plan is directionally positive and provides much valuable information about our pollution problems and many positive strategy ideas, the Richmond City Council finds it lacking in its distillation of the critical success factors for significant emissions reduction and missing the aggressive milestones expected for its top strategies for public health improvement.

The City of Richmond is hereby submitting public comments to be taken into consideration for the final plan. Please refer to the attached list of improvement requests.

Best regards,

Claudia Jimenez

Claudia Jimenez, Vice Mayor
Elected Council Member, District 6
City of Richmond

Eduardo Martinez

Eduardo Martine, Mayor
City of Richmond

Attachment: List of Requested Improvements to the Draft AB 617 Community Emissions Reduction Plan for Richmond, San Pablo, and North Richmond from the Richmond City Council

CC: Richmond City Council

List of Requested Improvements to the Draft AB 617 Community Emissions Reduction Plan (CERP) for Richmond, San Pablo, and North Richmond from the Richmond City Council

Richmond City Council would like to thank the work that CERP Steering committee in collaboration with BAAQMD has done. Here some major gains in the plan:

1. It is the first community plan to name Just Transition of all 19 communities across the state
2. It is the first plan to bring the local union into regulatory practices
3. It is the only plan to ask for community benefits policy.
4. It is the only plan to ask for a 35%-50% reduction in exposure for disproportionately harmed residents in 10 years

In the spirit of collaboration and the project’s purpose, we are submitting public comments to assist with the discussion on how to strengthen the plan so that the plan gets implemented. First, we would like to request BAAQMD for an extension of public comment period. We deeply appreciate the work of the CERP Steering Committee. However, this draft was not released until Dec 13, 2023, when many organizations were closed or community members were with family for the holidays.

Our comments fall into the following themes:

1. A need for greater focus on the critical success factors for our key emission reduction strategies.
2. More aggressive timelines and milestones for our key strategies.
3. The need to receive critical missing data and better analyzed data.

Concern/Improvement	Current Plan (text or point of view)	Completion Timeframe	Specific Needs & Rationale
Include a complete profile of the November 27 th Flaring Event (4 flares full bore for twelve hours plus periodic flaring afterwards)	No complete profile or analysis of any flaring event	Q2 2024	Produce a model report based on case scenarios on: <ul style="list-style-type: none"> • Total emissions by flare and type of pollutant • Peak 1-hour emissions and dispersion of health impacts • Complete causal analysis • A dispersion model that shows the path and distance release
Faster Development of tougher Flaring Rule amendments with goals	FR 2.6. Air District will initiate a rule development effort, further evaluating potential updates to flaring rules (Rule 12-11 and Rule	2024 Q2 Draft Q3 Public Comment	Amendments are not like new rules. They can be done more quickly. We need:

	12-12), by the end of 2024. Rule development efforts will aim to incorporate health impacts analyses, enhance rule enforceability, and establish new and/or more stringent limits	Q4 Board Approval	<ul style="list-style-type: none"> • An event classification system based on cause and health impacts. • Effective Chevron reporting requirements • New penalties by type of event or total annual events, with multipliers for repeat offenses.
Discuss 75% Reduction in annual flaring events with Chevron senior management.	No suggestion in the plan that this is important. No clear analysis of the causes of the 3-4X overall increase in flaring since 2018. No specific goals, despite the fact that many large refineries keep flaring events to mid-single digits	Q2 2024	When the city council or mayor declares that these events are impacting the community negatively, Chevron should come to talk to the city council after 10 days of the incident
Discuss the health impacts of the significant 2019 to 2021 increases in 8 of 10 of the most dangerous TAC emissions from the refinery and their legal fight against the Cat Cracker wet scrubber rule (6-5) with Chevron senior management.	No analysis of why these changes happened, although we assume it is the higher sulfur content of the crude being processed. No measurement of the increase in health risks. No explanation of Chevron's arguments against Rule 6-5.	Q2 2024	When the city council or mayor declares that these events are impacting the community negatively, Chevron should come to talk to the city council after 10 days of the incident Let's hear them explain, for example, the 275% increase in sulfuric acid and their plans for reduction.
Beef up Rule 11-18. Pass the amendments by the end of 2024. Model the impact of tightening the chronic health & cancer risk thresholds in Rule 11-18 by 20 and 30%. What reductions in which emissions would these changes likely force? Analyze with Chevron and	Currently, the plan says: <ul style="list-style-type: none"> • Rule 11-18 is our key strategy for reducing TAC emissions and lays out a strategy for fixing the implementation delays (no impact in last 5 years). 	Q2-4 2024 Some of this must be in the Plan to show clear direction; further analysis can be added later in	BAAQMD needs to do 2 things to make 11-18 work. One is to make sure Chevron complies with tighter regulations that force faster emission reductions. The 2nd is setting emission reduction goals and modeling the various ways to achieve them,

<p>ChemTrade If these reductions are possible at current production levels and with current feedstock sulfur levels.</p>	<ul style="list-style-type: none"> • BAAQMD doesn't know what emission reductions to expect. • BAAQMD will need to provide better information on how they are planning to achieve any reductions within the next 4 years. (A rule passed in 2018 will have no impact until 2028 and remains highly uncertain) 	<p>annual reports</p>	<p>uncovering the limits of 11-18 and considering all possible ways to achieve the 30-40% reduction goal, including export limits.</p>
<p>Request the California Air Resources Board and OEHHA review the current state of basic health research for our ten highest impact pollutants. Evaluate whether some existing risk factors could underestimate the health impacts. Create a range of risk factors to support sensitivity analysis. Secure funding for more research on our most damaging pollutants (sulfuric acid, nickel, benzene, particulate matter (PM), etc.)</p>	<p>The plan suggests that the Air District and Community Steering Committee (CSC) advocate for basic research, track funding cycles, and make proposals.</p> <p>While it is clearly possible that the health risk factors we currently use could understate certain risks, there is no urgency or priority in the plan to test and improve our knowledge. If the toxicity rating for one TAC such as sulfuric acid was underestimated by 25-50% (very possible!), it would dramatically affect our understanding and priorities.</p>	<p>2025</p>	<p>This is the fundamental research needed by all California refinery communities and US EPA funding should be easy to obtain. We need this to ensure the best possible targeting of our emissions reduction strategies and tactics.</p>
<p>Provide a list of all emission-related penalties of \$5,000 or more over the last 5 years. Include firm, date of violation, and specific violation.</p>	<p>No data and no analysis or commentary in the plan</p>	<p>Q2 2024</p>	<p>This should be a living document that is actively updated with the most current data to provide information to the public. This can be linked to the information provided by the plan.</p>

<p>Provide a list of all permitted facilities whose emissions are included in our current emissions inventory reports.</p>	<p>Not in the plan</p>	<p>Q2 2024</p>	<p>We have the impression that there are some polluting firms or some operations of polluting firms that are not currently included. What's missing?</p>
<p>What were the 841 Title V permit violations in 2019-2022 about? What enforcement actions have been taken? What's the plan for compliance in this area?</p>	<p>Not in plan</p>	<p>Q2 2024</p>	<p>Has BAAQMD spoken with senior management at Chevron about this? How did it go?</p>
<p>Add 2 Strategy Summary tables, one for emission reduction strategies and the other for all other strategies. Target length for both together would be around 8-10 pages.</p> <p>Each row should include a clear one sentence description of the strategy, key implementation milestones, critical success factors, funding requirements if any, and responsible agency</p>	<p>The current plan is overwhelming and fragmented. It is difficult to work with. It often buries the real strategies in the individual actions, and it is difficult to see the whole picture, in part due to the lack of specific goals and firm target dates. There is no place where you can see the whole plan with milestones, responsibilities, and impacts in a few pages.</p> <p>Diving down into a single strategy, look at <u><i>Reduce Exposure and Public Health Impacts from Toxic Air Contaminants Emitted by the Fuel Refining Sector</i></u>. It includes only a general end state goal of 30-50% by 2035. That's great but it lacks crisp, aggressive milestones. We see nothing on what to expect by 2026 or 2030. Or what the critical success factors are. Also note we could have 2 strategies as 4 Actions could</p>	<p>Q2 2024</p>	<p>Maybe this format and this length is helpful to BAAQMD, but it is not good for transparency, community engagement or accountability. Who is this plan for?</p> <p>See previous point about needing to model the impact of health risk threshold reductions on the impact of Rule 11-18. Without doing this, you can't fill out the row in the requested table</p>

	be combined. all related to implementing Rule 11-18.		
What's the budget for all of this?	<p>No description of costs or funding sources in the plan</p> <p>Some of these strategies must require new funding. How and when do we find out which strategies can be funded adequately from which sources? How will we set priorities in a world of limited resources?</p>	2025	The Richmond City Council would like to participate in any discussions about priorities
Schedule a presentation of the final draft Community Emissions Reduction Plan to the Richmond City Council by BAAQMD's CEO with a focus on the critical path and key milestones for goal achievement. Show how we will get to a 30-40% reduction in PM2.5, NOx and toxicity-weighted TAC emissions by 2035 and a 75% reduction in flaring event by 2025. Review the status of the funding picture as well as our legal challenges, current delays, and possibilities.	Not in the plan	Q2 or Q3 2024	There needs to be an in-person meeting with face-to-face discussion and commitments.

Attn: Planning and Climate Protection Division: Comments to Richmond-San Pablo AB617 Draft CERP

Osterberg, Todd [REDACTED]

Fri 1/19/2024 2:46 PM

To: Air Quality Planning <aqplanning@baaqmd.gov>

📎 1 attachments (418 KB)

Final Draft Path to Clean Air Plan_CVX comments_20240119 .pdf;

[REDACTED] [Learn why this is important](#)

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Good afternoon,

Chevron appreciates the opportunity to review and comment on the Bay Area Air Quality Management District's December 2023 Path to Clean Air, Draft Community Emissions Reduction Plan. Chevron acknowledges the efforts of the community to engage with stakeholders, including emissions sources, in an effort to work collaboratively to achieve the AB 617 goals. We thank you for the opportunity to comment on these matters. If you have questions regarding our comments, please contact Todd Osterberg at (510) 242-2813. Thank you.

Todd E Osterberg

Advocacy Specialist
Chevron Richmond Refinery

**Health, Safety & Environmental
Chevron Manufacturing**





Kris Battleson
HSE Manager, Richmond Refinery

January 19, 2024

via email: aqplanning@baaqmd.gov

Planning and Climate Protection Division
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

RE: Comments on Draft AB617 Path to Community Emissions Reduction Plan

Chevron appreciates the opportunity to review and comment on the Bay Area Air Quality Management District's ("BAAQMD") December 2023 Path to Clean Air, Draft Community Emissions Reduction Plan ("the Plan"). Chevron is a major refiner and marketer of petroleum products and renewable fuels in the state of California, and Chevron's Richmond Facility is located in the BAAQMD.

The approximately 3,000 people that work at Chevron Richmond are proud of what we do and how it benefits the community and economy we share. Our business activity empowers our community with good jobs, local spending, community support and affordable, reliable and ever-cleaner energy. Chevron has a long-standing commitment to reduce emissions at our Richmond facility. Our recent major investment in our Modernization Project is a great example of efforts and increase the safety and reliability of the facility. For example, this project enabled an approximate 40 percent reduction of particulate matter emissions facility-wide. Chevron recognizes the value of complete and accurate air quality data to support the AB 617 process. In fact, for nearly 10 years the Chevron Richmond Refinery has supported an independent community air monitoring program within our neighboring communities and has made that data available publicly through the third-party website richmondairmonitoring.org. It is imperative that the Plan's focus areas are grounded by real and up to date air quality measurements and data. Chevron Richmond remains committed to working collaboratively as a member of the steering committee and with the BAAQMD throughout this process. Chevron recommends that BAAQMD consider the below overarching legal comments in addition to technical comments made herein.

Following are Chevron's comments in response to topics discussed in the Plan.

I. Legal Comments

A. There must be underlying legal authority to conduct the actions in the Plan.

The Plan includes myriad strategies and actions for achieving the core vision and principles of the Plan. Regulatory agencies such as BAAQMD and the California Air Resources Board ("CARB"), however, are creatures of statute and only possess the authority granted to them by the



legislature.¹ For example, as described in the Plan, BAAQMD and CARB have varying, and often distinct, authority based on geography and source type.² The mechanism for implementing this authority is often done pursuant to rulemaking. Rulemaking, at either the CARB or BAAQMD level, is required to be done pursuant to specific procedural processes described in the California Administrative Procedure Act (“APA”), the California Environmental Quality Act (“CEQA”) and/or the Health & Safety Code.³ This includes both the initial rulemaking for a given goal and any amendments to that rulemaking. Importantly, any actions taken by BAAQMD or CARB with respect to the Plan’s elements must be authorized either by statute or by a duly promulgated rule adopted by the agencies. Where no such authority exists in existing rules or regulations, CARB or BAAQMD must undergo rulemaking, pursuant to the requirements of the Health & Safety Code or the APA, as applicable, before any such action can be taken.

1) Permitting Activities

The Plan vaguely refers to “permitting actions to address permitted facilities.”⁴ BAAQMD issues permits and permit amendments pursuant to specific permitting regulations (e.g., BAAQMD Rule 2-1 and 2-2). These regulations, and the underlying statutes authorizing the permitting program, are limited to the construction of new sources and the modification of existing sources.⁵ BAAQMD cannot unilaterally open a permit and impose new requirements absent one of these triggering events.⁶ Accordingly, any permitting action, including the imposition of permit conditions, best available control technology, or other limitations is only authorized when triggered pursuant to actions described in the existing rules. To impose any other changes via permit, there must be rulemaking conducted pursuant to the Health & Safety Code.

2) Emissions Monitoring

The Plan discusses using enhanced monitoring and data analysis to help improve emissions modeling, rule development, compliance and enforcement, and public communication.⁷ Additionally, the Plan lists actions BAAQMD proposes to undertake to reduce pollution and negative health impacts associated with stationary sources. One of these actions is to “[i]mprove source emissions monitoring and reporting for the Chevron Refinery and fuel refining-related facilities.”⁸ Changes to monitoring and reporting requirements must be made pursuant to existing regulatory authority or by promulgating new rules. Modifications to existing permits are

¹ See California Health & Saf. Code §§39002, 39003, 40000 et seq.

² See Draft Clean Air Plan. at 58; Health & Saf. Code §§39002, 40000.

³ See Govt. Code §11340-11365; Health & Saf. Code §40725 et seq.

⁴ Draft Clean Air Plan at 86.

⁵ See BAAQMD 2-1-101 (“The purpose of Regulation 2 is to provide an orderly procedure for the review of new sources of air pollution, and of the modification and operation of existing sources, and of associated air pollution control devices, through the issuance of authorities to construct and permits to operate.”)

⁶ The only exception is that a permit can be modified upon annual renewal where a permit is found to omit conditions adequate to ensure compliance with and enforceability of rules which were in effect at the time the permit was issued or modified, or when a rule, subsequently adopted, is made retroactively applicable to the relevant equipment. See Health & Saf. Code §42301(e).

⁷ Draft Clean Air Plan. at 97.

⁸ *Id.* at 99.



authorized only in specific situations, as described above, and BAAQMD may not modify a permit without an underlying applicable requirement.

3) Flaring Activities

The Plan seeks to reduce flaring activities to “an ultimate goal of zero routine or planned flaring.”⁹ This objective is based on concerns over increased flaring events and emissions associated with such flaring. Flaring is a highly regulated activity within the BAAQMD and is only permitted under specific circumstances. Chevron Richmond remains focused on minimizing and preventing flaring. However, flaring is an important safety mechanism for refineries and is allowed under BAAQMD rules (e.g., BAAQMD Rule 12-11, BAAQMD Rule 12-12). Moreover, in some cases, flaring is the desired abatement for emissions associated with refinery processes (e.g., BAAQMD Rule 13-5). Thus, any action taken pursuant to this objective must be done pursuant to duly promulgated rulemaking pursuant to the Health & Safety Code, and any other applicable law, recognizing the important safety function that flares provide.

4) Out of Scope Activities

The purpose of AB617 is to “reduce emissions of toxic air contaminants and criteria air pollutants in communities affected by a high cumulative exposure burden (overburdened communities) to these forms of air pollution.”¹⁰ The Plan, however, includes action items unrelated to air pollution. For example, the Plan asserts that it is rooted in “Just Transition principles,” but these principles are not included in AB 617, nor the California Air Resources Board’s Blueprint 2.0,¹¹ which is the legal basis for this Plan. The concept of a “just transition” does not relate to emission reductions and is more akin to providing a safety net for workers and residents impacted by the State’s goals of eliminating an entire industry.¹² While certain historical and community needs and goals are important (e.g., addressing redlining, reparations, and food access), they are likewise outside of the scope of AB 617 as they do not address emission reductions and should be removed and addressed through a different process.

B. Enforcement is not a public process.

The Plan also lists as an objective to reduce pollution and negative health impacts associated with stationary sources that BAAQMD “will coordinate on enforcement with federal, state (USEPA, CARB, and the Attorney General’s Office) and local enforcement partners (District Attorneys, City and County Counsel) on fuel refining violations, enforcement, and other legal issues, as appropriate.”¹³ Such extensive coordination and resources should only be used when appropriate. The vast majority of notices of violation, or those with little or no public impact, for

⁹ *Id.* at 95.

¹⁰ CARB, *Community Air Protection Program Blueprint 2.0* at 1, https://ww2.arb.ca.gov/sites/default/files/2023-09/BP2.0_Final_Draft_9.24.2023_FD.pdf (Sept. 2023).

¹¹ *Community Air Protection Program Blueprint 2.0* at https://ww2.arb.ca.gov/sites/default/files/2023-09/BP2.0_Final_Draft_9.24.2023_FD.pdf

¹² See Executive Order N-79-20.

¹³ *Draft Clean Air Plan* at 99.



example, should not be subject to enforcement at multiple government levels because it would create an overly burdensome and inefficient process.

In addition, the Plan requires increased community engagement regarding penalties and enforcement. In particular, the Plan requires coordination with the Community Steering Committee (“CSC”). The Plan states that BAAQMD will “provide quarterly and annual updates to CSC about penalties assessed against fuel refining sector facilities and all other sources in the PTC area.” BAAQMD “will collaboratively develop, with the CSC, and pilot legal enforcement approaches for fuel refining facilities within one year of final approval of the PTCA Plan” to be expanded to cover all PTCA sources.¹⁴ Enforcement is not a public process, and penalty determinations are made pursuant to statutorily prescribed penalty amounts, mitigation factors, and long-held principles of proportionality and parity, the authority of which is bound to the air pollution control officer (and the District) exclusively and provides no authority for public input or participation.¹⁵

II. Technical Comments: Draft Plan

Chevron provides miscellaneous comments below on various aspects of the Plan.

- The below statements about Chevron’s Richmond facility are inaccurate:
 - Table 5-11 lists emissions associated with Chevron Refinery.¹⁶ As previously acknowledged by the District in the 12-15 Emissions Inventory (EI) for Reporting Year (RY) 2019, the emissions value for hexavalent chromium should be 3.17 lbs. Emissions of other TACs in Table 5-11 were inflated above the values reported in the RY2019 12-15 EI as follows: Arsenic (50%), Benzene (42%), Hydrochloric Acid (37%), Manganese (407%), Nickel (3%). These values should be corrected as shown in the table.
 - Key Issue 2 on page 91 states that there is a “*lack of accountability with respect to compliance with Air District Regulations*” because “*86% of Air District Notices of Violations within the PTCA area are associated with Chevron and other fuel-refining related sources.*”¹⁷ Chevron takes compliance with applicable rules and regulations seriously and employs dozens of full-time staff who are focused on implementing programs to ensure compliance, for such requirements such as permit conditions issued by BAAQMD. Unfortunately, the above statement is misleading for several reasons. First, Chevron Richmond is the largest regulated stationary source in the Plan’s area, having approximately 600 sources. Second, the existence of NOV’s does not equate to a “*lack of accountability.*” In fact, 90% of NOV’s for the Refinery are the direct result of Chevron self-reporting permit deviations, many of which are not related to a physical air quality exceedance (i.e., late report submittal). Third,

¹⁴ *Id.*

¹⁵ See Health & Saf. Code §§40752 (duties of APCO), 42400 et seq. (penalty limits and required mitigation factors).

¹⁶ *Draft Clean Air Plan* at 47

¹⁷ *Id.* at 91.



compliance inspections are conducted by BAAQMD enforcement staff one (1) to two (2) times per week. This is more frequent than any other facility in the Plan’s area. The Plan should utilize a more accurate analysis for determining which facilities are characterized as ‘frequent violators’ by normalizing the data to number of NOV’s per source and then examining and comparing the results.

- The number of BAAQMD inspectors assigned to the Refinery is incorrectly stated on page 59¹⁸, BAAQMD has six inspectors dedicated to the Refinery, four full-time and two part-time inspectors.
- The Plan should recognize the significant progress Chevron has made regarding emissions reductions:
 - Page 21 of the Plan states that “air monitoring data shows that levels of some pollutants including fine particulate matter (PM2.5) and certain toxic air contaminants (TACs), have not improved over the past ten years.”¹⁹ The Plan should acknowledge the significant progress Chevron has made regarding emissions reductions. Chevron’s Modernization project, for example, has reduced PM2.5 from the refinery by approximately 40%. Please see below for the PM2.5 emissions reductions from 2018 – 2022 per the 12-15 EI. Additionally, Appendix B states that Chevron “emits more fine particulate matter and sulfur dioxide than all other contribution sources in our community combined[.]”²⁰ This sentence is not supported by the analysis in Chapter 5 and should be deleted. It should also be recognized that Chevron made several commitments, as part of the recent Modernization Project Conditional Use Permit with the City of Richmond, related to air quality. These include no net increase in criteria air pollutants, no net increase in health risk from TACs, and no physical increase in greenhouse gas emissions compared to the Project’s baseline.

Year	PM Emissions (tons/yr)	Reduction compared to 2018
2018	539.567	-
2020	367.704	-32%
2021	348.296	-35%
2022	229.764	-57%

¹⁸ *Id* at 59.

¹⁹ *See also id.* at 57, 91.

²⁰ *Id.* Appendix B at B-1.



- The plan mischaracterizes pollutants in the following places:
 - On page 40, the Plan incorrectly discusses ammonia as a Criteria Air pollutant when it is actually a Toxic Air Contaminant.²¹
 - On page 91, the Plan incorrectly describes PM2.5, NOx, and SOx as “toxic emissions.”²²
 - The Plan discusses manganese emissions throughout the document.²³ However, the Plan fails to acknowledge that Health Risk Assessments (“HRA”) show that manganese does not significantly contribute to health risks because it contributes little to chronic toxicity and does not cause cancer or acute toxicity.²⁴ Also, the bioavailability of manganese differs based on whether it is ingested or bound to something and not bioavailable (such as in food, soil, and particulate). The Plan should distinguish between these two kinds of exposure in its discussion of community exposure to manganese.
 - Figure 5-16 shows benzene concentrations for January through March 2022.²⁵ BAAQMD should be wary of drawing conclusions from such a limited data set. Additional data, spanning more than three months, is needed to understand the data and emissions trends. Additional information on Benzene monitoring conducted by all US Refineries can be found on EPA’s fence-line Monitoring Data Collection and Reporting website https://awsedap.epa.gov/public/extensions/Fenceline_Monitoring/Fenceline_Monitoring.html?sheet=MonitoringDashboard.
 - Table 5-10 shows emissions from selected TACs and includes acrolein emissions.²⁶ As pointed out by BAAQMD’s Air Toxics New Source Review Program HRA Guidelines, CARB has identified that there is currently no CARB-approved test method for acrolein from stationary sources. Accordingly, BAAQMD stated that they will “exclude acrolein emissions from the final HRA results on which risk management decisions will be based.”²⁷ Thus, acrolein should not be considered in any Plan activities until such time as an approved

²¹ *Draft Clean Air Plan* at 40.

²² *Id.* at 91.

²³ *Id.* Figure 4-2 at 18, 45, 52, 54.

²⁴ BAAQMD, *Air Toxics Control Program Health Risk Assessment Guidelines* at 7, https://www.baaqmd.gov/~media/dotgov/files/rules/reg-2-permits/2021-amendments/documents/20211215_hraguidelines-pdf.pdf?la=en&rev=eb18ff83f96049fa84d54552b58baee3 (Dec. 2021).

²⁵ *Draft Clean Air Plan* at 39.

²⁶ *Id.* at 46.

²⁷ BAAQMD, *Health Risk Assessment Guidelines*, at 10 (Dec. 2016) https://www.baaqmd.gov/~media/files/planning-and-research/permit-modeling/hra_guidelines_12_7_2016_clean-pdf.pdf?la=en.



test method is available.

- Page 51 discusses combined emissions values for various categories, concluding that “[f]or chronic HI, vehicles and trucks and fuel refining are again important accounting for about 90% of the...value that is attributable to local sources.”²⁸ The Plan should acknowledge that these levels (chronic HI) are 10 times below any benchmark level of concern.²⁹ Additionally, the phrase “chronic risks” is used in this section to describe pollutants. This phrase is usually associated with cancer risk discussions, and the listed chemicals are not all carcinogens (manganese, sulfuric acid). The Plan should use the phrase “health hazard” instead of “health risk.” This same change should also be made on page 54.
- The Plan should include citations for all data used. Below are instances where the Plan presents data without citations.
 - General comment: There are numerous discussions of, and references to Chevron Richmond refinery emissions. All such discussions and references should include citations for all figures and dates for those emissions.
 - Figure 5-19 shows modeled contributions from local sources to chronic hazard index and applies population weighting to the data.³⁰ Any data depiction of hazard index should include source and date of data. No citations are included for this data and the application of population weighting contradicts USEPA guidance. For example, USEPA (2009) guidance for inhalation risk assessment from a point source explains that you may use an exposure concentration to represent various microenvironments, but under USEPA guidance, such calculations do not “weight” findings according to the population of any given site under assessment.³¹
 - Figures 5-22 and 5-25 lack citations.³² Citations are essential to show the source of all data and year of analysis. Citations are also lacking for discussions of this data on page 54.
 - The Plan states that “approximately half of harbor craft and other marine vessel activity in the PTCA area are connected to Chevron and other fuel refining operations.”³³ However, there are no citations for this statement, and it is unclear how this was determined.

²⁸ *Draft Clean Air Plan* at 51.

²⁹ See BAAQMD Rule 11-18-218.

³⁰ *Draft Clean Air Plan* at 51.

³¹ See EPA *Risk Assessment Guidance for Superfund, Vol. I: Human Health Evaluation Manual (Part F, Supplemental Guidance for Inhalation Risk Assessment)* (Jan. 2009).

³² *Draft Clean Air Plan* at 53, 54, 56.

³³ *Id.* at 56.



- The section “Source Attribution Analyses” identifies emissions contributions by sources based on “areas of concern identified by the community.” The Plan should include a citation for documentation of what these areas of concern are and when they were identified by the community.³⁴
- Figures 6-9 and 1-10 are missing legends.³⁵

III. Technical Comments: Appendix C

- Appendix C, Page C-8 states “*For example, in its rulemaking for the current national 1-hour SO₂ standard of 75 parts per billion (ppb), the U.S. Environmental Protection Agency noted that exposure to SO₂ at levels as low as 200 ppb for 5-10 minutes has been experimentally shown to cause moderately or severely decreased lung function in some exercising asthmatics.*”³⁶ There is no 5–10-minute standard for SO₂. The Plan should not rely on unverified experimental results.
- Appendix C, Page C-10 states “*Insights from modeling can sometimes be corroborated by air monitoring if some of the modeled potential scenarios actually occurred. As noted above, model predictions carry a degree of uncertainty, which is generally larger for more specific predictions (like what would happen under a single set of circumstances, rather than across a range of possibilities), so it is unreasonable to expect perfect agreement. Holding this aside, if air monitoring data do not show the same distribution of SO₂ levels that the modeling predicted (in this case, 1-hour averages over 75 ppb), it still does not mean that such impacts could not occur in the future under the right combination of conditions. Predicted impacts could also have occurred in the past, but at a location that did not have an SO₂ monitor.*”³⁷ This statement appears to dismiss monitoring data. Actual monitoring data, where available, should always take precedence over modeling results.
- Appendix C, Page C-10 states “*Numerous occurrences of hourly SO₂ concentrations above typical hourly levels were observed, including some occurrences of hourly concentrations approaching 75 ppb (Figure A- 3). While none appeared to be traceable to a reported flaring event,¹⁰ the possibility still remains of flaring-related impacts at non-monitored locations, as well as the potential for future impacts at any location in the PTCA region.*”³⁸ This conclusion is not scientifically justifiable. Dismissing ambient monitoring data from BAAQMD or Chevron monitors in favor of modelling data is not a sound approach.

³⁴ *Id.* at 51.

³⁵ *Id.* at 69.

³⁶ *Id.* Appendix C at C-8.

³⁷ *Id.* Appendix C at C-10

³⁸ *Id.* Appendix C at C-10



IV. Technical Comments: Appendix D

- Appendix D, Pages D-1 and D-2, monitors operated by PSE Health Energy are omitted from the 'Background and Resources On Air Monitoring Programs And Projects' section.³⁹
- Appendix D, Page D-2, states “*These air sensors (Groundwork Richmond, Ramboll,), their siting/placement, and the data they provide do not undergo the same rigorous quality control and assurance protocols that are used for the Air District’s fixed-site air monitoring network. However, the data from these networks can still show relatively large differences between locations or times that are helpful in identifying potential sources of fine particulate matter.*”⁴⁰ Given that these low-cost air sensors do not undergo the same siting and QA/QC as Air District’s fixed-site air monitoring network, the Plan should not make assumptions about the data produced from such sensors without verifying that data utilizing trusted scientific methods.
- Appendix D, Page, D-3 states
“*Data from the refinery ground-level monitors are not subject to the NAAQS since they are inside a facility fenceline, but they do show numerous occurrences of SO2 concentrations approaching and exceeding the NAAQS (75 ppb) at the Chevron-Castro monitor.*”⁴¹
“*Data from the refinery ground-level monitors are not subject to the NAAQS since they are inside a facility fenceline, but they do show numerous occurrences of SO2 concentrations approaching and exceeding the NAAQS (75 ppb) at the Chevron-Castro monitor.*”⁴² Data gathered by GLMs cannot be compared to the NAAQS. There are several reasons for that; NAAQS monitors are designed and sited for the purpose of measuring regional air quality. Whereas Refinery GLMs are designed to measure local air quality and are sited inside the Refinery perimeter which is not appropriate for a NAAQS monitor.
- Appendix D, Page D-6, states “*Chevron operates fenceline air monitoring systems for compliance with Air District Regulation 12, Rule 15 (Rule 12-15)18 as well as the U.S. EPA’s Refinery Maximum Achievable Control Technology (MACT) Rules.19,20 These air monitoring systems are intended to provide information about refinery emissions that cross the refinery fenceline into neighboring communities*”⁴³

³⁹ *Id.* Appendix D at D-1 and D-2.

⁴⁰ *Id.* Appendix D at D-2.

⁴¹ *Id.* Appendix D at D-3.

⁴² *Id.* Appendix D at D-3.

⁴³ *Id.* Appendix D at D-6.



These GLMs were installed for compliance with BAAQMD Rules 9-1 and 9-2 prior to the existence of Rule 12-15. While GLMs are intended to provide data on potential refinery emissions, as with any ambient air monitor, GLMs measure emissions from all sources in the area. There are numerous anthropogenic and natural sources of pollution in the PTCA area that may contribute to GLM measurements.

- Appendix D, Page D-6 states *“Under an agreement with the City of Richmond, Chevron also operates three community air monitoring sites that provide measurements for several pollutants...”* This statement should be changed to the following, as Chevron presently funds the third-party operation of these monitors at the Company’s discretion. *“Chevron also funds the third-party operation of three community air monitoring sites that provide measurements for several pollutants, including PM2.5 and selected VOCs.”*

Chevron acknowledges the efforts of the community to engage with stakeholders, including emissions sources, in an effort to work collaboratively to achieve the AB 617 goals. We thank you for the opportunity to comment on these matters. If you have questions regarding our comments, please contact Todd Osterberg at [REDACTED]

Sincerely,

A handwritten signature in black ink, appearing to read "Kris Battleson", with a horizontal line extending to the right.

Kris Battleson

From: [Joseph Puleo](#)
To: [Air Quality Planning](#)
Subject: AB 617. Public comments
Date: Friday, January 19, 2024 11:22:44 AM

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In 2014 BAAQMD approved Chevron's refinery modernization plan. The modernization allowed Chevron to refine feed stock with much higher Sulphur content. This feed stock contains higher amounts of toxic elements such as heavy metals and produces other pollutants such as sulfuric acid, hydrogen cyanide, formaldehyde, and benzene among others.

This is due to both the cheaper grade of crude and the large increase in flaring to over 20 incidents per year.

BAAQMD failed to require Chevron to mitigate the dangerous effects until 2021 when it required Chevron to install wet scrubbers to reduce these pollutants. CBE had requested BAAQMD do so in 2014 but its request to install said scrubbers was ignored.

Chevron filed suit soon thereafter the wet scrubbers were required.

It is now ten years later and the refinery's pollution is much worse than in 2014.

What is BAAQMD's plan to defeat this lawsuit? Has BAAQMD any plan to pursue other avenues such as legislation, regulation or other legal venues?

We demand at least an 80% reduction in flaring and a large reduction in toxic air contaminants.

There must be a hard timeline to achieve this result with periodic goals along the way.

Fining Chevron is useless. Any such fine is just absorbed as a minor cost of doing business.

We know this reduction is eminently possible and that Chevron knows how to achieve it.

A denial of the use of cheaper high Sulphur feed stock, rather than a fine, would pose a serious penalty to Chevron's bottom line.

Respectfully submitted; Joseph Puleo

From: [Susan Wehrle](#)
To: [Air Quality Planning](#)
Subject: AB617
Date: Friday, January 12, 2024 9:51:53 PM

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My family supports the Path to Clean Air Community Emissions Reduction Plan. We are Richmond residents, and we recognize that we all have a right to clean air and good health. Let us make this a reality.

Sincerely,
Susan Wehrle

[REDACTED]

From: [TARNEL ABBOTT](#)
To: [Air Quality Planning](#)
Subject: comments - Draft Community Emissions Reduction Plan
Date: Thursday, January 18, 2024 9:01:24 AM

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The Draft Community Emissions Reduction Plan is a good start, but, as our Richmond City Council asked for, before finalization it needs significant improvement to strengthen it such as more and better analyzed data, tougher strategies, and more milestones with goals. BAAQMD should use this proposed plan to live up to its Mission Statement: "The Air District aims to create a healthy breathing environment for every Bay Area resident while protecting and improving public health, air quality, and the global climate." Instead, it allows the long-standing practice of protecting Chevron's profits over the health of residents to continue.

It is well documented that Chevron's Richmond refinery is the biggest greenhouse gas/ air polluter in the downwind communities of Richmond, North Richmond and San Pablo. These are environmental justice communities with majority low income and people of color populations, and according to CalEnviroScreen 4.00 these communities rank highest (80-100 percentile) for pollution. The cumulative impacts of toxic air pollutants that burden residents have caused higher rates of asthma, cardiovascular disease and other health problems.

Where is the plan to reduce flaring to a minimum such as 5 to 7 incidents per year instead of 20 plus? If big fines were imposed, would they upgrade their equipment to prevent flaring? There is no analysis of the emissions and health impacts of bad flaring events such as the one in November 2023. Lacking this, the plan is incomplete and unacceptable. What kind of regulations can be imposed on Chevron to "create a healthy breathing environment" ? The draft plan doesn't show how we reduce PM2.5, NOx, and toxic air contaminants by 40%. There are no milestone steps and it just seems too fuzzy and uncertain. Do we need to limit exports or force Chevron to use cleaner feedstocks to get to a 40% reduction?

Chevron is very profitable; maybe they need to pay more to protect the health of the people who live here. When will BAAQMD demand that human and environmental health needs to count for more than industry profit?

Tarnel Abbott, Richmond Resident

From: [Steve Early](#)
To: [Air Quality Planning](#)
Subject: Comments on Path to Clean Air (PTCA) Community Emissions Reduction Plan
Date: Sunday, January 14, 2024 3:48:50 PM

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1. I am a Richmond resident and Chevron refinery neighbor, responding to BAAQMD's request for comment on the draft CERP. Last year, our City Council urged to develop a plan that would reduce flaring by 75% - back to the level before the company's "Modernization Project" was approved by the city in 2014.

Reading this plan, we find that BAAQMD doesn't know what pollutants are being emitted or what the possible health impacts really are. There isn't a clear plan for forcing Chevron to reduce the number of flaring events per year - just some sort of vague commitment to having such a plan in the future. This is unacceptable. The smoke from the last major flaring event in November was worse than the fire of 2012.—I was here for that one too. Until you address this major issue appropriately for real flaring reduction, your CERP isn't ready for approval.

If our state legislature was committed to funding an effort to reduce pollution in our most polluted communities, they should be open to the possibility that completely new regulatory initiatives may be needed. While we work to make the traditional best available technology-based rules succeed and work with the legislature to create tougher penalties, we should, at the same time, look into new ideas - like export limits as a way to reduce the amount of fuel refining we permit and requiring that fuels be made from cleaner feedstocks.

These non-traditional approaches to regulation would, of course, be legally contested by Chevron. But, if implemented, they would certainly help us move faster toward our goal of reducing toxic pollution by 30-50%. And we might not be able to succeed without them. Why should Richmond be badly polluted to help Chevron sell gas and jet fuel to Asia? Or to save \$5-10/barrel on dirtier, higher-sulfur feedstocks?

In 2014 BAAQMD recommended approval of Chevron's Modernization project and said it would have no negative impact on emissions or public health. Now, ten years later in Richmond, 8 of 10 of the top TAC pollutants for chronic health risk have increased significantly, with sulfuric acid up 275% from 2019 to 2021. Chevron clearly misrepresented the impact of its project and BAAQMD accepted its projections and thus did not foresee the actual adverse health impacts.

Given how successful Chevron has been at delaying and obstructing the implementation of past process safety rule making and/or environmental protection enforcement by the state, BAAQMD should be cutting the company no slack now or in the future—on issues like flaring reduction—given this company's long history of misbehavior in our community.

Steve Early

From: [Garry Hurlbut](#)
To: [Air Quality Planning](#)
Subject: Comments on Path to Clean Air (PTCA) Draft Community Emissions Plan
Date: Friday, January 19, 2024 10:17:56 AM

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CHEVRON EMISSIONS – HEALTH RISK AND RECOMMENDATIONS

Perspective and Background: I am fortunate to have been exposed to many large-scale projects in my career and learning from a number of successful large projects as well as some missteps along the way. After serving as a fighter pilot during the Vietnam War, I went back to school to get a master's degree in Mathematics, Technology and Project Management. I was privileged to get hired by Ross Perot from Electronic data Systems (EDS) to lead projects for large companies. I had a chance to observe and learn about the factors that lead to successful implementation of big projects as well as some of the considerations that led to the failure to achieve critical objectives. I then moved to Kaiser Permanente (KP) to serve as the Chief Operations Officer of Information Technology. After the successful implementation of the Electronic Information Project at KP, I retired and moved to Point Richmond.

My wife, Maryn, and I continue to participate and manage volunteer projects within Richmond. In fact, Maryn, who consulted with me on this email, had established and managed an international company, Technology Affiliates International, which completed many successful large projects for manufacturing, airline and utility companies before she retired.

The reason that we are listing this background is to help establish some project management credibility from our experiences in the past and our observations of the shortcomings in past (and recent) 'project management' efforts by Chevron and BAAQMD.

First off: The exhibits produced by Jeff Kilbreth and Marisol Cantu relating to AB 617 that outline the health risk to our community residents (and children) are impressive and well based on the analysis and recommendations that they produced. The exhibits contain many of the critical elements necessary to achieve the success of their proposed strategy and project (actually, much more than a single project, it is a strategy that comprises many sub-projects).

Just a couple examples:

- The need for a complete analysis of the Nov. 17th flares that lasted a full 12 hours that would show the actual extent of emissions and pollutants along with remedial actions proposed and scheduled for their implementation.

- The need for specific goals and timelines and action plans necessary to achieve those goals.

The Resolution No. XX recently passed by the Richmond City Council specifies 4 strategies that need to be fleshed out and addressed:

1. 75% reduction in the number and extent of the flares
2. Aggressive plans for identifying the extent and reduction of dangerous pollutants.
3. Shore power to tankers idling at the wharf.
4. Education and information sharing to residents of plans and progress toward goals.

We hope that BAAQMD will be more assertive in pursuing specific goals, timelines and contingencies for the various initiatives that are required to produce a healthier environment for residents of Richmond and surrounding communities.

--

Garry Hurlbut
President and Executive Director
Richmond Tennis Association (RTA)



Check out "news and events" on <http://www.rta-ca.org>
Like us on <https://facebook.com/richmondtennisca>

From: [Sally Tobin](#)
To: [Air Quality Planning](#)
Cc: [Eduardo Martinez](#); [Gayle McLaughlin](#); [Claudia Jimenez@ci.richmond.ca.us](#); [soheila_bana@ci.richmond.ca.us](#); [doria_robinson@ci.richmond.ca.us](#); [Cesar Zepeda@ci.richmond.ca.us](#); [melvin_willis@ci.richmond.ca.us](#); [John Gioia](#)
Subject: Comments on the Draft PTCA Community Emissions Reduction Plan (CERP)
Date: Thursday, January 18, 2024 12:54:15 PM

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Comments on the Draft PTCA Community Emissions Reduction Plan (CERP)

To the Air District and the PTCA Community Steering Committee:

I was able to attend the first hour of the BAAQMD meeting on January 11; a very collegial, cooperative, and incremental approach was described. From one perspective, such an approach is responsible in committing to gather information and feedback from all parties as the process moves forward. However, this approach also upsets me because more and more children and adults in Richmond and the surrounding communities will be exposed to pollution and develop lifelong medical conditions as the project inches slowly forward. I hope there will be a way to accelerate the process because area residents are already suffering severely.

The Chevron refinery is unquestionably the biggest contributor to the polluted air that Richmond residents breathe. Emissions from the refinery contribute to damaging particulates and toxic emissions. Chevron seems to be using the community as disposable guinea pigs instead of using updated standards for emissions that would lower the burden of hospitalizations and diseases such as asthma for communities that live near (especially downwind from) the refinery. Over the years, Chevron has lost any ability to pretend corporate good will.

If Chevron were really serious about protecting the local community, we would have already seen actions like these:

1. Chevron would have moved to carry out direct measurements (smokestack monitoring) of the particulate matter and toxics given off by all smokestacks, including tankers moored to the Chevron Wharf, tugboats, and all refinery emissions. Fenceline monitors do not reveal the true level of Chevron's lack of responsibility to the region and to the planet because they do not identify the specific source or the magnitude of the pollution.
2. Chevron would have stopped its delaying tactics and would already have installed "shore power" on the Chevron Wharf, so that tankers would no longer need to fire up their diesel engines, some of which emit huge clouds of blue smoke, sometimes as often as every fifteen minutes. Vessels wishing to dock at the Wharf would already be pre-screened for their ability to comply with local clean air standards to protect Richmond residents.
3. Chevron would already have initiated a series of public meetings to explain the reasons for the huge increase in recent flaring activity. They would be open about the effective actions that they are instituting to reduce flares.
4. Chevron would have been proactive about their plans to deal with sea level rise. They would have already engaged an independent and reputable company to assess and characterize toxic sites on the entire Chevron property (not merely the refinery). They would have presented a public plan to protect both San Francisco Bay and San Pablo Bay from being poisoned by mobilization of toxins as sea levels rise and flood contaminated areas. In addition to flooding, sea level rise causes ground water rise, and rising ground water spreads any soil toxins. Chevron would have already presented plans to protect the public and the environment from spread of any toxins.

But where are these efforts (and others)? Why does Chevron find it so difficult to operate a refinery that takes its community responsibilities seriously? Which brings us to the heart of the problem: Chevron's apparent absence of any sense of ethical corporate behavior that is evident in their delaying tactics. Since it can reasonably be concluded that they are uninterested in the health and well-being of area residents in their pursuit of financial gain, then the only way to ensure responsible behavior in the future would seem to be financial consequences. And such consequences are not present in the draft document. The document needs a major rewrite that includes not only substantial consequences and penalties for future noncompliance, but also project milestones, so that regular progress toward goals will be ensured. Please add some teeth!

For example, you could require Chevron to reduce flaring to pre-modernization levels. I am guessing that the numerous recent flares result from Chevron's switch to cheaper crude with a higher sulphur content. Local people should not be subjected to illness in order to increase Chevron's profits. Perhaps one milestone could be a requirement that if flaring does not decrease to pre-modernization levels over the next six months, then Chevron will be required to purchase only low-sulphur crude oil for 5 calendar years.

Residents of Richmond and the surrounding communities are getting sick while baby steps are taken. How many low birthweight babies and childhood asthma cases and premature deaths does it take for you to stand up to Big Oil?

Sincerely,
Sally Tobin

From: [Janet at Sunflower Alliance](#)
To: [Air Quality Planning](#)
Subject: Comments, Richmond-N. Richmond-San Pablo PTCA CERP
Date: Friday, January 19, 2024 1:33:13 PM
Attachments: [SFA AB617 CERP comment 240119.pdf](#)

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Good afternoon,
Please find Sunflower Alliance's comments on the AB 617 PTCA CERP, attached. I would appreciate an email confirming receipt.
Thank you!
~janet

--

Janet Scoll Johnson
pronouns: she/her
Co-Coordinator, [Sunflower Alliance](#)
Co-Chair, [Richmond Shoreline Alliance](#)

I actively occupy and benefit from stolen land of the Ohlone Chochenyo people, who looked after this land for centuries and still live here. I advocate and support efforts for Indigenous land to be returned to Indigenous ownership and management. Learn more at <https://sogoreate-landtrust.org>.

From: [daniel lanis](#)
To: [Air Quality Planning](#)
Subject: Community Emissions Reduction Plan Support
Date: Thursday, January 18, 2024 4:12:13 PM

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Hello,

I'm a Richmond resident concerned about air pollution. I support the adoption of the Community Emissions Reduction Plan and have a particular interest in viable mobility options for all ages and abilities, especially for pedestrians and bicyclists.

Kind regards,

[Dani Lanis](#)

From: [Priya V.](#)
To: [Air Quality Planning](#)
Subject: Draft PTCA Community Emissions Reduction Plan - Written Comments from Priya V.
Date: Saturday, January 13, 2024 11:21:25 PM

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Hello,

My name is Priya and I am a Richmond community member. This is my written comment for the Draft PTCA Community Emissions Reduction Plan:

Clean air includes clean indoor air. In light of the US going through one of the biggest covid surges in January 2023, it is clear that covid and other airborne viruses (such as RSV and the Flu that are peaking this winter) are still a risk to the public health of Richmond citizens. As a result, Covid and disease prevention/mitigation through clean air must be part of this comprehensive air pollution plan, since these viruses pollute the air we breathe and affect our ability to live, work, and play. Better ventilation in public spaces is critical and must be included in this plan, as well as having seasonal (if not year-round) mask requirements in healthcare settings to keep immunocompromised and disabled citizens safe from these viruses. Covid also predominantly impacts BIPOC, low-income, houseless, and other vulnerable communities who have less access to PPE, so ensuring the availability of masks is critical to keeping the air clean and keeping people safe.

A coordinated effort with the public health sector must be made to bring clean indoor air to stop the spread of these harmful viruses. The plan's Vision Statement itself discusses the "severe health risks" that pollution causes, so covid must be identified as one of these pollutants in the plan explicitly. The best way to keep our community safe and together is by ensuring our indoor air is clean and free of viruses through improving ventilation standards in public spaces and communicating public health practices. If you truly want to remove "barriers to health equity for all residents" and ensure a "significant reduction of pollution-driven respiratory illness rates in children," a plan that includes covid prevention is necessary. Continuing wastewater data is also critical in this endeavor as it can show us the prevalence of covid, flu, RSV, etc. and tell us when we may need to take stricter measures and communicate to the community to take precautions. Holding an invisible virus accountable may seem hard, but is actually quite simple through acknowledgment and inclusion in this plan to ensure a coordinated effort with the public health department that ultimately keeps our indoor air clean too. This is what community care would look like in the Bay Area.

Thank you for your time and consideration.

Sincerely,
Priya V.

From: [Diana Ruiz](#)
To: [Air Quality Planning](#)
Subject: FW: BAAQMD Workshop Confirmation
Date: Wednesday, January 17, 2024 11:06:24 AM

See below
-Diana

From: [REDACTED]
Sent: Thursday, January 11, 2024 5:00 PM
To: [REDACTED]
Subject: Re: BAAQMD Workshop Confirmation

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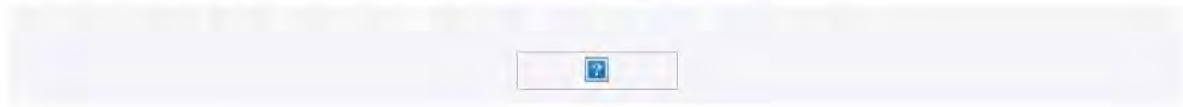
Hello,
I'm probably going to have to review a recording of this as I have a conflict. Can you however help answer my question about who will fund the Draft Plan actions? [This FAQ document](#) says that "BAAQMD has the primary responsibility for completing, adopting and implementing the Plan. The California Air Resources Board is the State agency responsible for implementing AB 617 and provides support for this work."

However, it seems too good to be true to think that BAAQMD and CARB have the funding in place to carry out all of the identified actions in the plan.
If you don't have the answer, if you are willing to point me to someone who does, that would be wonderful.

Sincerest thanks and appreciation,
Alison

Alison LaBonte
[REDACTED]

On Jan 11, 2024, at 4:45 PM, Bridget Brown | MIG <no-reply@zoom.us> wrote:



Hello Alison LaBonte,

Thank you for registering for BAAQMD Workshop. You can find information about this meeting below.

BAAQMD Workshop

Date & Time	Jan 11, 2024 05:30 PM Pacific Time (US and Canada)
Meeting ID	869 5409 1560

[Add to Calendar\(.ics\)](#) | [Add to Google Calendar](#) | [Add to Yahoo Calendar](#)

To edit or cancel your registration details, [click here](#).

From: [JAIME PEREZ](#)
To: [Air Quality Planning](#)
Subject: Fwd: Great Idea - A few edits
Date: Wednesday, January 17, 2024 4:05:02 PM

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Dear people,

My name is Jaime Perez. I have lived in my home at [REDACTED] since 2015. My phone number is [REDACTED]

Please find below my response as specified in your webpage <https://www.baaqmd.gov/community-health/community-health-protection-program/richmond-area-community-health-protection-program/community-emissions-reduction-work>. I hope that you will give full considerations to these comments and suggestions:

Urgent Action Needed:

Provide a comprehensive analysis of emissions and health impacts from major flaring events, like the recent Nov 27th incident.

Provide a plan to reduce flaring by 75% by 2025 or 2026, aiming for industry best practice levels.

Provide a full plan for a 30-40% reduction in the toxic contaminants causing chronic health problems by 2035, with clear milestones and critical success factors.

Force Chevron senior management to participate.

Enhance understanding of individual emission health risks. How does sulfuric acid compare to PM2.5?

Investigate legislative strategies for pollution reduction, including export limits and cleaner crude oil requirements.

Issues with Current Plan:

Lack of specific target reduction numbers and inadequate discussion of

critical success factors.

Insufficient milestones and clarity on Chevron's obligation to reduce flaring events.

Unanswered questions regarding the feasibility of achieving reduction goals.

Need for a better working relationship with Chevron and creative approaches to ensure cooperation.

No serious plan to improve our understanding of the true impacts of toxic air contaminants.

No exploration of non-traditional regulatory approaches, such as export limits and cleaner feedstocks, to expedite pollution reduction.

No recognition of past failures or the need for new ideas.

BAAQMD could use some humility. BAAQMD missed the impact of the "Modernization" project on public health. And it has struggled to make its "best available control technology" rules actually stick and get implemented. While attempting to improve these rules and strengthen penalties, we should also explore legislative measures that are more resistant to delay.

The comprehensive approach presented here is vital for the well-being of our community and effective pollution reduction.

Thankyou very much in advance for your support and best regards,

Jaime Perez

From: [Jacob Rico](#)
To: [Air Quality Planning](#)
Date: Thursday, January 18, 2024 11:59:39 AM

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“ I grew up in Richmond and I like this plan to address air pollution in my community.

From: [Suzanne Gordon](#)
To: [Air Quality Planning](#)
Cc: [REDACTED]
Subject: My comments on Path to Clean Air plan...
Date: Saturday, January 13, 2024 5:04:19 PM
Attachments: [SGsiq4.png](#)

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Dear BAAQMD Board & Staff-

I writing to comment on your AB 617 CERP draft.

I have been a close Point Richmond neighbor of the Chevron refinery for the last 12 years. I have been directly impacted by its frequent lapses and mishaps, which adversely affect workplace safety and community health, not to mention the future of the planet.

So I have a strong interest in more effective regulation of its corporate behavior, particularly in the area of pollution reduction. And, after reading it, I found your draft "Path to Clean Air" plan to be deficient in several areas:

1) Your document pretty much ignores the fact that Chevron neighbors are exposed to toxic pollutants at a level not found in other places—and I'm referring here to sulfuric acid, nickel, manganese, hydrogen cyanide, hydrochloric acid, formaldehyde, arsenic, benzene and cadmium. We need a Rule 11-18 with stronger annual benchmarks and special focus on these hazardous Richmond refinery by-products. From a regulatory standpoint, this part of the proposed plan—if implemented as is—will take much too long to have the desired impact and is overly vague in its details, goals, and milestones.

2) As someone who has taken several Chevron neighbor refinery tours and followed the company's 2014 "modernization plan" approval process, and related community benefits agreement negotiations, I am angered, but not surprised, to learn that management is now trying to avoid installing wet scrubber technology on its "Cat Cracker" equipment. The whole plan for PM2.5 reduction depends on this process change improvement—and the BAAQMD needs to be on the side of getting this done—and soon.

3) Every day, I look out my front window and see three or four tankers, docked at the Chevron wharf, burning diesel fuel, while their holds are pumped out—a daily routine that is one source of the above mentioned arsenic exposure risk for refinery neighbors (not too much fuel spills like we had not long ago).

When is the BAAQMD and its parent organization, CARB, going to do something about that? Why should a company as rich as Chevron be given many additional years to convert to shore power, when the Port of Oakland required this long ago to improve air quality and reduce toxic exposure in that city. This shore power conversion needs to happen by 2027, if not before—and definitely not ten years later! Why should one important path to cleaner air be allowed to become such a long, winding road????


I don't think allowing endless Big Oil foot-dragging is a great "alternative, innovative concept"—we need regulatory action sooner, rather than later, with no loop-holes for Chevron.

4). I've lived in Richmond long enough to know that too many residents suffer from chronic health conditions that are refinery related. I'm talking the many thousands of people, who live in downtown Richmond, North Richmond, and other neighborhoods, which are down-wind of its basic operations, not the few thousand more well-off folks, like myself, who live on the Bay side of Point Richmond and just downwind from the wharf (although hardly immune from other sources of toxicity cited in #1 above, particularly in the form of endless flaring "accidents.")

I'm no scientist, just a concerned citizen and tax-payer. As such, it seems to me that the BAAQMD should be partnering with other state and federal agencies on further research on the specific health impacts of the worst TACs - sulfuric acid, nickel, manganese, hydrogen cyanide, etc. The AB 617 effort requires this. All of our Contra Costa and Solano County refinery towns would benefit from it. And future BAAQMD community planning and advisory processes like the current one would be better informed as a result.

Best wishes, many thanks for the hard work you do, and your consideration of my in-put,

Suzanne Gordon

 *Suzanne Gordon*

Author, *Our Veterans, Wounds of War*
Senior Policy Fellow, Veterans Healthcare Policy Institute



From: [Diana Martinez](#)
To: [Air Quality Planning](#)
Subject: Path to Clean Air draft plan
Date: Thursday, January 18, 2024 5:45:42 PM

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Hello I'd like to support the intention of this plan. Thank you.

Sincerely, Diana Martinez

From: [Y'Anad Burrell](#)
To: [Air Quality Planning](#)
Subject: PTCA Draft Plan Comments
Date: Thursday, January 18, 2024 8:45:45 PM

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Here are my comments. Thank you.

Fuel Refining

Strategy 3/FR3.9 (pg. 99): Investing 'up to 100%' of the penalty money could mean as little as 2% of those funds would be invested back to the PTCA. Recommendation: 50% - 100% of the penalty money will be invested back. Additionally, there is no clarity on what 'body' will be the oversight group for the Community Benefits Policy. Members should be majority community members.

Strategy 4 (pg. 99): First line of paragraph, delete the words 'Click here to enter text.'

Marine and Rail

Strategy 1/M&R 1.3 (pg. 104): What is 'find and fund'?

Public Health

Strategy 1/H1.1 (pg. 112) - Promote and advocate to 'who' for a guaranteed income pilot?

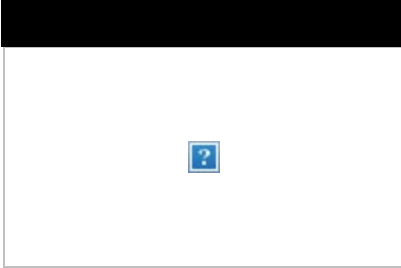
Strategy 1/H1.3 (pg. 112) - The plan is asking a county health system to move the dial on a state-wide (California) healthcare program. This is worded in a way to 'assume' if there is no movement, then CCHS did not make an effort to support this strategy.

Strategy 2/H2.1 & 2.2 - 'Support' meaning?

Strategy 4: Table/Narrative on how section: When the word 'government' is mentioned, in most contexts, there is an immediate connotation that nothing will get done. To have this wording as part of the 'success' of this strategy does not give hope to the community that it will happen. Additionally, to say that 'depending on Air District staff capacity' further discourages that this strategy has hope of even happening. Community and community partners are always willing so more emphasis should be put on their involvement in the success of this strategy. FYI/Note: There are a ton of churches in the CERP area and their buildings are large and often empty Monday - Saturday. There is an opportunity to partner with them to enhance/remodel parts of their building to become resilience centers.

--

Y'Anad Burrell, MPA/MHA
Glass House Communications
*(Public Relations, Media Relations, Public Affairs
Event Planning and Strategic Communications)*
WBE/MBE/SBE Certified
Freelance Journalist - Post News Group



From: [Jennifer Mourelatos](#)
To: [Air Quality Planning](#)
Subject: PTCA Public Comment on Draft
Date: Thursday, January 18, 2024 9:41:57 AM
Attachments: [lmclogo_color_46997572-635c-4c1e-9c0e-903bdaad7a80.png](#)
[facebook_32x32_1030a511-e287-423f-89dd-151861571b1f.png](#)
[twitter_32x32_9dc45865-07d6-4c2d-b78d-7e36cd38f7c4.png](#)
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[youtube_32x32_7f9e5413-1642-4f01-87ad-438ca71fb273.png](#)

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Good morning,

As someone who works full-time in the area, I see the effects of air pollution, and the increased asthma rates in the children; I completely support the draft plan to improve the air quality and health of our community.

Thanks for your work in this area,
Jennifer



**Care.
Compassion.
Community.**



Jennifer Mourelatos

Center Director

LifeLong William Jenkins Health Center
P.O. Box 11247
Berkeley, CA 94712



510.981.4100 | Main



www.lifelongmedical.org

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From: [Karen De la cruz](#)
To: [Air Quality Planning](#)
Subject: PTCA
Date: Thursday, January 18, 2024 6:21:02 PM

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Hello, this is Luz from youth council and I wanted to stated that I support the intention of this plan. Thank you.
Sent from my iPhone

From: [Brenda Illescas](#)
To: [Air Quality Planning](#)
Subject: Public Comment
Date: Thursday, January 18, 2024 4:10:07 PM

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I'm a Richmond resident who suffers from asthma. I have two young children and am concerned about exposure to harmful air quality caused by Chevron and car traffic in my community. I support the Community Emissions Reduction Plan and encourage the Air District to adopt it.

Thank you,
Brenda Illescas

From: [Catalin Kaser](#)
To: [Air Quality Planning](#)
Subject: Public Comments on Community Emissions Reduction Plan
Date: Friday, January 19, 2024 1:09:06 PM

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Hello,

I'm writing to you as a Richmond resident since 2009. I love this community, which has many wonderful qualities and also much room for improvement. I am particularly interested in moving our city into a post-fossil-fuel future to remediate and reduce the current health problems in our area due to multiple sources of pollution and car-dependent infrastructure.

I write today to urge you to adopt the recommendations made in the Community Emissions Reduction Plan for Richmond/San Pablo.

I am especially eager to see better bike and pedestrian infrastructure put into place, including traffic calming measures to reduce pollution AND make it safer for more people to get around by foot and bicycle. The fewer people in cars and the more people walking and biking, the safer and more resilient our community becomes.

Thank you for your consideration and your work to improve our shared air,
Catalin Kaser

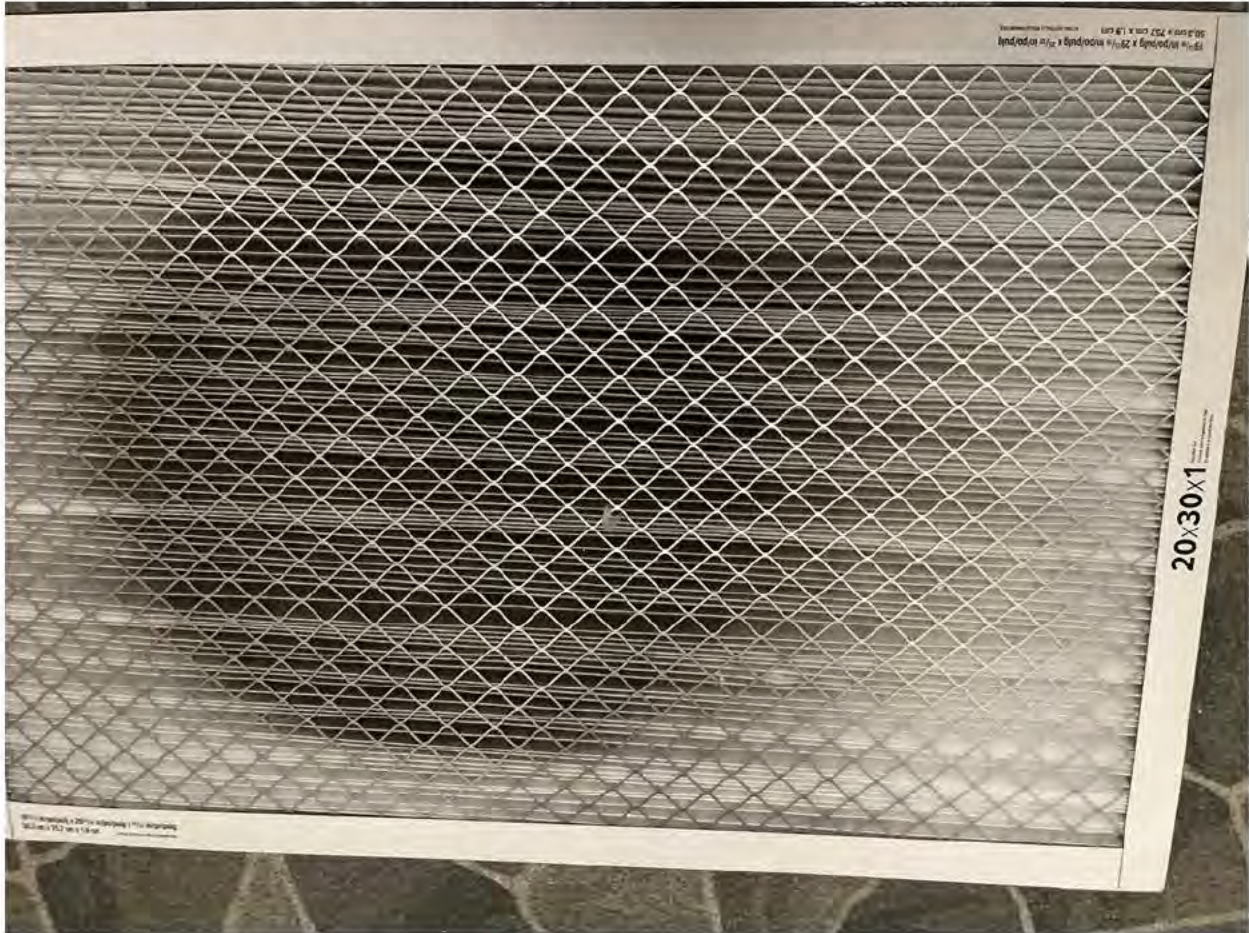
[REDACTED]

From: [redacted]
To: [redacted]
Subject: [redacted]
Date: Wednesday, June 9, 2010 9:52:52 AM

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The report lists a plethora of air monitoring data and aggregated compounding factors. However, it seems to lack actual evidence based chemical analysis of accumulated substances in residential homes' furnace filters. Attached is a photo of mine, installed on 12.01.23, replaced on 01.01.24. The 1,000sqh home (North East Richmond near Garvin 2463) has an energy efficient forced air unit which runs 4x daily for 30 minutes. Any Chevron flaring, depending on wind direction, directly impacts my health (painfully burning and swollen eyes, persistent respiratory coughing and headaches). Considering the sheer number of recent Chevron incidents it's not surprising that the high density HVAC filter turned pitch black.

My question: will you be willing to expand data collection and include analyzing hvac filters. I gladly offer mine, I am concerned! The filter usually lasts 3 months and isn't that black, one exception was the aftermath of the 2012 Chevron fire. Please ensure participating room audience can see the filter!



Best,
Candida Citroen

"Be useful. Be mindful. Be kind. Be bold."
Antonio Guterres

From: [Leticia Chavez](#)
To: [Air Quality Planning](#)
Subject: Richmond North Richmond San Pablo comm Path to clean air workshop
Date: Saturday, January 13, 2024 11:09:08 AM

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Hello, I attended to the presentation about the Richmond, North Richmond and San Pablo path to clean air thank you very much for it, and I just would like to share with you some thoughts of mine, I live in North Richmond for almost 20 years now, lately there is an increased times of a really bad smell like manure and sometimes like burned plastics in the air, I tried to reported to baaqmd but it's hard when trying to do it online because it request the address where it's happening, about this smell I always thought it came from the dump but to my surprise I passed by the refinery and the same odor was there, so it's hard to identify and address for odors, but very necessary to get it investigated so would b nice to figure a way to make it easier. And would be nice to see or hear about progress on the complaints.

Another thing is North Richmond is already affected by pollution from refinery and dump and now to add to the problem there is a bloom of warehouses and businesses with big trucks which I I fear will make the air worst for us who live here and have no choice to move to other places. Even with the request of the business having electric vehicles in the future might help the problem it's now, for kids and people living here and being affected right now. I may help having someone who is checking the business to comply with what they are only allowed to do and not over using or abusing what they are doing could help, I see many trucks in some places parked like using every little space they have and looks overcrowded to me, to be specific about one site that I could think of and pass by every day is on the corner of Pittsburg av and Fred Jackson (North Richmond), not forgetting that close by is Verde school. Adding to that we have a lot of cars who try to avoid the Richmond Prkway traffic and use ours neighborhood streets like Fred Jackson and some big trucks still use our streets even when they are not supposed to do so

I know there is a lot of work to do about environmental impacted communities and getting a clean air to breath but I'm thankful to see the work in progress, I'm just sharing trying to see if I could help a little sharing the experience of living here and thank you for your work and help to our communities.

Leticia Chavez.

From: [Carla Morales](#)
To: [Air Quality Planning](#)
Subject: Support for PTCA plan
Date: Thursday, January 18, 2024 4:59:36 PM

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I like this plan to address air pollution in my community.

From: [Megan Goetz](#)
To: [Air Quality Planning](#)
Subject: Support for the CERP & PTCA
Date: Thursday, January 18, 2024 10:05:55 AM
Attachments: [lmclogo_color_46997572-635c-4c1e-9c0e-903bdaad7a80.png](#)
[facebook_32x32_1030a511-e287-423f-89dd-151861571b1f.png](#)
[twitter_32x32_9dc45865-07d6-4c2d-b78d-7e36cd38f7c4.png](#)
[instagram_32x32_f8a89d55-82d2-49d1-a7e2-4921ef66166a.png](#)
[linkedin_32x32_70734617-5bc5-44ef-88e7-45adffa53bee.png](#)
[youtube_32x32_7f9e5413-1642-4f01-87ad-438ca71fb273.png](#)

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Hi!

I'm writing today to voice my support for the Community Emissions Reduction Plan for the Path to Clean Air. I live in North Richmond and work at LifeLong William Jenkins as a health educator. We see the effects of air pollution in our patients, with increased incidence of childhood asthma and respiratory illnesses in adults. It would be amazing if this plan passed and we were able to improve the air quality and health of our community.

Thank you for your time,
Megan Goetz



**Care.
Compassion.
Community.**



Megan Goetz

AmeriCorps Health Fellow

LifeLong William Jenkins Health Center
P.O. Box 11247
Berkeley, CA 94712

[REDACTED]
510.981.4100 | Main

[REDACTED]

www.lifelongmedical.org

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From: [Janis Hashe](#)
To: [Air Quality Planning](#)
Subject: Support for the Path to Clean Air Community Emissions Reduction Plan
Date: Thursday, January 11, 2024 4:03:33 PM

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As a Richmond resident, who lives in the frontline community of Atchison Village, I fully support the PTCA and urge all entities to implement it.

Sincerely yours,

Janis Hashe

[REDACTED]

From: [Jackelyn Ledesma](#)
To: [Air Quality Planning](#)
Subject: Support of PTCA plan
Date: Thursday, January 18, 2024 8:54:01 AM

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I like this plan to address air pollution in our community.

From: [Steve Early](#)
To: [REDACTED]
Subject: Why I don't support the plan!
Date: Friday, January 12, 2024 8 53 53 PM

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Hi Nancy and Lazuli-

Thanks for email reminder below about your briefing last night and deadline for formal comment, which I will send in this weekend.

In the meantime, since you asked for feedback, this draft plan looks, to me, like it's taking "pragmatism" much too far, while not being "aspirational" enough about much needed improvements long opposed by the our Richmond Chevron refinery, whose property line is three houses away and whose mile-long wharf extends out into the Bay, just in front of our house.

In the 12 years we've lived in this spot, we were driven indoors by a disastrous fire in the summer of 2012, have experienced endless flaring incidents and other dangerous mis-haps over the years, a diesel spill that fouled beaches in this neighborhood, and the company's refusal to do what the the Port of Oakland has long required of its container ships to do—which is shift from burning diesel fuel to using electric power while its vessels are docked and unloading their fossil fuel cargo.

As someone downwind from that daily process, I find it shocking that this proposed change is not among your recommended "strategies" for pollution reduction? Hopefully, that and other shortcomings of the draft document will be addressed by Richmond residents during the public comment period and what I know is a very concerned Richmond City Council, at its meeting this week.

If you want to better distinguish BAAQMD Community Engagement Department messaging about "clean air" efforts from that of the Chevron Public Affairs Dept. on the other side of the hill (and I have some personal experience dealing with them), the Air Quality Board and staff might want to start by putting themselves in the place of near refinery neighbors, who have seen nothing but corporate obfuscation and foot-dragging for years.

Best wishes,

Steve Early

[REDACTED]

Author of *Refinery Town: Big Oil, Big Money, and the Remaking of an American City* (Beacon Press, 2017);

For book ordering or speaking event information, visit: <http://steveearly.org/>

Hello Richmond Community,

I am forwarding this message from our community member, Nancy, who has helped develop the Path to Clean Air (PTCA) Community Emissions Reduction Plan. Join TONIGHT, **Thursday, January 11, at 5:30 PM to learn more about this plan.** The [project web page](#) will have meeting details including the Zoom link. More information is below.

Best,
Lazuli

From: Nancy Peace <>
Sent: Thursday, January 11, 2024 1:22 PM
To: Lazuli Trujano [REDACTED]
Subject: AB 617 CERP Public Comment Open

Hi Lazuli, Happy New Year!

I'm happy to share that the Path to Clean Air (PTCA) Community Emissions Reduction Plan that I've been working with fellow residents of Richmond, North Richmond, and San Pablo is now available for review and public comment. The plan includes a lot of both pragmatic and aspirational steps that our governments can take to improve the air we breathe and the health of our communities. The full plan is [here](#), and while I don't expect you to read all 160 pages, take a minute to read the executive summary, which tells the story of how this plan came about.

Most importantly, please send an email to aqplanning@baaqmd.gov saying that you support the plan. It can be one or two sentences, and feel free to personalize it with an aspect of the plan that matters to you. The public comment period closes at **5pm on January 19th**, so please send your email before then.

Lastly, mark your calendar for **Thursday, January 11, at 5:30 PM.** The Air District will host a virtual public workshop on the draft plan. The [project web page](#) will have meeting details including the Zoom link. Objectives of the public workshop are that participants will:

- Understand the AB 617 program and the activities in the PTCA

Acquire knowledge of air quality concerns in the PTCA area

- Learn about the core elements of the draft PTCA Plan

Please feel free to forward and share with our membership and networks.

Thank you so much!

Nancy

Community Emissions Reduction Plan

scott gelfand

Thu 1/11/2024 4:06 PM

To: Air Quality Planning <aqplanning@baaqmd.gov>

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To whom it may concern,

[REDACTED] wanted to voice my concern and encouragement regarding this plan, and I will vote accordingly to have leaders in our community who prioritize health and air quality over business needs and lack of accountability.

The plan as is doesn't do enough to ensure success.

PLEASE consider these changes and upgrades to the plan to address insufficiencies..

1. A true analysis of the emissions and health impacts of major flaring events. They happen too often these days. It's not enough to just say it'll be fine.
2. Reduce flaring - to health rules in 2024 -or bring accountable punishments/fines.
3. Reduce toxic contaminants all together! You can't poison children and older adults and think it's their fault for living there. The business must be held accountable for their emissions
4. Force Chevron to participate actively in this planning process, or be fined
5. Educate Richmond residents on individual emission health risks
6. Legislative strategies for reducing pollution such as limits on exports or requirements to process cleaner crude oil with lower sulfur content. Again - the business must adhere to the community health around it. It cannot do business as usual.

Thank you for allowing me to comment,

Scott Gelfand

[REDACTED]

Path to Clean Air Draft Plan

Manuel Gomez [REDACTED]

Thu 1/18/2024 9:29 AM

To: Air Quality Planning <aqplanning@baaqmd.gov>

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<https://aka.ms/LearnAboutSenderIdentification>]

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I support this plan for the clean goals it sets to achieve in my community.
Sent from my iPhone

PTCA

Hazel Padilla [REDACTED]

Thu 1/18/2024 12:21 PM

To: Air Quality Planning <aqplanning@baaqmd.gov>

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Hello,

I strongly support this draft plan and believe it will help bring awareness to air pollution in our community.

Best,
Karely

Appendix I: Applicability Analysis for California Environmental Quality Act

The California Environmental Quality Act (CEQA) is a state law that requires public agencies to consider the environmental impacts of certain projects they undertake or approve. For projects that are subject to CEQA, the statute imposes specific legal requirements that agencies must follow before carrying out or approving the project. This appendix evaluates whether CEQA applies to this project – the Community Emissions Reduction Plan (CERP) for the Richmond-North Richmond-San Pablo area. As explained in more detail later in this discussion, Bay Area Air Quality Management District (Air District) staff have reviewed all aspects of the CERP and determined that it is exempt from CEQA, for multiple reasons.

First, as an overall matter, the CERP is being adopted to benefit the environment and the health of residents of the Richmond/San Pablo community, and all of the action items within the CERP support this goal. Therefore, adoption of the CERP is exempt from CEQA review under Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment. This exemption applies to actions taken by regulatory agencies, as authorized by law, to “assure the maintenance, restoration, enhancement, or protection of the environment.” The Air District is a regulatory agency charged with the protection of air quality in its jurisdiction. Because the goal of the CERP is to protect air quality and public health, its adoption fits within the category of actions subject to this exemption.

Second, all of the individual strategies set forth in the CERP would be exempt if they were implemented on their own, apart from adoption of the CERP. For example:

Strategies that would either not cause any physical changes to the environment or involve such minimal physical changes that it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. These strategies fall within the common sense exemption in CEQA Guidelines section 15061(b)(3). Examples include actions that involve encouraging local governments to establish vegetative buffer zones (Urban Greening actions 1.1, 1.3), advocating for municipalities to modify their zoning or land use regulations (Land Use actions 1.1, 1.3), and developing model policies or ordinances for possible future adoption by other entities (Mobile actions 1.2, 1.4, 4.2; Health action 3.4).

Strategies that call for feasibility and planning studies, which are exempt under Public Resources Code section 21150 and CEQA Guidelines section 15262. (“A project involving only feasibility or planning studies for possible future actions which the agency . . . has not approved, adopted, or funded does not require the preparation of an EIR or negative declaration but does require consideration of environmental factors.”) Examples include preparing an initial feasibility assessment and needs analysis for a Truck Management Plan (Mobile action 3.1), conducting a study to identify areas that would benefit most from street sweeping initiatives (Mobile action 4.1), and investigating the feasibility of a Bay Area Indirect Source Rule or zero-emission vehicle zones (Marine & Rail action 1.4).

Strategies that would result only in the modification of existing facilities or the construction of new minor facilities, which are exempt under CEQA Guidelines sections 15301 (“Existing Facilities”; class 1) and 15303 (“New Construction or Conversion of Small Structures”; class 3). These strategies include the installation of air filters and monitoring equipment, the construction of electric vehicle charging stations, or the maintenance of existing roadways.

Strategies that call for information collection, inspections, enforcement, education, and workplace regulations, which are exempt under CEQA Guidelines sections 15306 (“Information Collection”; class 6), 15309 (“Inspections”; class 9), 15321 (“Enforcement Actions by Regulatory Agencies”; class 21), 15322 (“Educational or Training Programs Involving No Physical Changes”; class 22), and 15324 (“Regulations of Working Conditions”). These categorical exemptions would exempt CERP strategies that include activities like air quality monitoring or other data collection, performance inspections or compliance checks, certain enforcement actions involving permit enforcement or revocation, development of webpages or community outreach campaigns, and changes to air district staffing or coordination practices.

The Air District also considered the strategies included in the CERP that will involve undertaking rulemaking activities to address specific air quality concerns. These rulemakings include proceedings to further reduce public health impacts from toxic air contaminants, to finalize a methodology to account for health risk from Particulate Matter (PM), and to address Nitrous Oxides (NO_x) emissions from combustion sources at petroleum refineries. These rulemaking proceedings could potentially be subject to CEQA review when they occur, depending on the nature of any rules the Air District may propose to adopt in them. At this point, however, the CERP merely calls for these proceedings to be initiated in the future, generally following a period of study to determine how to approach a particular issue. The CERP has not identified, let alone committed to, any particular type of new or more stringent rule or regulation that would be developed or adopted in these rulemaking proceedings. Given that it is uncertain what the result of those regulatory proceedings would be, it is not possible at this stage to determine whether they could result in significant environmental impacts. Therefore, CEQA review is not required because the nature and extent of any environmental impacts would be too speculative for evaluation at this point. When Air District initiates a specific rulemaking process, it will determine whether and what level of CEQA review is required.

Attachment D: Draft Final Path to Clean Air Strategies

Concern	Strategy #	Strategy Name	Key Responsible Parties	PTCA Chapter 7 Page #
Commercial & Industrial	1	Control Fugitive Dust	Air District, Local Governments	86
Commercial & Industrial	2	Utilize Permitting to Address Commercial & Industrial Sources Near Community	Air District	87
Commercial & Industrial	3	Reduce Exposure from Food Preparation	Air District	88
Commercial & Industrial	4	Reduce PM, TACs & Health Hazards from Large Industrial Sources	Air District, Local Governments	89
Commercial & Industrial	5	Address Community Concens with Commercial & Smaller Industrial Facilities	Air District, Local Governments	91
Fuel Refining, Support Facilities, Storage & Distribution	1	Move Towards a Just Transition	CSC	94
Fuel Refining, Support Facilities, Storage & Distribution	2	Reduce Persistent Flaring & Improve Incident Response	Air District, City of Richmond, CSC	96
Fuel Refining, Support Facilities, Storage & Distribution	3	Hold Chevron and Other Emitters Accountable for Reducing Pollution & Negative Public Health Impacts from their Operations	Air District	98
Fuel Refining, Support Facilities, Storage & Distribution	4	Reduce Exposure & Public Health Impacts from Toxic Air Contaminants Emitted by the Fuel Refining Sector	Air District, CSC	101
Fuel Refining, Support Facilities, Storage & Distribution	5	Reduce Exposure & Public Health Impacts from PM and Other CAPs Emitted by the Fuel Refining Sector	Air District	102
Marine & Rail	1	Reduce Cancer & Chronic Health Risk from Rail Operations & Facilities	Air District, CARB, OEHHA	105
Marine & Rail	2	Reduce Cancer & Chronic Health Risk from Ocean Going Vessel Operations	Air District, CARB, OEHHA	106
Marine & Rail	3	Reduce Cancer & Chronic Health Risk from Commercial Harbor Craft	Air District, CARB, OEHHA	107
Marine & Rail	4	Reduce Cancer & Chronic Health Risk from Cargo Handling Equipment	Air District, CARB, OEHHA	108
Marine & Rail	5	Reduce Cancer & Chronic Health Risk from Cumulative Impact Facilities & Operations	Air District, CARB, OEHHA	109
Public Health & Reducing Exposure	1	Increase Health Resilience & Improve Social Determinants of Health	Air District, Contra Costa Health Services, CSC	111
Public Health & Reducing Exposure	2	Reduce Air Pollution at Home	Air District, Contra Costa Health Services, Local Governments	113
Public Health & Reducing Exposure	3	Promote Healthy Food Access	Contra Costa Health Services, Local Governments	114

Concern	Strategy #	Strategy Name	Key Responsible Parties	PTCA Chapter 7 Page #
Public Health & Reducing Exposure	4	Promote Resilience Centers	Air District, Local Governments, CSC	116
Public Health & Reducing Exposure	5	Pollution & Public Health Education, Outreach, Accountability, & Health Data Tracking	Contra Costa County Health Services	118
Public Health & Reducing Exposure	6	More Complete Health Risk data & HRAs, Including Pollutant Interactions	Air District, CARB, OEHHA, CSC	119
Vehicles & Trucks, Streets & Freeways, Logistics & Warehouses ("Mobile")	1	Truck-Attracting Businesses	Air District	122
Vehicles & Trucks, Streets & Freeways, Logistics & Warehouses ("Mobile")	2	Prioritize Air Quality Benefits of Traffic Calming & Other Safety Improvements on Local Streets & Freeways	Air District, Contra Costa Transportation Authority	124
Vehicles & Trucks, Streets & Freeways, Logistics & Warehouses ("Mobile")	3	Multi-Jurisdictional Truck Management Plan	Air District, West Contra Costa County Transportation Advisory Committee	125
Vehicles & Trucks, Streets & Freeways, Logistics & Warehouses ("Mobile")	4	Equitable Street Sweeping	Air District, Local Governments	127
Vehicles & Trucks, Streets & Freeways, Logistics & Warehouses ("Mobile")	5	Supporting Transition to Clean Fleets	Air District, CARB	128
Vehicles & Trucks, Streets & Freeways, Logistics & Warehouses ("Mobile")	6	Public Transit, Bike, & Pedestrian Infrastructure	Transit Agencies, City of Richmond	129
Compliance & Enforcement	1	Compliance & Enforcement	Air District	130
Land Use	1	Land Use Strategy	Air District, Local Governments, CSC	132
Resource PTCA Implementation Strategy	1	Resource PTCA Plan Implementation Strategy	Air District	134
Urban Greening	1	Urban Greening Strategy	Air District, Local Governments, CSC	135



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

AGENDA: 16

Path to Clean Air Richmond-North Richmond-San Pablo Community Emissions Reduction Plan

**Board of Directors Meeting
May 1, 2024**

**Diana Ruiz
Community Engagement Manager
druiz@baaqmd.gov**

**Wendy Goodfriend
Planning and Climate Protection Division Director
wgoodfriend@baaqmd.gov**

Presentation Outcome



- Describe the Path to Clean Air (PTCA) and introduce the Community Steering Committee (CSC)
- Share the goals and purpose of the Community Emission Reduction Plan (PTCA Plan)
- Spotlight critical solutions developed in PTCA Plan
- Request for action

Presentation Outline



- Overview of the Path to Clean Air (PTCA)
- Goals of the PTCA Plan
- Turning Problems into Solutions
- Public Review and CSC Approval
- Compliance with CEQA
- Community Steering Committee Priorities and Insights
- Requested Action

Presentation Requested Action

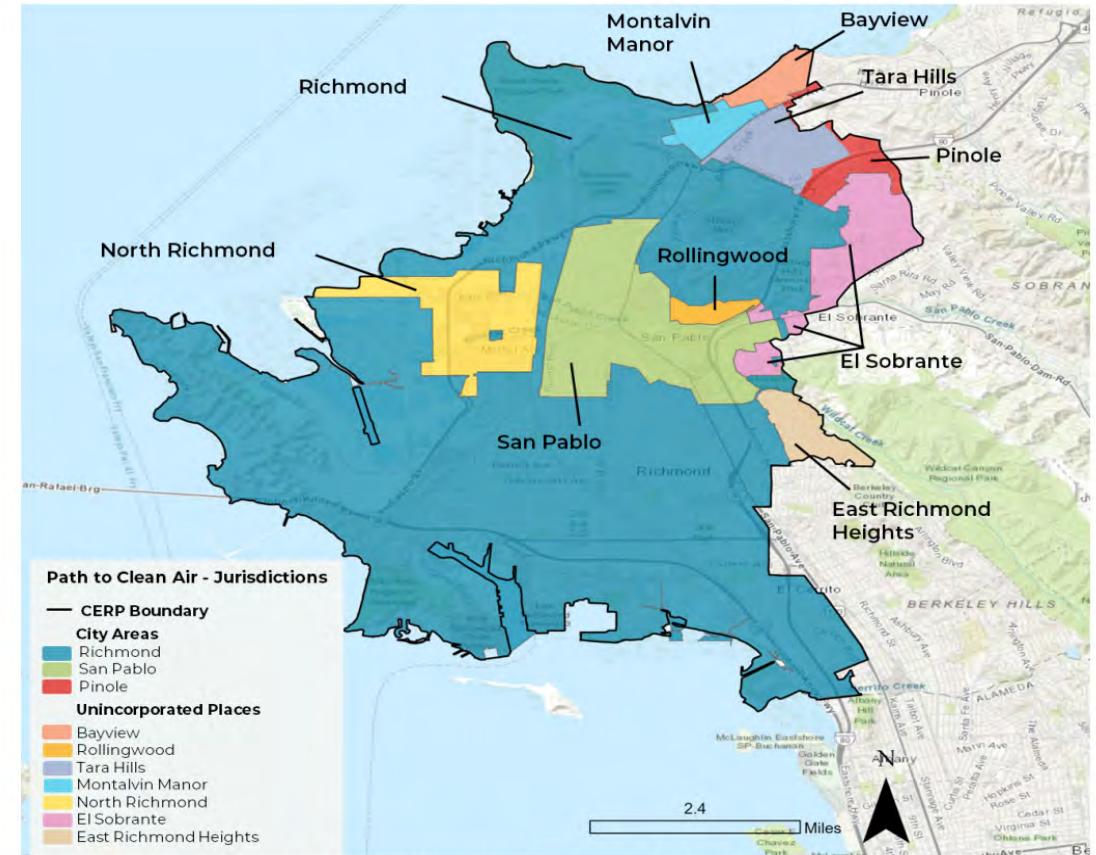


Recommend the Board of Directors (i) adopt the PTCA Plan and (ii) approve the determination that adoption of the PTCA Plan is exempt from the California Environmental Quality Act (CEQA).

Overview of the Path to Clean Air



- Includes areas of Richmond, North Richmond, San Pablo and unincorporated Contra Costa County.
- Area has major pollution sources and disproportionately high health burdens.
- Selected for AB 617 Community Air Monitoring Plan (CAMP) in 2018.
- Selected for AB 617 Community Emissions Reduction Plan (CERP) in 2020.



Community Emission Reduction Plan Boundary and Jurisdictions

Community Steering Committee



- Community Steering Committee (CSC) convened in 2021 to develop a CERP, also known as the PTCA Plan.
- Comprised of up to 27 individuals who work, live or grew up in the area, 3 non-voting government members, and 2 non-voting business/industry representatives.
- Governed by a CSC-adopted Charter.
- CSC members participated in monthly committee meetings, ad hoc subcommittees, writing and review teams, and helped center community voice in the PTCA Plan.



PTCA Plan Goals



Goal #1 Just Transition: In pursuit of our right to breathe clean air, promote environmental justice, and ensure the well-being of our residents and workers, our community-driven emissions reduction plan is rooted in Just Transition principles. This plan seeks to **address the consequences of historical racial disparities by developing more stringent air pollution policies that advance social healing and restoration.**

Goal #2 Health: In pursuit of reducing historically high rates of asthma, cancer, and other chronic health conditions, our plan seeks to **lower our community's disproportionate exposure to air pollution by reducing toxic emissions from local sources by 30-50% by 2035.**

PTCA Plan Goals (cont.)



Goal #3 Community Engagement: Through education and engagement, our plan aims to **empower our community by providing resources and tools** to promote understanding of air pollution and its impact on our health and environment.

Goal #4 Hold Government Accountable: Our goal is to hold our government accountable for implementing our plan, including its strategies and actions, to **protect our health and environment and effectively enforce regulations on high-polluting industries and other toxic sources of emissions** in our community.

Turning Problems into Solutions



Strategies addressing community concerns:

- Fuel refining, support facilities, storage, and distribution
- Mobile sources
- Commercial and industrial sources near communities
- Marine and rail
- Public health and reducing exposures



Cross-cutting strategies:

- Compliance and enforcement
- Land use
- Urban greening
- Properly resourced CERP



Fuel Refining Solutions



Fuel Refining, Support Facilities, Storage, and Distribution Strategies

1. Move Towards a Just Transition.
2. Reduce Persistent Flaring and Improve Incident Response.
3. Hold Chevron and Other Emitters Accountable for Reducing Pollution and Negative Public Health Impacts from their Operations.
4. Reduce Exposure and Public Health Impacts from Toxic Air Contaminants Emitted by the Fuel Refining sector.
5. Reduce Exposure and Public Health Impacts from Particulate Matter and Other CAPs Emitted by the Fuel Refining sector.

Fuel Refining Proposed Rules & Rule Related Actions



Update rules to reduce emissions and exposure from all fuel refining sources feasible, thoroughly engaging the public and CSC in the process:

- Strengthen Flaring Rules 12-11 and 12-12.
- Amend Rule 11-18 to improve stringency, efficiency, transparency, and public engagement.
- Evaluate targeted source-category specific rules.
- Develop regulations using the PM_{2.5} Local Risk Methodology.
- Evaluate NO_x BARCT for combustion sources.
- Evaluate controls to reduce SO_x emissions.

Mobile Source Solutions



Vehicles & Trucks, Streets & Freeways, Logistics & Warehouses Strategies

1. Truck-Attracting Businesses.
2. Prioritize Air Quality Benefits of Traffic Calming and Other Safety Improvements on Local Streets and Freeways.
3. Multi-Jurisdictional Truck Management Plan (TMP).
4. Equitable Street Sweeping.
5. Support Transitions to Clean Fleets.
6. Public Transit and Active Transportation.

Commercial & Industrial Solutions



Commercial & Industrial Sources Near Communities Strategies

1. Control Fugitive Dust.
2. Utilize Permitting to Address Commercial and Industrial Sources Near Community.
3. Reduce Exposure from Food Preparation.
4. Address Community Concerns and Impacts from Large Industrial Sources.
5. Address Community Concerns and Impacts from Commercial and Smaller Industrial Facilities.

Marine & Rail Solutions



Marine & Rail Strategies

Reduce cancer and chronic health risk from:

1. Rail Operations and Facilities
2. Ocean Going Vessel Operations
3. Commercial Harbor Craft
4. Cargo Handling Equipment
5. Cumulative Impact Facilities and Operations

Public Health Solutions



Public Health & Reducing Exposures Strategies

1. Increase Health Resilience and Improve Social Determinants of Health.
2. Reduce Air Pollution at Home.
3. Promote Healthy Food Access.
4. Promote Resilience Centers.
5. Pollution and Public Health Education, Outreach, Accountability, and Health Data Tracking.
6. More Complete Health Risk Data and HRAs, Including Pollutant Interactions.

Other Proposed Rules & Rule Related Actions



- Change permitting rule(s) to increase accessibility, incorporate EJ principles and strengthen community protections
- Evaluate opportunities to strengthen emissions and operational requirements, improve monitoring, recordkeeping and reporting for enforceability related to:
 - Autobody Shops
 - Metal Recycling
 - Sources of Fugitive Dust
 - Back Up Generators (BUGs)
 - Wood Burning
 - Indirect or Magnet Sources
 - Restaurants

PTCA Plan Public Review



- Public comment period on the Draft PTCA Plan opened on December 13, 2023 and concluded on January 19, 2024.
- A total of 48 public comments were received, covering 223 specific topics.
- Summary of comments and responses by theme was posted to the PTCA webpages on along with:
 - A list of all commenters (name/affiliation)
 - A spreadsheet of each comment with a brief response
 - A compilation of all comment received (with individual commenter's email, address, phone numbers redacted)

Community Steering Committee Approval and CEHJ Recommendation



- At the March 25, 2024, CSC meeting the committee voted unanimously to approve the Draft Final PTCA Plan, confirming the plan was ready to move to the CEHJ Committee for consideration.
- On April 22, 2024, the CEHJ Committee unanimously voted to recommend to the Board of Directors that the Board (i) adopt the Draft Final PTCA Plan and (ii) approve the determination that adoption of the Draft Final PTCA Plan is exempt from the California Environmental Quality Act (CEQA).

Implementation and Reporting



- Chapter 9 of the PTCA Plan discusses the approach to implementation and reporting.
- The Air District and the CSC will co-develop an annual Implementation Plan that will prioritize strategies and actions and identify resource needs in advance of Air District budget planning.
- An annual report will be completed with input from the CSC and made available to the public each year in October describing progress made on strategies and actions.

Compliance with CEQA



- Legal staff with support from outside counsel determined the PTCA Plan is exempt from CEQA
- Discussion regarding this determination is included in the PTCA Plan in *Appendix I: Applicability Analysis for California Environmental Quality Act*

Recommended Action



Recommend the Board of Directors (i) adopt the PTCA Plan and (ii) approve the determination that adoption of the PTCA Plan is exempt from the California Environmental Quality Act (CEQA).

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Davina Hurt and Members
of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: May 1, 2024

Re: Funding Community Benefits from Penalty Funds

RECOMMENDED ACTION

Recommend the Board of Directors approve and adopt the Community Benefits Penalty Funds Policy. The policy is proposed to take effect upon approval and be retroactive to the beginning of this fiscal year.

BACKGROUND

The Air District collects penalties from individuals and businesses that violate Air District regulations. In the past five years, these funds have varied from \$700k to \$4.2M per year. These funds are treated as general fund revenue and are used to pay for enforcement staff and other expenses. For comparison, the staff and contract costs of the Air District's enforcement program exceed \$16 million per year.

Civil penalties collected through an individual settlement agreement or court judgment that requires payment from a particular regulated entity are grouped as penalty packages. A package can address more than one violation but must be with an individual entity. Most of the individual penalty packages are for less than \$50,000. However, there have typically been one or more larger penalty packages that exceed \$1 million each year. Most of the penalty money collected is from these large packages. Looking at the current and past two fiscal years, all the large penalty packages were from oil refineries and related industries. Over 90% of the penalty money received during this period was from this industrial sector.

For many years, community and environmental justice advocates have asked for penalty funds to be spent in the communities where the violations occurred. In addition, it is not good practice to depend on penalty money to fund routine Air District operations as the intent of penalties is to deter violations and encourage regulatory compliance, not to raise revenue. With the Air District's renewed focus on enforcement, staff anticipates that penalty collections will increase significantly. Therefore, staff anticipates that the Air District can allocate substantial portions of penalty funds to community benefits without significant impacts to the operating budget.

On December 20, 2023, Air District Executive Officer Dr. Philip Fine presented an informational item to the Finance and Administration Committee regarding the use of penalty money to fund community benefits. At the meeting, Dr. Fine suggested that the Board set a policy that would automatically allocate penalty funds for community benefits. The exact nature of that allocation would depend on input from community representatives and advocates. The Finance and Administration Committee was generally favorable to the idea and directed staff to consult with the Community Advisory Committee and other community groups, including the Richmond-North Richmond-San Pablo AB 617 Community Steering Committee (CSC).

The CAC heard this item on January 18, 2024, and voted to approve the following recommendations to the Board of Directors:

- Recommend that the Air District Board of Directors create a policy, in collaboration with the Community Advisory Council, that automatically sets aside a portion of penalties for regional and local benefits.
- Recommend that the Air District Board of Directors have the Community Advisory Council conduct an annual periodic review of the program after one year to ensure that the policy is effective and equitable.
- Recommend that the Air District Board of Directors ensure, with the collaboration of the Community Advisory Council, that there is the creation of a plan for community outreach and oversight of any local or regional benefit fund spending programs.

The CAC heard this item again on March 21, 2024, and voted to approve the following additional recommendation to the Board of Directors:

- Recommend that the Board of Directors set a policy in collaboration with the Community Advisory Council that automatically allocates a portion of penalties for local (80%) and regional (20%) community benefits.

Staff also presented this item to the Richmond-North Richmond-San Pablo Community Steering Committee. This Community Steering Committee is developing the Community Emissions Reduction Plan for the area. The Richmond-North Richmond-San Pablo CSC voted to make the following policy recommendations to the Board of Directors:

1. Air District Board of Directors create a policy that automatically directs 90% to a Local Benefit Fund for the most impacted community and 10% to a regional benefit fund.
2. When the source and impact are within an AB617 designated community, the Air District will work with the Community Steering Committee to create the Community Benefits Policy, per strategy FR3.9 from the Community Emissions Reduction Plan (CERP), which would inform the Local Benefit Fund. The Community Steering Committee would have local oversight of the Local Benefit Fund.
3. When the source and impact are **not** within an AB617 designated community, the Air District will work with the Community Advisory Council (CAC) to identify community-based organizations that represent the impacted community and that would have local oversight of the Local Benefit Fund.
4. Air District will work in collaboration with the Community Advisory Council to create a regional policy to oversee and distribute the regional funds.

5. All policies and funds will include an annual review and amendment process to the program to ensure the policy’s effectiveness, equity, and environmental justice principles are being met.
6. All policies and funds will have an equitable and transparent implementation plan to improve air quality and public health for impacted communities.

The Board's Finance and Administration Committee heard this item on April 17, 2024, and recommended that the Board approve the proposed policy.

DISCUSSION

Staff has developed a proposed allocation method designed to accomplish the following goals:

- Ensure that significant amounts of large penalty packages go toward benefits in the community where the violation occurred.
- Avoid the creation of local benefit funds that are too small to be practically implemented.
- Address the needs of communities outside of the refinery corridor.
- Recover reasonable staffing costs for the Air District and minimize or eliminate budget risk.

This proposal is described in detail in the attached document entitled “Funding Community Benefits from Penalty Funds.” Should the Board adopt the proposal, they would create Local Community Benefit Funds in communities where penalty packages greater than \$100,000 have been assessed. It would also create a Regional Community Benefit Fund to address the needs of communities overburdened with air pollution which may not have industrial sources that could be subject to large penalties.

The proposed policy also enables the Air District to continue to partially fund its enforcement program with penalty money and includes a method for addressing the historic year-to-year variability of penalty collections.

The proposed policy would allocate 80% of penalty funds over \$1,000,000 to Local Community Benefit Funds and 20% to either a Regional Benefit Fund or the Air District’s general fund. This 80/20 split is consistent with the recommendation of the Community Advisory Council. The proposed policy also requires the staff to provide an annual update to the Board on the implementation of the policy. Should the Board adopt this policy, the Board could take additional actions to set different allocation policies for individual penalty packages. The Board is also able to make any changes to this policy, should the need arise.

This proposed policy only addresses funding allocation. Policies governing the management and disposition of the Community Benefit Funds will be taken up in separate Board actions after consultation with the Community Advisory Council, Community Steering Committees, and others through the Board’s Community Equity, Health and Justice Committee.

BUDGET CONSIDERATION/FINANCIAL IMPACT

This proposal will not impact the budget assumptions for the current fiscal year and is designed to mitigate budget risks in future years.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Gregory Nudd
Reviewed by: Philip M. Fine

ATTACHMENTS:

1. Policy: Funding Community Benefits from Penalty Funds
2. Letter from Richmond-North Richmond-San Pablo Community Advisory Committee of March 18, 2024
3. Draft Minutes of the March 21, 2024 Community Advisory Committee
4. Funding Community Benefits from Penalty Funds Presentation

Draft Policy: Funding Community Benefits from Penalty Funds

Definitions:

Penalty Package: Civil penalties collected through an individual settlement agreement or court judgment that requires payment from a particular regulated entity. A package can address more than one violation but must be with an individual entity.

Fiscal Year Penalty Budget Assumption: The amount of assumed general fund revenue derived from penalties in a fiscal year's adopted budget.

Fiscal Year Penalty Budget Cap: The amount needed to meet the Fiscal Year Penalty Budget Assumption for the current fiscal year, plus any shortfalls from the previous two years. A shortfall occurs when actual penalties collected in a fiscal year are less than the Fiscal Year Budget Assumption for that fiscal year. Once the Fiscal Year Penalty Budget Cap has been met, any additional penalties collected will be designated for regional community benefits as described below. Since this policy is starting in FYE 2024, the Fiscal Year Penalty Budget Cap will be \$3,000,000 which is equal to the Fiscal Year Penalty Budget Assumption for FYE 2024. Also, since there is no shortfall in penalty collections in FYE 2024, the Fiscal Year Penalty Budget Cap for FYE 2025 will also be equal to the Fiscal Year Penalty Budget Assumption for FYE 2025.

Regional Community Benefits Fund: A fund that the Board of Directors has designated to reduce air pollution or mitigate the impacts of air pollution in overburdened communities or aimed at improving health outcomes in communities impacted by air pollution in the Bay Area. The program governing the disposition of these funds will be addressed in a separate document.

Local Community Benefits Fund: Funds that the Board of Directors has designated to reduce air pollution or mitigate the impacts of air pollution or aimed at improving health outcomes in the particular community that was affected by the air quality violations leading to the Penalty Package in which the funds were collected. The program governing the disposition of these funds will be addressed in a separate document.

Method of Allocating Funds:

Beginning in the fiscal year ending June 30, 2024, and retroactive to the beginning of that fiscal year, net penalty funds collected¹ shall be allocated according to the method below.

First \$100,000: Funds shall be placed in the general fund until the Fiscal Year Penalty Budget Cap for that year is met. Once the Fiscal Year Penalty Budget Cap for that year is met, the funds from these settlements shall be placed in the Regional Community Benefits fund.

Amounts greater than \$100,000 and less than or equal to \$1,000,000: Fifty percent (50%) of the funds shall be placed in a Local Community Benefits Fund associated with the community impacted by the violations leading to the Penalty Package. Fifty percent (50%) shall be placed

¹ Net penalty funds collected are all penalties obtained by the Air District through settlements or court judgments, net of any external costs associated with obtaining the penalty, such as litigation costs, costs of expert witnesses or consultant, or outside attorney fees, that are not otherwise recovered.

in the general fund or the Regional Community Benefits Fund depending on whether the Fiscal Year Penalty Budget Cap has been met.

Amounts exceeding \$1,000,000: Eighty percent (80%) of the funds shall be placed in a Local Community Benefits Fund associated with the community impacted by the violations leading to the Penalty Package. Twenty percent (20%) shall be placed in the general fund or the Regional Community Benefits Fund depending on whether the Fiscal Year Penalty Budget Cap has been met.

Annual Report:

In May of each year, staff will provide the Community Advisory Council and the Board of Directors a review of the results of this policy for the current fiscal year. The review will include the amount allocated and expended from each community benefit fund and an assessment of the effectiveness of the policy in advancing the environmental justice and equity goals of the Air District.

Attachment A: Example Calculations

Example Allocation Scenario assuming Fiscal Year Budget Target of \$3,000,000

Amount of Penalty Package	Location	Date
\$1,150,000	Richmond	7/27/2023
\$15,500	Napa	12/04/2023
\$20,000,000	Richmond	4/2/2024
\$130,000	Berkeley	5/10/2024

This example is taken from FYE24 penalty packages, but it does not include all penalties collected.

Allocation of 7/27/2023 Package

	General Fund	Regional Benefits Fund	Richmond Fund
First \$100,000	\$100,000	\$0	\$0
\$100,000 to \$1,000,000	\$450,000	\$0	\$450,000
\$1,000,000 to \$1,150,000	\$30,000	\$0	\$120,000
Totals	\$580,000	\$0	\$570,000

Allocation of 12/04/2023 Package

	General Fund	Regional Benefits Fund	Richmond Fund
First \$100,000	\$15,500	\$0	\$0

Note that the General Fund now has \$595,500. So, an additional \$2,404,500 is required to meet the Fiscal Year Penalty Budget Cap.

Allocation of the 4/2/2024 package

	General Fund	Regional Benefits Fund	Richmond Fund
First \$100,000	\$100,000	\$0	\$0
\$100,000 to \$1,000,000	\$450,000	\$0	\$450,000
\$1,000,000 to \$20,000,000	\$1,854,500	\$1,945,500	\$15,200,000
Totals	\$2,404,500	\$1,945,500	\$15,650,000

After the 4/2/2024 package, the Fiscal Year Penalty Budget Cap has been met and the funds begin to flow into the Regional Community Benefits Fund. The Richmond Community Benefits Fund now has a total of \$16,220,000 with the contribution from the 7/27/2023 and the 4/2/2024 packages.

Allocation of the 5/10/2024 package

	General Fund	Regional Benefits Fund	Berkeley Fund
First \$100,000	\$0	\$100,000	\$0

\$100,000 to \$130,000	\$0	\$15,000	\$15,000
Totals	\$0	\$115,000	\$15,000

Since the Fiscal Year Penalty Budget Cap was met with the 4/2/2024 package, all penalty funds collected the rest of the fiscal year that do not accrue to Local Community Benefit Funds will accrue to the Regional Community Benefit Fund rather than the general fund.

The application of this policy to this example set of penalty packages had the following results:

General Fund: \$3,000,000 (Fiscal Year Penalty Budget Cap met)

Regional Benefits Fund: \$2,060,500

Richmond Community Benefits Fund: \$16,220,000

Berkeley Community Benefits Fund: \$15,000

Calculation of the Fiscal Year Penalty Budget Cap

This policy is being put in place in FYE 2024 and the Fiscal Year Penalty Budget Assumption has been met for FYE 2024. Therefore, the Fiscal Year Penalty Budget Cap for FYE 2024 will be \$3,000,000, which is equal to the Fiscal Year Penalty Budget Assumption. The Fiscal Year Penalty Budget Cap for FYE 2025 will also be equal to the FYE 2025 Fiscal Year Penalty Budget Assumption (currently proposed as \$4,000,000).

The Fiscal Year Penalty Budget Cap for FYE 2026 will be equal to the Fiscal Year Penalty Budget Cap for 2026 plus any shortfall in penalty collections in FYE 2025. The Fiscal Year Penalty Budget Cap for FYE 2027 will be equal to the Fiscal Year Penalty Budget Assumption for FYE 2027 plus any shortfall in penalty collections in FYE 2026 or FYE 2025. This two-year-lookback method will apply to future Fiscal Year Penalty Budget Caps while this policy remains in place.

Example 1 (actual Budget assumptions will be set by the Board of Directors):

Fiscal Year	2025	2026	2027
Penalty Budget Assumption	\$4,000,000	\$4,000,000	\$4,000,000
Penalty Budget Cap	\$4,000,000	\$4,500,000	\$4,500,000
Actual Penalties Collected	\$3,500,000	\$4,000,000	\$5,000,000
Shortfall	\$500,000	\$0	\$0

Example 2 (actual Budget assumptions will be set by the Board of Directors):

Fiscal Year	2025	2026	2027
Penalty Budget Assumption	\$4,000,000	\$4,000,000	\$4,000,000
Penalty Budget Cap	\$4,000,000	\$4,500,000	\$4,700,000
Actual Penalties Collected	\$3,500,000	\$3,800,000	\$5,000,000
Shortfall	\$500,000	\$200,000	\$0

March 18, 2024

To:

[Bay Area Air Quality Management District](#), Board of Directors

[Community Equity Health and Justice Committee](#)

BAAQMD Executive Officer, Phillip Fine

BAAQMD Community Advisory Council

Re: Penalty Policy and Process

Background:

Chevron will pay a \$20 million fine for **678 violations (separate from Rule 6-5)**. This money has been directed to the BAAQMD General Fund and Air District staff would like to earmark a certain percentage to the most immediately impacted communities.

We acknowledge that this is the first routine policy regarding penalty funds for community benefits to be developed by an Air District in all of California. This means that 1) there are no precedents in California to refer to, and 2) this is an opportunity for BAAQMD to develop a precedent that could have significant impact locally, statewide, and nationally, as California regularly sets precedents for the rest of the country.

Statement of Purpose:

Those that are being negatively impacted by PM2.5 should be the recipients of any penalty policy fund. The money should be specifically designated to create some form of justice, by alleviating the health burdens of those impacted by the violations, through funding strategies that either improve the air quality of that area or improve the health outcomes. A policy that allocates funds from Chevron's 678 air quality notice of violations to be used regionally, outside of the impacted community, is a policy that reinforces environmental injustice. It would allow other communities to prosper off the most impacted community, in this case the Richmond people who are suffering a variety of chronic health disparities by living and breathing the direct impacts of PM2.5 emissions.

Policy Recommendations:

- 1) BAAQMD Board of Directors create a policy that automatically directs 90% to a Local Benefit Fund for the most impacted community and 10% to a regional benefit fund.
- 2) When the source and impact are within an AB617 designated community, the Air District will work with the Community Steering Committee to create the Community Benefits Policy, per strategy FR3.9 from the Community Emissions Reduction Plan ([CERP](#)), which would inform the Local Benefit Fund. The Community Steering Committee would have local oversight of the Local Benefit Fund. See link and Reference section below.
- 3) When the source and impact are **not** within an AB617 designated community, the Air District will work with the Community Advisory Council (CAC) to identify community based organizations that represent the impacted community and that would have local oversight of

the Local Benefit Fund.

- 4) Air District will work in collaboration with the Community Advisory Council to create a regional policy to oversee and distribute the regional funds.
- 5) All policies and funds will include an annual review and amendment process to the program to ensure the policy's effectiveness, equity, and environmental justice principles are being met.
- 6) All policies and funds will have an equitable and transparent implementation plan to improve air quality and public health for impacted communities.

Sincerely,

Richmond-North Richmond-San Pablo AB617 Community Steering Committee

Reference:

Richmond-North Richmond-San Pablo Community Emissions Reduction Plan (CERP)

FR Action 3.9

First, Air District will partner with the CSC to develop, within 1 year of PTCA Plan adoption, a Community Benefits Policy (CBP) that invests up to 100% of penalty monies from the fuel refining sector back into the PTCA area. Then, Air District will partner with the CSC to expand the Fuel Refining Community Benefits Policy (CBP) to cover the full PTCA area. • CSC will establish a CBP Subcommittee

- Air District will work with CSC and CBP Subcommittee to facilitate public engagement during development of Air District policies regarding a CBP:
 - The CSC or its CBP Subcommittee will help the Air District gather community input
 - The CSC or its CBP Subcommittee and Air District will meet with Indigenous Tribal Leaders and/or Sogorea Te' Land Trust
 - The CSC or its CBP Subcommittee will communicate with CAC to learn about its position on the CBP

Air District and the CBP Subcommittee will develop a specific CBP for the distribution of funds in the PTCA that includes:

- Criteria for investment, tied to air quality and climate protection, including criteria incorporating Just Transition principles (Cross Reference FR Strategy 1)
- A community-driven mechanism to incorporate the community voice, including the CSC in an advisory role, with respect to:

- Mechanisms to invest in community to improve air quality and public health, including:
 - Public Transportation
 - Residential Ventilation & Air Filtration
 - Urban Greening
 - Public Health Programs & Research
- Investment Mechanisms should also draw from community investment projects included throughout the PTCA Plan, including, but not limited to, Public Health Action 1.4 - Asthma management (Cross-reference)
- The CBP will speak to the following stages of implementation:
 - Length of fuel refining focused CBP
 - Fuel refining focused CBP success evaluation (criteria, timelines, and longevity)
 - Expansion from fuel-refining CBP into a PTCA-wide CBP (Step 2 below), which would include decisions about resource needs and governance
- The CBP will establish a long-term mechanism to allow the CSC and/or CBP Subcommittee to provide consultation on CBP implementation with respect to local input
- The Fuel Refining CBP will be launched within 30 days of a policy (including CBP implementation mechanisms) being approved by the Air District Board of Directors
- The Fuel Refining Community Benefits Policy will be expanded into a PTCA-wide community benefits policy. CBP Subcommittee and Air District will:
 - incorporate successes and lessons learned from the PTCA Fuel Refining CBP.
- draft a proposal for a PTCA-wide CBP and share it through a transparent and inclusive public review process.
 - CBP Subcommittee will provide guidance on public engagement for the review.

Bay Area Air Quality Management District
375 Beale Street
San Francisco, California 94105
(415) 749-5073

DRAFT MINUTES

Community Advisory Council
Thursday, March 21, 2024

1. CALL TO ORDER - ROLL CALL

The meeting Facilitator, Randolph Belle of Randolph Belle, Artist (RBA) Creative, called the Community Advisory Council (Council) in-person meeting to order at 6:00 p.m.

Roll Call:

Present, In Person: Council Co-Chairpersons Kevin John Jefferson, Latasha Washington, and Ken Szutu; and Council Members William Goodwin, Ms. Margaret Gordon, Ariann Harrison, Joy Massey, Hana Mendoza, Rio Molina, and Violet Saena.

Participated Remotely, via Zoom (remote presence does not count for quorum, but votes are counted for all action items): Council Member Fernando Campos and Mayra Pelagio (just cause).

Absent: Council Members Dr. Juan Aguilera, Dr. John Ritterman, and Kevin G. Ruano Hernandez.

Note: Dr. Aguilera listened into the meeting remotely via Zoom as member of the public since his reason for attending remotely did not fall under exemptions for “just cause,” which allows for remote participation under Assembly Bill (AB) 2449 (Rubio, 2022). Thus, he was marked as “absent.”

2. PUBLIC COMMENT ON NON-AGENDA MATTERS

CONSENT CALENDAR

3. APPROVAL OF THE DRAFT MINUTES OF THE COMMUNITY ADVISORY COUNCIL (CAC) MEETING OF JANUARY 18, 2024

Public Comments

No requests received.

Council Comments

None.

Council Action

Co-Chair Washington made a motion, seconded by Council Member Massey, to **approve** the Draft Minutes of the Community Advisory Council Meeting of January 18, 2024, and the motion **carried** by the following vote of the Council:

AYES: Campos, Goodwin, Gordon, Harrison, Jefferson, Massey, Mendoza, Molina, Pelagio, Szutu, Washington.
NOES: None.
ABSTAIN: Saena.
ABSENT: Aguilera, Ritterman, Ruano Hernandez.

Motion Approved

ACTION ITEMS

4. COMMUNITY ADVISORY COUNCIL WORK PLAN

This item was presented by the following members of the Work Plan Ad Hoc Committee: Co-Chair Ken Szutu, Council Member William Goodwin, and Council Member Rio Molina. The presentation *Community Advisory Council Workplan* included the slides: outcome; outline; requested action; initial work plan; revised work plan (March 2023 CAC meeting); developing an updated work plan; CAC Retreat – September 2023; and current CAC Work Plan – December 2023.

Public Comments

No requests received.

Council Comments

The Council and staff discussed the desire for more action agenda items and less informational agenda items.

Council Action

Co-Chair Washington made a motion, seconded by Council Member Harrison, to **adopt** the updated Community Advisory Council 2024-2025 Work Plan; and the motion **carried** by the following vote of the Council:

AYES: Campos, Goodwin, Harrison, Jefferson, Massey, Mendoza, Molina, Pelagio, Saena, Szutu, Washington.
NOES: Gordon.
ABSTAIN: None.
ABSENT: Aguilera, Ritterman, Ruano Hernandez.

Motion Approved

5. **FUNDING COMMUNITY BENEFITS FROM PENALTY FUNDS**

Greg Nudd, Deputy Executive Officer, Science and Policy, gave the staff presentation *Funding Community Benefits from Penalty Funds*, including: potential presentation outcomes; proposal; previous CAC vote; remaining questions; community benefit project examples; background; about the penalties; penalty percentage allocation for local and regional community benefits - Option 1: 80-20; Option 2: 70-30; Option 3: 60-40; allocation results – Fiscal Year (FY) 24.

Public Comments

Public comments were given by the following Richmond-North Richmond-San Pablo Path to Clean Air Community Emissions Reduction Plan Community Steering Committee Members: YAnad Burell (Co-Chair), Marisol Cantú, Alfredo Angulo (Co-Chair), and Nancy Peace.

Council Comments

The Council and staff discussed concern about annual increases of penalty funds that are budgeted to partially fund the Air District’s enforcement program, and the suggestion for a ceiling; whether community benefits projects can be both regionally and locally funded; whether limits could be placed on regional benefits; whether regional or local benefits could apply to law enforcement; the request for a Council orientation on how the Air District determines violations and penalty amounts; how the Air District charges fees to permitted sources based on the type of source; the cost of corrective actions; the manner in which collected penalties would be distributed to communities (who are the recipients, and the comparison of paying regional funds versus local funds); whether the penalties collected for regional benefits can be added to the Air District’s budget target; the belief that a member of the Council had not been informed well enough to be polled about penalty allocation options; whether facilities are fined for all of their violations; the manner in which new fees are added to a facility, and whether fees can be allocated for regional or local benefits; the Council’s desire for healthy relationships with all of the designated Bay Area Community Health Protection Program (AB 617) Community Steering Committees; whether there is a statute of limitations for assessing penalties for past violations; and whether the Air District must enter into tolling agreements with penalized facilities.

Council Action

Co-Chairperson Szutu made a motion, seconded by Council Member Mendoza, to recommend that the Board of Directors **set** a policy in collaboration with the Community Advisory Council that automatically **allocates** a portion of penalties for local (80%) and regional (20%) community benefits; and the motion **carried** by the following vote of the Council:

AYES:	Campos, Goodwin, Harrison, Massey, Mendoza, Molina, Pelagio, Saena, Szutu, Washington.
NOES:	Gordon.
ABSTAIN:	Jefferson.
ABSENT:	Aguilera, Ritterman, Ruano Hernandez.

Motion Approved

THE COUNCIL RECESSED AT 7:33 P.M., AND RESUMED AT 7:45 P.M.

INFORMATIONAL ITEM

6. AIR DISTRICT STRATEGIC PLANNING UPDATE

Dr. Philip M. Fine, Executive Officer / Air Pollution Control Officer (APCO), and CAC Co-Chair, Latasha Washington, gave the presentation *Strategic Planning Update*, including: outcome; requested action; outline; Environmental Justice (EJ) plan development; inputs for development of EJ priorities; examples of EJ priorities; developing EJ strategies: January 2024 to present; Strategic Plan; early input on Strategic Plan; CAC input (survey responses); consistent engagement findings; Strategic Plan framework and definitions; Draft Revision: Air District mission, core values, 5-year vision; draft goal areas; draft strategy examples; working timelines; and next steps.

Public Comments

No requests received.

Council Comments

The Council and staff discussed appreciation for the thank you to the Council’s Environmental Justice Policy Ad Hoc Committee and Air District staff for their EJ contribution to the Strategic Plan; the manner in which small groups of Council Members may meet, regarding the Strategic Plan, without violating the Ralph M. Brown Act; the desire for distinction between EJ priorities and EJ principles; the request for a Council orientation on EJ principles so that all Council Members have the same understanding of terms and definitions; whether accountability is part of the Air District’s core values; concerns about the proposed goal of “Maintain an Effective, Efficient, and Customer-Oriented Organization”, and the suggestion of the removal of corporate-sounding language; whether the Air District’s Public Participation Plan will be relaunched; and the suggestion that the Air District hire a person to measure the success of equity initiatives.

Council Action

None; receive and file.

OTHER BUSINESS

7. ENVIRONMENTAL JUSTICE POLICY AD HOC COMMITTEE UPDATE

The Council receives an update from the Environmental Justice Policy Ad Hoc Committee from Environmental Justice Policy Ad Hoc Committee Co-Chair Washington.

Public Comments

No requests received.

8. **COMMUNITY BENEFITS FUND AD HOC UPDATE**

The Council received an update from the Community Benefit Fund Ad Hoc Committee from Community Benefit Fund Ad Hoc Committee Co-Chair Campos.

Public Comments

No requests received.

9. **COMMUNITY ADVISORY COUNCIL MEMBER SELECTION AD HOC COMMITTEE**

The Council received an update from the CAC Member Selection Ad Hoc Committee from CAC Member Selection Ad Hoc Committee Co-Chair Pelagio. 33 applications were received for the two vacant seats, and scoring will take place over the next few weeks.

Public Comments

No requests received.

Council Comments

The Council and staff discussed the anticipated timeline of the appointment of new Council Members.

10. **REPORT OF THE EXECUTIVE OFFICER / AIR POLLUTION CONTROL OFFICER**

Dr. Fine announced the following:

- Marcia Raymond, who has been Acting Deputy Executive Officer of Equity and Community Programs, is continuing in this role for a third extension. The hiring process for a permanent Deputy Executive Officer of Equity and Community Programs is ongoing.
- Air District staff appreciates the Council Members who attended the Board of Directors annual retreat on January 31, 2024.
- The Air District is currently sponsoring several bills: Senate Bill (SB) 1095 (Becker) - Cozy Homes Cleanup Act: building standards: gas-fuel-burning appliances; **AB 2298 (Hart, et al.)** – Coastal resources: voluntary vessel speed reduction and sustainable shipping program; and **AB 1465 (Wicks)** – Nonvehicular air pollution: civil penalties.

11. **COUNCIL MEMBER COMMENTS / OTHER BUSINESS**

Council Member Goodwin asked whether the Air District has a legislative policy priority platform so that interested members of the public may support and advocate for Air District-sponsored bills, or bills of interest to the Air District.

Co-Chair Jefferson thanked Dr. Fine for centering EJ as guiding principle of Air District’s work.

Council Member Gordon requested a more detailed explanation of the Air District’s harassment policy, process, procedures, and protocol. She believed that the training that the Council Members received lacked clarity.

Council Member Gordon announced the following event:

**Lau Grants for Just Climate Futures Presentation Workshops
Friday, April 5, 10 AM to 5 PM at Bauer Wurster Hall, UC Berkeley**

The College of Environmental Design will be holding presentation workshops for the Lau Grants for Just Climate Futures, featuring dialogue around climate adaptation strategies, organized by the Institute of Urban & Regional Development. Exhibitions of the five funded cross-disciplinary projects will be featured, including community partners and representatives of public agencies. At 3:00pm, there will be an exhibit called “**BAAQMAP: Bay Area Air Quality Map Analysis Project**”, which maps real-time air quality and cumulative environmental exposure. Members of the Council will be speakers at that exhibit.

Council Member Mendoza requested that hard copies of agenda packets be made available in larger font size, for those who require it.

Co-Chair Szutu registered a public harassment complaint against Co-Chair Washington for her comments made to and about him, which Co-Chair Szutu considered hostile, during Item 5 (Funding Community Benefits from Penalty Funds.) In response, Co-Chair Washington offered an apology to Co-Chair Szutu and the Council for her earlier comments, noting that she did not intend to offend Co-Chair Szutu.. Council Member Pelagio requested that staff intervene and offer proposed motion language, to assist the maker of a motion, in the future, if needed.

12. TIME AND PLACE OF NEXT MEETING

Thursday, May 16, 2024, at 6:00 p.m. at the California State University East Bay Oakland Professional Development and Conference Center, Trans Pacific Center, 1000 Broadway, Suite 109, Oakland, CA 94607. The meeting will be in-person for the Community Advisory Council members and members of the public will be able to either join in-person or via webcast.

13. ADJOURNMENT

The meeting was adjourned at 9:00 p.m.

Marcy Hiratzka
Clerk of the Boards



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

AGENDA: 17

Funding Community Benefits from Penalty Funds

Board of Directors Meeting
May 1, 2024

Greg Nudd
Deputy Executive Officer, Science and Policy
gnudd@baaqmd.gov

Potential Presentation Outcomes



- The Board of Directors will consider the recommendation by the Finance & Administration Committee to adopt a policy to automatically allocate some penalty funds for community benefits.

Presentation Outline



- Information about penalties
- Penalty allocation proposal
- Mitigating budget risk
- Recommendations from community representatives
- Recommended action

About Penalties



- The Air District collects penalties from facilities that violate our regulations.
- In the past five years, these funds have varied from \$700k to \$4.2M per year.
- Penalty collections for this fiscal year are almost \$22M.
- In the current fiscal year, \$3M of penalty fund revenue was budgeted to partially fund our enforcement program consisting of 77 full time employees with a total direct costs of roughly \$16M per year.

About Penalties (cont.)



- Most individual penalty packages are between \$10-\$50k (58%).
- But most of the penalty dollars collected are from a few large penalty packages exceeding \$1M.
- Penalties > \$1M are paid primarily by petroleum refineries and related industry. Over 90% of the penalties collected in recent years are from this sector.

Proposed Policy



- Allocate as much of penalty funds as possible to community benefits, while ensuring the Air District recovers appropriate costs.
- Focus on providing benefits to the community impacted by the air quality violation, but also address the needs of communities that may not have large industrial sources.
- Details in attached document entitled “**Funding Community Benefits from Penalty Funds.**”

Community Benefit Project Examples



Examples of projects that were identified for possible funding from penalty money from Richmond-North Richmond-San Pablo Community Emissions Reduction Plan:

- Reduce particulate matter and other toxic air pollution from food cooking operations.
- Urban greening projects.
- Expand accessibility to programs like Black Infant Health and CalAIM.
- Expand asthma programs in schools.
- Home retrofits for asthma patients.

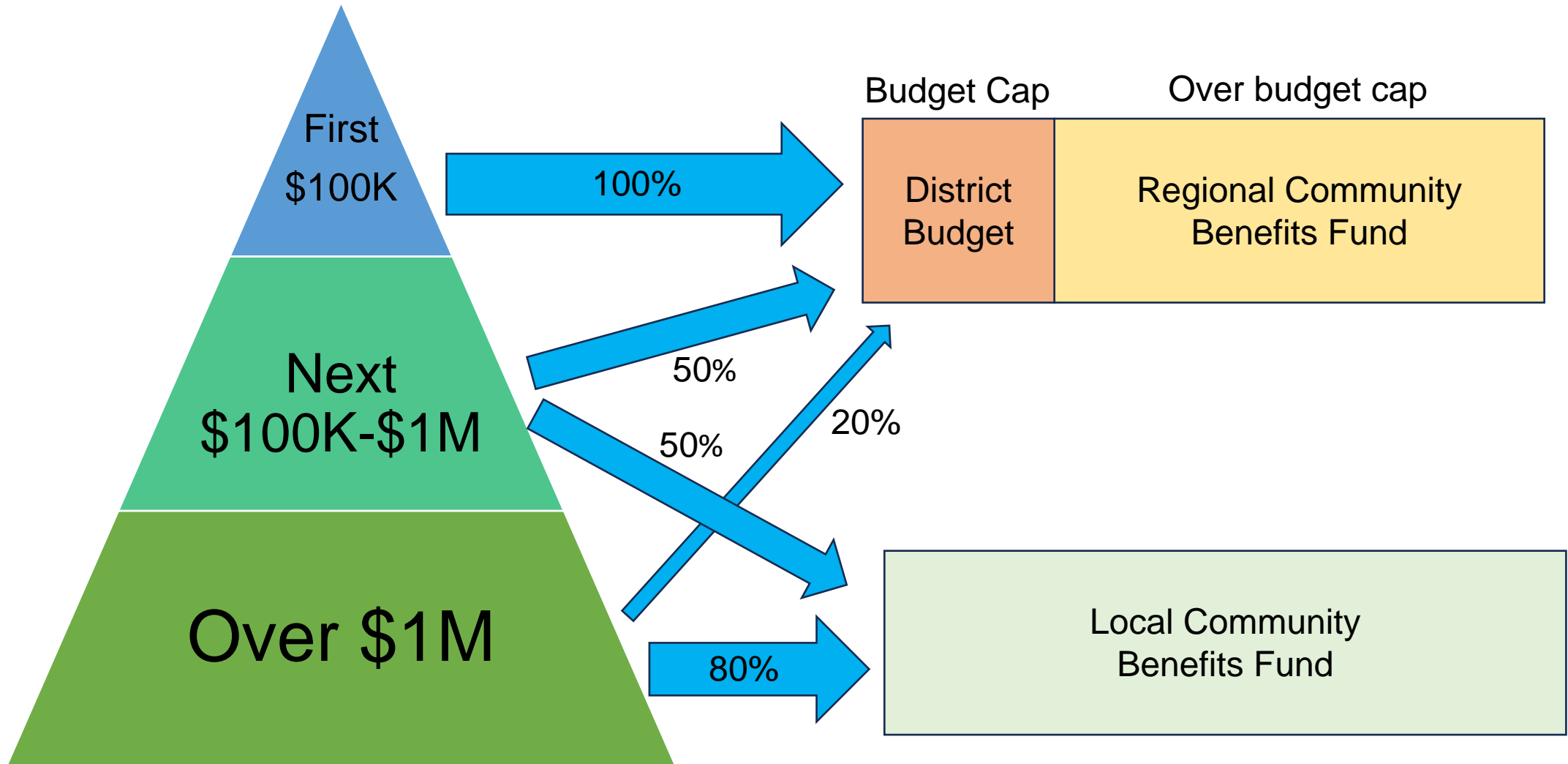
Penalty Allocation Proposal



Lower Break Point	Upper Break Point	% to Local Benefit Fund	% to Air District or Regional Benefit Fund
\$0	\$100,000		100%
\$100,000	\$1 million	50%	50%
\$1 million		80%	20%

- The first \$100,000 of each penalty payment would go to offset the Air District's expenses in enforcing regulations. **After the budget cap is met those funds would go into a regional benefit fund.**
- Between \$100,000 and \$1M, 50% of the penalties would go to a fund to benefit the community impacted by the violation. The balance would go Air District's general fund or the regional benefit fund (after the budget cap has been met).
- Above \$1M, 80% of the penalties would be reserved for local benefits programs, with 20% to the Air District's general fund or the regional benefit fund (after the budget cap has been met)

Penalty Allocation Proposal (cont.)



Mitigating Budget Risk



- Penalty Collections vary from year-to-year, but are expected to be higher than in prior years due to enhanced and prioritized enforcement by the Air District.
- FYE 2024 budget assumes \$3M in penalty collections with actual collections near \$22M year-to-date.
- Proposed FYE 2025 budget assumes \$4M in penalty collections
- The proposed policy would automatically allocate some funding for local benefits for any penalty package over \$100,000, potentially creating some budget risk.

Mitigating Budget Risk (cont.)



- Proposal: Set the Fiscal Year Penalty Budget Cap to account for any shortfalls in the previous two years.
- Fiscal Year Penalty Budget Assumption = general revenue for penalties assumed in the budget.
 - FYE 2024 - \$3M
 - FYE 2025 - \$4M (proposed)
- Fiscal Year Penalty Budget Cap = Fiscal Year Budget Assumption + any recent shortfalls

Community Advisory Council Recommendations:



- Recommend that the Air District Board of Directors create a policy in collaboration with the Community Advisory Council that automatically sets aside a portion of penalties for regional and local benefits.
- Recommend that the Air District Board of Directors have the Community Advisory Council conduct an annual periodic review of the program after one year to ensure that the policy is effective and equitable.
- Recommend that the Air District Board of Directors ensure, with the collaboration of the Community Advisory Council, that there is the creation of a plan for community outreach and oversight of any local or regional benefit fund spending programs.

Community Advisory Council Recommendations (cont.):



- Recommend that the Board of Directors set a policy in collaboration with the Community Advisory Council that automatically allocates a portion of penalties for local (80%) and regional (20%) community benefits.

Richmond-North Richmond-San Pablo CSC Recommendations:



- Create a policy that automatically directs 90% to a Local Benefit Fund for the most impacted community and 10% to a regional benefit fund.
- When the source and impact are within an AB617 designated community, the Community Steering Committee would have local oversight of the Local Benefit Fund.
- When the source and impact are **not** within an AB617 designated community, work with the Community Advisory Council (CAC) to identify community based organizations that would have local oversight of the Local Benefit Fund.

Richmond-North Richmond-San Pablo CSC Recommendations (cont.):



- Work in collaboration with the Community Advisory Council to create a regional policy to oversee and distribute the regional funds.
- All policies and funds will include an annual review and amendment process to the program to ensure the policy's effectiveness, equity, and environmental justice principles are being met.
- All policies and funds will have an equitable and transparent implementation plan to improve air quality and public health for impacted communities.

Partial Results for FYE 2024



- For the fiscal year ending 2024 including the \$20M Chevron penalty, the proposed 80/20 split would have the following results:
 - Air District budget cap of \$3,000,000 met
 - Local benefit fund for Richmond area: \$16,250,000
 - Regional benefit fund: \$2,658,650
 - Local benefit fund for Pleasanton: \$64,000

Recommendation



The Executive Officer/APCO requests that the Board of Directors:

Adopt the policy to allocate penalty money to community benefits as described in the attached policy document entitled “Funding Community Benefits from Penalty Funds” Including the requirement to report back to the Board on the effectiveness of the policy.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Davina Hurt and Members
of the Board of Directors

From: Philip M. Fine
Executive Officer/APCO

Date: May 1, 2024

Re: State Legislative Bills Update

RECOMMENDED ACTION

Approve staff's recommendation of SUPPORT for the following bill:

- Assembly Bill (AB) 2851 (Bonta) - Metal shredding facilities: fence-line air quality monitoring.

BACKGROUND

The April 17, 2024, Policy, Grants, and Technology Committee (Committee) meeting was canceled due to a lack of quorum and the next scheduled Committee meeting is May 15, 2024. Therefore, staff is presenting the above recommendation on a pending legislative bill directly to the Board of Directors.

DISCUSSION

Attached is a bill matrix of the bills that Air District staff is tracking, noting their current status and current or recommended positions to support, oppose, and work with the author during the 2024 Legislative Session.

Specifically, staff will be discussing the following bill:

AB 2851 (Bonta) - Metal shredding facilities: fence-line air quality monitoring.

CapitolTrack Summary: Current law requires the Department of Toxic Substances Control to adopt, and revise when appropriate, standards and regulations for the management of hazardous wastes to protect against hazards to the public health, to domestic livestock, to wildlife, or to the environment, including the operation of metal shredding facilities for appliance recycling. Current law authorizes the department to collect an annual fee from all metal shredding facilities that are subject to the requirements of the hazardous waste control laws, and to deposit those fees into a subaccount in the Hazardous Waste Control Account. Current law makes those moneys available to the department, upon appropriation by the Legislature, to reimburse the department's costs to implement the hazardous waste control laws applicable to metal shredder facilities. This

bill would require, on or before July 1, 2025, the department, in consultation with affected local air pollution control and air quality management districts, to develop requirements for facilitywide fence-line air quality monitoring at metal shredding facilities. Those requirements would include, among other things, monitoring light fibrous material, lead, zinc, cadmium, and any other substance required to be monitored by the department, and a requirement that, if the monitoring indicates a potential adverse impact on air quality or public health, the local public health department issue a community notification, as provided. The bill would also require all metal shredding facilities that are subject to the hazardous waste control laws to implement the fence-line air quality monitoring requirements. The bill would require the department to oversee and enforce the implementation of the fence-line air quality monitoring requirements on or before December 31, 2025. The bill would also authorize any regulatory costs incurred by the department in implementing the bill's requirements to be reimbursed from the subaccount in the Hazardous Waste Control Account.

Current Status: AB 2851 was double-referred to the Assembly Environmental Safety and Toxic Materials Committee and the Assembly Natural Resources Committee. The bill passed the Assembly Environmental Safety and Toxic Materials Committee on April 9, 2024, with a vote of 5-2, and passed the Assembly Natural Resources Committee on April 22, 2024, with a vote of 8-2. This bill has been referred to the Assembly Appropriations Committee - the hearing date is pending.

Staff Recommendation: Support

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Philip M. Fine
Executive Officer/APCO

Prepared by: Alan Abbs
Reviewed by: Viet Tran

ATTACHMENTS:

1. Bills of Interest Matrix - As of April 22, 2024
2. AB 2851 (Bonta) - Bill Text - As Amended on April 4, 2024
3. State Legislative Bills Update Presentation

Bill #	Author	Subject	Last Amended	Last Status - As of 4/22/2024	Location	Notes	Position	Priority (Low/Medium/High)	Category
AB 593	Haney	Carbon emission reduction strategy: building sector.	7/13/2023	09/01/2023 - Failed Deadline pursuant to Rule 61(a)(11). (Last location was APPR. SUSPENSE FILE on 8/14/2023)(May be acted upon Jan 2024)	09/01/2023 - Senate 2 YEAR			Low	Climate Change
AB 1992	Boerner	Coastal resources: coastal development permits: blue carbon demonstration projects.		04/10/2024 - In committee: Set, first hearing. Referred to suspense file.	04/10/2024 - Assembly APPR. SUSPENSE FILE			Low	Climate Change
AB 2008	Wallis	Reliable Energy Needs for Everyone in the West Program.	3/6/2024	03/07/2024 - Re-referred to Com. on U. & E.	02/12/2024 - Assembly U. & E.			Low	Climate Change
AB 2331	Gabriel	Voluntary carbon market disclosures.	3/21/2024	04/16/2024 - From committee: Do pass and re-refer to Com. on APPR. (Ayes 10. Noes 0.) (April 15). Re-referred to Com. on APPR.	04/15/2024 - Assembly APPR.			Low	Climate Change
AB 2372	Bains	Greenhouse gas emissions: state board: report.		02/26/2024 - Referred to Com. on NAT. RES.	02/26/2024 - Assembly NAT. RES.			Low	Climate Change
AB 2569	Connolly	Climate change.		02/15/2024 - From printer. May be heard in committee March 16.	02/14/2024 - Assembly PRINT	Intent Bill		Low	Climate Change
AB 2572	Muratsuchi	Ocean carbon dioxide removal projects.	3/21/2024	04/01/2024 - Re-referred to Com. on NAT. RES.	03/21/2024 - Assembly NAT. RES.			Low	Climate Change
AB 2623	Arambula	Carbon dioxide transport.		04/02/2024 - In committee: Set, first hearing. Hearing canceled at the request of author.	03/21/2024 - Assembly U. & E.			Low	Climate Change
AB 2732	Papan	Grant Information Act of 2018: internet web portal: climate-related grants: childcare sector.	4/16/2024	04/17/2024 - Re-referred to Com. on HUM. S.	03/21/2024 - Assembly HUM. S.			Low	Climate Change
AB 2870	Muratsuchi	Low Carbon Fuel Standard regulations: carbon intensity calculation: avoided methane emissions from livestock manure: prohibition.	4/15/2024	04/18/2024 - Assembly Rule 56 suspended. (Pending re-refer to Com. on AGRI.)	04/18/2024 - Assembly NAT. RES.			Low	Climate Change
AB 3208	Boerner	Greenhouse gases: methane.		02/17/2024 - From printer. May be heard in committee March 18.	02/16/2024 - Assembly PRINT	Spot Bill		Low	Climate Change
AB 3230	Petrie-Norris	Greenhouse gas emissions reduction: state agencies.	3/21/2024	04/01/2024 - Re-referred to Com. on NAT. RES.	03/21/2024 - Assembly NAT. RES.			Low	Climate Change
SB 308	Becker	Carbon Dioxide Removal Market Development Act.	5/18/2023	07/14/2023 - Failed Deadline pursuant to Rule 61(a)(10). (Last location was NAT. RES. on 6/8/2023)(May be acted upon Jan 2024)	07/14/2023 - Assembly 2 YEAR			Low	Climate Change
SB 422	Portantino	California Environmental Quality Act: expedited environmental review: climate change regulations.	3/20/2023	09/14/2023 - Failed Deadline pursuant to Rule 61(a)(14). (Last location was INACTIVE FILE on 9/12/2023)(May be acted upon Jan 2024)	09/14/2023 - Assembly 2 YEAR			Medium	Climate Change
SB 941	Skinner	California Global Warming Solutions Act of 2006: scoping plan: industrial sources of emissions.	3/18/2024	04/10/2024 - Set for hearing April 24.	04/03/2024 - Senate E.Q.			Low	Climate Change
SB 972	Min	Methane emissions: organic waste: landfills.	4/15/2024	04/15/2024 - From committee with author's amendments. Read second time and amended. Re-referred to Com. on E.Q.	02/14/2024 - Senate E.Q.			Low	Climate Change
SB 1036	Limón	Voluntary carbon offsets: business regulation.		04/12/2024 - Set for hearing April 22.	04/09/2024 - Senate APPR.			Low	Climate Change
SB 1136	Stern	California Global Warming Solutions Act of 2006: report.		04/09/2024 - Read second time. Ordered to third reading.	04/09/2024 - Senate THIRD READING			Low	Climate Change
SB 1497	Menjivar	Polluters Pay Climate Cost Recovery Act of 2024.	3/20/2024	04/17/2024 - From committee: Do pass and re-refer to Com. on JUD. (Ayes 5. Noes 2.) (April 17). Re-referred to Com. on JUD.	04/17/2024 - Senate JUD.			Low	Climate Change
AB 124	Committee on Budget	Energy.	6/26/2023	08/14/2023 - Re-referred to Com. on B. & F.R.	08/14/2023 - Senate BUDGET & F.R.			Low	Energy
AB 1176	Zbur	General plans: Local Electrification Planning Act.	5/26/2023	07/14/2023 - Failed Deadline pursuant to Rule 61(a)(10). (Last location was GOV. & F. on 6/14/2023)(May be acted upon Jan 2024)	07/14/2023 - Senate 2 YEAR			Low	Energy
AB 1921	Papan	Energy: renewable electrical generation facilities: linear generators.	4/8/2024	04/16/2024 - From committee: Do pass and re-refer to Com. on APPR. with recommendation: To Consent Calendar. (Ayes 10. Noes 0.) (April 15). Re-referred to Com. on APPR.	04/15/2024 - Assembly APPR.			Medium	Energy
AB 2083	Berman	Industrial facilities' heat application equipment and process emissions.	4/1/2024	04/09/2024 - Coauthors revised. From committee: Do pass and re-refer to Com. on U. & E. (Ayes 9. Noes 0.) (April 8). Re-referred to Com. on U. & E.	04/09/2024 - Assembly U. & E.			Low	Energy
AB 2092	Mathis	Energy: small modular reactors: feasibility study.	3/18/2024	04/10/2024 - In committee: Set, first hearing. Referred to suspense file.	04/10/2024 - Assembly APPR. SUSPENSE FILE			Low	Energy
AB 2204	Bennett	Green hydrogen.	3/21/2024	04/17/2024 - In committee: Set, first hearing. Hearing canceled at the request of author.	04/15/2024 - Assembly NAT. RES.			Low	Energy
AB 2495	Muratsuchi	Electricity: state policy: joint report.	4/8/2024	04/17/2024 - In committee: Set, second hearing. Hearing canceled at the request of author.	04/15/2024 - Assembly U. & E.			Low	Energy
AB 2601	Ramos	Energy Savings Assistance Program: energy-efficient appliances.		03/28/2024 - In committee: Set, first hearing. Hearing canceled at the request of author.	03/04/2024 - Assembly U. & E.			Low	Energy
AB 2805	Essayli	Electricity: fixed charges: repeal.		03/04/2024 - Referred to Com. on U. & E.	03/04/2024 - Assembly U. & E.			Low	Energy
AB 2912	Dixon	Energy: retail gasoline pricing.		03/11/2024 - Referred to Com. on U. & E.	03/11/2024 - Assembly U. & E.			Low	Energy
AB 3118	Wallis	Solar energy: official state energy.		03/11/2024 - Referred to Com. on U. & E.	03/11/2024 - Assembly U. & E.			Low	Energy
ACR 175	Essayli	State energy policies: implications for the state.		04/11/2024 - From printer.	04/10/2024 - Assembly PRINT			Low	Energy
SB 233	Skinner	Battery electric vehicles and electric vehicle supply equipment: bidirectional capability.	9/1/2023	09/14/2023 - Failed Deadline pursuant to Rule 61(a)(14). (Last location was INACTIVE FILE on 9/13/2023)(May be acted upon Jan 2024)	09/14/2023 - Assembly 2 YEAR			Low	Energy

Bill #	Author	Subject	Last Amended	Last Status - As of 4/22/2024	Location	Notes	Position	Priority (Low/Medium/High)	Category
SB 438	Caballero	Carbon sequestration: Carbon Capture, Removal, Utilization, and Storage Program: incidental and unintentional residual oil production.	6/6/2023	07/14/2023 - Failed Deadline pursuant to Rule 61(a)(10). (Last location was NAT. RES. on 5/26/2023)(May be acted upon Jan 2024)	07/14/2023 - Assembly 2 YEAR			Low	Energy
SB 983	Wahab	Energy: gasoline stations and alternative fuel infrastructure.	3/21/2024	04/11/2024 - Set for hearing April 23.	04/03/2024 - Senate TRANS.			Low	Energy
SB 993	Becker	Clean energy development incentive rate tariff.	4/22/2024	04/18/2024 - From committee: Do pass as amended and re-refer to Com. on APPR. (Ayes 15. Noes 2.) (April 16). (Amended text released 4/22/2024)	04/16/2024 - Senate APPR.			Low	Energy
SB 1006	Padilla	Electricity: transmission capacity: reconductoring and grid-enhancing technologies.	4/17/2024	04/18/2024 - Withdrawn from committee. Re-referred to Com. on APPR.	04/18/2024 - Senate APPR.			Low	Energy
SB 1095	Becker	Cozy Homes Cleanup Act: building standards: gas-fuel-burning appliances.	4/8/2024	04/15/2024 - April 15 hearing: Placed on APPR suspense file.	04/15/2024 - Senate APPR. SUSPENSE FILE		Air District-Sponsored	High	Energy
SB 1148	Blakespear	Electrical service: master meters.	4/4/2024	04/17/2024 - Set for hearing April 22.	02/21/2024 - Senate E. U., & C.			Low	Energy
SB 1420	Caballero	Hydrogen.	4/8/2024	04/09/2024 - Set for hearing April 22.	04/03/2024 - Senate E. U., & C.			Low	Energy
AB 2250	Weber	Social determinants of health: screening and outreach.		04/03/2024 - Coauthors revised. From committee: Do pass and re-refer to Com. on APPR. (Ayes 15. Noes 0.) (April 2). Re-referred to Com. on APPR.	02/08/2024 - Assembly APPR.			Low	Environmental Justice
AB 2851	Bonta	Metal shredding facilities: fence-line air quality monitoring.	4/4/2024	04/10/2024 - From committee: Do pass and re-refer to Com. on NAT. RES. (Ayes 5. Noes 2.) (April 9). Re-referred to Com. on NAT. RES.	04/10/2024 - Assembly NAT. RES.		Propose Support	Medium	Environmental Justice
SB 720	Stern	Aviation: airports: report: emissions: GO-Biz.	7/10/2023	07/14/2023 - Failed Deadline pursuant to Rule 61(a)(10). (Last location was NAT. RES. on 7/5/2023)(May be acted upon Jan 2024)	07/14/2023 - Assembly 2 YEAR			Low	Environmental Justice
AB 985	Arambula	San Joaquin Valley Unified Air Pollution Control District: emission reduction credit system.	7/6/2023	09/12/2023 - Assembly refused to concur in Senate amendments. Motion to reconsider made by Assembly Member Arambula.	09/12/2023 - Assembly RECONSIDERATION			Low	General-Air District
AB 2188	Ta	Vehicles: pollution control devices.		02/26/2024 - Referred to Com. on TRANS.	02/26/2024 - Assembly TRANS.			Low	General-Air District
AB 2298	Hart	Coastal resources: voluntary vessel speed reduction and sustainable shipping program.	3/20/2024	04/17/2024 - In committee: Set, first hearing. Referred to suspense file.	04/17/2024 - Assembly APPR. SUSPENSE FILE		Air-District Co-Sponsor	High	General-Air District
AB 2522	Carrillo, Wendy	South Coast Air Quality Management District: district board: compensation.		04/18/2024 - Read third time. Passed. Ordered to the Senate. (Ayes 72. Noes 0.) In Senate. Read first time. To Com. on RLS. for assignment.	04/18/2024 - Senate RLS.	Board Approval 4/3/2024	Support	Medium	General-Air District
AB 3136	Reyes	Attorney General: Bureau of Environmental Justice.		04/02/2024 - Coauthors revised. From committee: Do pass and re-refer to Com. on E.S. & T.M. (Ayes 11. Noes 0.) (April 2). Re-referred to Com. on E.S. & T.M.	04/02/2024 - Assembly E.S. & T.M.			Low	General-Air District
SB 336	Umberg	State grant programs: negotiated indirect cost rates.	9/1/2023	09/14/2023 - Failed Deadline pursuant to Rule 61(a)(14). (Last location was INACTIVE FILE on 9/11/2023)(May be acted upon Jan 2024)	09/14/2023 - Assembly 2 YEAR			Low	General-Air District
SB 674	Gonzalez	Air pollution: refineries: community air monitoring systems: fence-line monitoring systems.	9/1/2023	09/14/2023 - Failed Deadline pursuant to Rule 61(a)(14). (Last location was INACTIVE FILE on 9/14/2023)(May be acted upon Jan 2024)	09/14/2023 - Assembly 2 YEAR	Board Approval 4/19/2023	Support	Medium	General-Air District
SB 1158	Archuleta	Carl Moyer Memorial Air Quality Standards Attainment Program.	4/16/2024	04/16/2024 - From committee with author's amendments. Read second time and amended. Re-referred to Com. on TRANS.	03/20/2024 - Senate TRANS.	Board Approval 3/6/2024	Support	Medium	General-Air District
AB 627	Jackson	Drayage trucks: voucher incentive project.	1/22/2024	01/29/2024 - Read third time. Passed. Ordered to the Senate. (Ayes 67. Noes 1.) In Senate. Read first time. To Com. on RLS. for assignment.	01/29/2024 - Senate RLS.			Low	GGRF, Incentive Programs, Mobile Source, Cap and Trade
AB 637	Jackson	Zero-emission vehicles: fleet owners: rental vehicles.	9/6/2023	01/25/2024 - Read third time. Passed. Ordered to the Senate. (Ayes 70. Noes 0.) In Senate. Read first time. To Com. on RLS. for assignment.	01/25/2024 - Senate RLS.			Low	GGRF, Incentive Programs, Mobile Source, Cap and Trade
AB 1349	Irwin	Electric vehicle charging station networks: data fields.	6/5/2023	07/14/2023 - Failed Deadline pursuant to Rule 61(a)(10). (Last location was E. U., & C. on 6/13/2023)(May be acted upon Jan 2024)	07/14/2023 - Senate 2 YEAR			Low	GGRF, Incentive Programs, Mobile Source, Cap and Trade
AB 1567	Garcia	Safe Drinking Water, Wildfire Prevention, Drought Preparation, Flood Protection, Extreme Heat Mitigation, Clean Energy, and Workforce Development Bond Act of 2024.	5/26/2023	06/14/2023 - Referred to Coms. on N.R. & W. and GOV. & F.	06/14/2023 - Senate N.R. & W.			Low	GGRF, Incentive Programs, Mobile Source, Cap and Trade
AB 1969	Hart	State Air Resources Board: Clean Off-Road Equipment Voucher Incentive Project: unmanned aerial systems.		04/10/2024 - In committee: Set, first hearing. Referred to suspense file.	04/10/2024 - Assembly APPR. SUSPENSE FILE			Low	GGRF, Incentive Programs, Mobile Source, Cap and Trade
AB 2061	Wilson	Sales and Use Tax: exemptions: zero-emission public transportation ferries.		03/11/2024 - In committee: Set, first hearing. Referred to REV. & TAX. suspense file.	03/11/2024 - Assembly REV. & TAX SUSPENSE FILE			Low	GGRF, Incentive Programs, Mobile Source, Cap and Trade
AB 2266	Petrie-Norris	California Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project: vehicle eligibility.		04/04/2024 - In committee: Set, first hearing. Hearing canceled at the request of author.	02/26/2024 - Assembly TRANS.			Low	GGRF, Incentive Programs, Mobile Source, Cap and Trade
AB 2401	Ting	Clean Cars 4 All Program.	4/9/2024	04/16/2024 - Coauthors revised. From committee: Do pass and re-refer to Com. on NAT. RES. (Ayes 15. Noes 0.) (April 15). Re-referred to Com. on NAT. RES.	04/15/2024 - Assembly NAT. RES.			Medium	GGRF, Incentive Programs, Mobile Source, Cap and Trade
AB 2418	Patterson, Jim	Vehicular air pollution: heavy-duty trucks.		02/26/2024 - Referred to Com. on TRANS.	02/26/2024 - Assembly TRANS.			Low	GGRF, Incentive Programs, Mobile Source, Cap and Trade
AB 2480	Garcia	Zero-emission schoolbus replacement grants: private contractors.	4/16/2024	04/17/2024 - Re-referred to Com. on TRANS.	03/04/2024 - Assembly TRANS.			Low	GGRF, Incentive Programs, Mobile Source, Cap and Trade
AB 2626	Dixon	Advanced Clean Fleets regulations: local governments.		03/04/2024 - Referred to Coms. on TRANS. and NAT. RES.	03/04/2024 - Assembly TRANS.			Low	GGRF, Incentive Programs, Mobile Source, Cap and Trade

Bill #	Author	Subject	Last Amended	Last Status - As of 4/22/2024	Location	Notes	Position	Priority (Low/Medium/High)	Category
AB 2760	Muratsuchi	Lower Emissions Equipment at Seaports and Intermodal Yards Program.	4/8/2024	04/16/2024 - From committee: Do pass and re-refer to Com. on NAT. RES. with recommendation: To Consent Calendar. (Ayes 15. Noes 0.) (April 15). Re-referred to Com. on NAT. RES.	04/15/2024 - Assembly NAT. RES.			Low	GGRF, Incentive Programs, Mobile Source, Cap and Trade
AB 2796	Alvarez	Equitable Access to Zero-Emissions Vehicles Fund.		03/11/2024 - Referred to Coms. on TRANS. and NAT. RES.	03/11/2024 - Assembly TRANS.			Low	GGRF, Incentive Programs, Mobile Source, Cap and Trade
AB 2815	Petrie-Norris	Clean Transportation Program: electric vehicle charging stations.	4/3/2024	04/16/2024 - From committee: Do pass and re-refer to Com. on NAT. RES. (Ayes 15. Noes 0.) (April 15). Re-referred to Com. on NAT. RES.	04/15/2024 - Assembly NAT. RES.			Low	GGRF, Incentive Programs, Mobile Source, Cap and Trade
AB 3153	Dixon	Emission standards: marine vessels: exemption.		03/11/2024 - Referred to Com. on TRANS.	03/11/2024 - Assembly TRANS.			Low	GGRF, Incentive Programs, Mobile Source, Cap and Trade
AB 3243	Ta	Vehicle registration fees: penalties.	4/3/2024	04/04/2024 - Re-referred to Com. on TRANS.	03/11/2024 - Assembly TRANS.			Low	GGRF, Incentive Programs, Mobile Source, Cap and Trade
SB 301	Portantino	Vehicular air pollution: Zero-Emission Aftermarket Conversion Project.	9/1/2023	09/14/2023 - Failed Deadline pursuant to Rule 61(a)(14). (Last location was INACTIVE FILE on 9/13/2023)(May be acted upon Jan 2024)	09/14/2023 - Assembly 2 YEAR			Low	GGRF, Incentive Programs, Mobile Source, Cap and Trade
SB 638	Eggman	Climate Resiliency and Flood Protection Bond Act of 2024.	6/28/2023	07/06/2023 - July 11 hearing postponed by committee.	06/15/2023 - Assembly W.P. & W.			Low	GGRF, Incentive Programs, Mobile Source, Cap and Trade
SB 867	Allen	Drought, Flood, and Water Resilience, Wildfire and Forest Resilience, Coastal Resilience, Extreme Heat Mitigation, Biodiversity and Nature-Based Climate Solutions, Climate Smart Agriculture, Park Creation and Outdoor Access, and Clean Energy Bond Act of 2024.	6/22/2023	07/06/2023 - July 10 hearing postponed by committee.	06/20/2023 - Assembly NAT. RES.			Low	GGRF, Incentive Programs, Mobile Source, Cap and Trade
SB 1054	Rubio	Climate Pollution Reduction in Homes Initiative: natural gas: customer credit.	3/20/2024	04/04/2024 - Set for hearing April 22.	02/21/2024 - Senate E. U., & C.			Low	GGRF, Incentive Programs, Mobile Source, Cap and Trade
SB 1135	Limón	Greenhouse Gas Reduction Fund: income taxes: credit.	4/10/2024	04/12/2024 - Set for hearing April 24.	04/09/2024 - Senate REV. & TAX			Low	GGRF, Incentive Programs, Mobile Source, Cap and Trade
SB 1387	Newman	California Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project: vehicle eligibility.	3/18/2024	04/17/2024 - From committee: Do pass and re-refer to Com. on TRANS. (Ayes 7. Noes 0.) (April 17). Re-referred to Com. on TRANS.	04/17/2024 - Senate TRANS.			Low	GGRF, Incentive Programs, Mobile Source, Cap and Trade
AB 817	Pacheco	Open meetings: teleconferencing: subsidiary body.	1/17/2024	01/25/2024 - Read third time. Passed. Ordered to the Senate. (Ayes 54. Noes 8.) In Senate. Read first time. To Com. on RLS. for assignment.	01/25/2024 - Senate RLS.	Board Approval 4/19/2023	Support	Medium	Other
AB 1465	Wicks	Nonvehicular air pollution: civil penalties.	7/13/2023	09/14/2023 - Failed Deadline pursuant to Rule 61(a)(14). (Last location was INACTIVE FILE on 9/6/2023)(May be acted upon Jan 2024)	09/14/2023 - Senate 2 YEAR		Air District-Sponsored	High	Other
AB 1812	Gabriel	Budget Act of 2024.		01/16/2024 - Referred to Com. on BUDGET.	01/16/2024 - Assembly BUDGET	January Budget Proposal		High	Other
AB 1857	Jackson	State Air Resources Board: air quality regulation: valleys.		04/10/2024 - In committee: Set, first hearing. Referred to suspense file.	04/10/2024 - Assembly APPR. SUSPENSE FILE			Low	Other
AB 1864	Connolly	Pesticides: agricultural use near schoolsites: notification and reporting.	4/1/2024	04/10/2024 - From committee: Do pass and re-refer to Com. on ED. (Ayes 5. Noes 1.) (April 9). Re-referred to Com. on ED.	04/10/2024 - Assembly ED.			Low	Other
AB 1866	Hart	Oil and gas: idle wells.	3/11/2024	04/10/2024 - In committee: Set, first hearing. Referred to suspense file.	04/10/2024 - Assembly APPR. SUSPENSE FILE			Low	Other
AB 1894	Ta	Nonvehicular air pollution: civil penalties.	3/11/2024	03/14/2024 - In committee: Set, first hearing. Hearing canceled at the request of author.	02/12/2024 - Assembly NAT. RES.	Board Approval 3/6/2024	Oppose	Medium	Other
AB 1922	Davies	California Conservation Corps: Green Collar Certification Program.		04/10/2024 - In committee: Set, first hearing. Referred to suspense file.	04/10/2024 - Assembly APPR. SUSPENSE FILE			Low	Other
AB 1923	Davies	Green Assistance Program.		04/10/2024 - In committee: Set, first hearing. Referred to suspense file.	04/10/2024 - Assembly APPR. SUSPENSE FILE			Low	Other
AB 2037	Papan	Weights and measures: electric vehicle chargers.	3/14/2024	04/11/2024 - Read second time. Ordered to third reading.	04/11/2024 - Assembly THIRD READING			Low	Other
AB 2153	Lowenthal	California Public Records Act: public agency employees: notice requirements: personnel and medical information.		03/13/2024 - In committee: Set, first hearing. Hearing canceled at the request of author.	02/20/2024 - Assembly JUD.			Low	Other
AB 2190	Mathis	California Environmental Quality Act: expedited judicial review: infrastructure projects: hydrogen.		03/19/2024 - In committee: Set, first hearing. Hearing canceled at the request of author.	02/26/2024 - Assembly NAT. RES.			Low	Other
AB 2208	Zbur	California Ports Development and Offshore Wind Infrastructure Bond Act of 2024.	3/21/2024	04/08/2024 - In committee: Set, first hearing. Hearing canceled at the request of author.	03/21/2024 - Assembly NAT. RES.			Low	Other
AB 2302	Addis	Open meetings: local agencies: teleconferences.		04/15/2024 - Read second time. Ordered to third reading.	04/15/2024 - Assembly THIRD READING			Low	Other
AB 2309	Muratsuchi	City attorney: state law: misdemeanor.	4/17/2024	04/18/2024 - Re-referred to Com. on PUB. S.	02/26/2024 - Assembly PUB. S.			Low	Other
AB 2394	Grayson	California Environmental Quality Act.		02/13/2024 - From printer. May be heard in committee March 14.	02/12/2024 - Assembly PRINT			Low	Other
AB 2404	Lee	State and local public employees: labor relations: strikes.	3/21/2024	04/17/2024 - From committee: Do pass and re-refer to Com. on JUD. (Ayes 5. Noes 1.) (April 17). Re-referred to Com. on JUD.	04/17/2024 - Assembly JUD.			Low	Other
AB 2432	Gabriel	Corporations: criminal enhancements.	4/10/2024	04/16/2024 - From committee: Do pass and re-refer to Com. on APPR. (Ayes 8. Noes 0.) (April 15). Re-referred to Com. on APPR.	04/15/2024 - Assembly APPR.			Low	Other

Bill #	Author	Subject	Last Amended	Last Status - As of 4/22/2024	Location	Notes	Position	Priority (Low/Medium/High)	Category
AB 2439	Quirk-Silva	Public works: prevailing wages: access to records.	4/1/2024	04/18/2024 - From committee: Do pass and re-refer to Com. on APPR. (Ayes 6. Noes 0.) (April 17). Re-referred to Com. on APPR.	04/18/2024 - Assembly APPR.			Low	Other
AB 2453	Villapudua	Weights and measures: electric vehicle supply equipment.	4/18/2024	04/18/2024 - From committee chair, with author's amendments: Amend, and re-refer to Com. on P. & C.P. Read second time and amended.	03/04/2024 - Assembly P. & C.P.			Low	Other
AB 2487	Fong, Mike	Deputy Secretary for Climate.	3/21/2024	04/18/2024 - From committee: Do pass and re-refer to Com. on APPR. (Ayes 15. Noes 0.) (April 17). Re-referred to Com. on APPR.	04/17/2024 - Assembly APPR.			Low	Other
AB 2513	Pellerin	Gas stoves and ranges: warning label.	4/17/2024	04/18/2024 - Re-referred to Com. on E.S. & T.M.	03/21/2024 - Assembly E.S. & T.M.			Low	Other
AB 2561	McKinnor	Local public employees: vacant positions.	3/11/2024	04/17/2024 - From committee: Do pass and re-refer to Com. on APPR. (Ayes 5. Noes 1.) (April 17). Re-referred to Com. on APPR.	04/17/2024 - Assembly APPR.			Low	Other
AB 2577	Irwin	Organic waste: reduction regulations.		04/10/2024 - In committee: Set, first hearing. Referred to suspense file.	04/10/2024 - Assembly APPR. SUSPENSE FILE			Low	Other
AB 2658	Bains	Short-lived climate pollutants: organic waste: reduction regulations: exemption.		03/04/2024 - Referred to Com. on NAT. RES.	03/04/2024 - Assembly NAT. RES.			Low	Other
AB 2675	Low	State agencies: electronic transmission of information.		02/15/2024 - From printer. May be heard in committee March 16.	02/14/2024 - Assembly PRINT	Spot Bill		Low	Other
AB 2715	Boerner	Ralph M. Brown Act: closed sessions.		04/09/2024 - In committee: Set, first hearing. Hearing canceled at the request of author.	03/04/2024 - Assembly L. GOV.			Low	Other
AB 2751	Haney	Employer communications during nonworking hours.	3/21/2024	04/18/2024 - From committee: Do pass and re-refer to Com. on APPR. (Ayes 4. Noes 2.) (April 17). Re-referred to Com. on APPR.	04/18/2024 - Assembly APPR.			Low	Other
AB 2781	Irwin	Public contracting: state grants: prohibition.	4/10/2024	04/18/2024 - From committee: Do pass and re-refer to Com. on APPR. with recommendation: To Consent Calendar. (Ayes 21. Noes 0.) (April 17). Re-referred to Com. on APPR.	04/17/2024 - Assembly APPR.			Low	Other
AB 2900	Soria	Small agricultural truck fleet assistance program.	3/21/2024	04/16/2024 - From committee: Do pass and re-refer to Com. on APPR. with recommendation: To Consent Calendar. (Ayes 15. Noes 0.) (April 15). Re-referred to Com. on APPR.	04/15/2024 - Assembly APPR.			Low	Other
AB 2902	Wood	Organic waste: reduction regulations: exemptions.	4/10/2024	04/11/2024 - Re-referred to Com. on APPR.	04/09/2024 - Assembly APPR.			Low	Other
AB 2937	Wicks	California Environmental Quality Act: streamlined environmental reviews.		02/16/2024 - From printer. May be heard in committee March 17.	02/15/2024 - Assembly PRINT	Spot Bill		Low	Other
AB 2940	Muratsuchi	California Environmental Quality Act: environmental leadership development projects: transmission projects.		03/18/2024 - Referred to Coms. on NAT. RES. and JUD.	03/18/2024 - Assembly NAT. RES.			Low	Other
AB 2958	Calderon	State Air Resources Board: board members: compensation.	3/21/2024	04/17/2024 - In committee: Set, first hearing. Referred to suspense file.	04/17/2024 - Assembly APPR. SUSPENSE FILE	Board Approval 4/3/2024	Support	Medium	Other
AB 3114	Low	California Environmental Quality Act: expedited judicial review: sustainable aviation fuel projects.	3/18/2024	03/19/2024 - Re-referred to Com. on NAT. RES.	03/18/2024 - Assembly NAT. RES.			Low	Other
AB 3155	Friedman	Oil and gas wells: health protection zones: civil liability.		04/16/2024 - From committee: Do pass and re-refer to Com. on NAT. RES. (Ayes 7. Noes 3.) (April 16). Re-referred to Com. on NAT. RES.	04/16/2024 - Assembly NAT. RES.			Low	Other
AB 3233	Addis	Oil and gas: operations: restrictions: local authority.	3/21/2024	04/09/2024 - From committee: Do pass and re-refer to Com. on U. & E. (Ayes 8. Noes 3.) (April 8). Re-referred to Com. on U. & E.	04/09/2024 - Assembly U. & E.			Low	Other
SB 312	Wiener	California Environmental Quality Act: university housing development projects: exemption.	1/11/2024	01/25/2024 - Read third time. Passed. (Ayes 34. Noes 1.) Ordered to the Assembly. In Assembly. Read first time. Held at Desk.	01/25/2024 - Assembly DESK			Low	Other
SB 382	Becker	Single-family residential property: disclosures.	1/4/2024	01/18/2024 - Read third time. Passed. (Ayes 37. Noes 0.) Ordered to the Assembly. In Assembly. Read first time. Held at Desk.	01/18/2024 - Assembly DESK	Board Approval 3/6/2024 Proposed Co-Sponsor	Support	Medium	Other
SB 537	Becker	Open meetings: multijurisdictional, cross-county agencies: teleconferences.	9/5/2023	09/14/2023 - Ordered to inactive file on request of Assembly Member Bryan.	09/14/2023 - Assembly INACTIVE FILE	Board Approval 4/19/2023	Support	Medium	Other
SB 917	Skinner	Budget Act of 2024.		01/10/2024 - Introduced. Read first time. Referred to Com. on B. & F.R. To print.	01/10/2024 - Senate BUDGET & F.R.	January Budget Proposal		High	Other
SB 979	Grove	Oil and gas: operations: notices of intention: written response for denied notice.		02/14/2024 - Referred to Com. on N.R. & W.	02/14/2024 - Senate N.R. & W.			Low	Other
SB 1045	Blakespear	Composting facilities: zoning: air and water permits.	4/10/2024	04/17/2024 - Set for hearing April 24 in E.Q. pending receipt. From committee: Do pass and re-refer to Com. on E.Q. (Ayes 5.	04/17/2024 - Senate E.Q.			Medium	Other
SB 1046	Laird	Organic waste reduction: program environmental impact report: small and medium compostable material handling facilities or operations.	4/9/2024	04/12/2024 - Set for hearing April 22.	03/20/2024 - Senate APPR.			Low	Other
SB 1062	Dahle	Energy: conversion of biomass energy generation facilities.	4/3/2024	04/16/2024 - From committee: Do pass and re-refer to Com. on E.Q. (Ayes 17. Noes 0.) (April 16). Re-referred to Com. on E.Q.	04/16/2024 - Senate E.Q.			Low	Other
SB 1087	Grove	Oil imports: air quality emissions data.		04/04/2024 - Set for hearing April 22.	03/20/2024 - Senate E. U., & C.	Intent Bill		Low	Other
SB 1193	Menjivar	Airports: leaded aviation gasoline.	4/11/2024	04/15/2024 - Withdrawn from committee. Re-referred to Com. on APPR.	04/15/2024 - Senate APPR.	Board Approval 3/6/2024	Support	Medium	Other
SB 1204	Archuleta	Planning and Zoning Law: electric vehicle charging stations.		02/29/2024 - Referred to Com. on RLS.	02/15/2024 - Senate RLS.	Spot Bill		Low	Other

Bill #	Author	Subject	Last Amended	Last Status - As of 4/22/2024	Location	Notes	Position	Priority (Low/Medium/High)	Category
SB 1221	Min	Gas corporations: gas distribution infrastructure: zero-emission alternatives.	3/18/2024	04/17/2024 - Set for hearing April 22.	04/03/2024 - Senate E. U. & C.			Low	Other
SB 1232	Grove	Organic waste: collection requirements: exemption.	3/18/2024	04/17/2024 - Set for hearing April 24 in E.Q. pending receipt. April 17 set for first hearing. Failed passage in committee. (Ayes 2. Noes 4.) Reconsideration granted.	04/03/2024 - Senate E.Q.			Low	Other
SB 1298	Cortese	Certification of thermal powerplants: data centers.	4/22/2024	04/18/2024 - From committee: Do pass as amended and re-refer to Com. on APPR. (Ayes 14. Noes 0.) (April 16). (Amended text released 4/22/2024)	04/16/2024 - Senate APPR.	Board Approval 4/3/2024	Oppose unless amended	Medium	Other
SB 1308	Gonzalez	Ozone: indoor air cleaning devices.	3/18/2024	04/16/2024 - Set for hearing April 22.	04/03/2024 - Senate APPR.			Low	Other
SB 1426	Blakespear	Waste reduction: undiverted materials.	4/10/2024	04/17/2024 - Set for hearing May 1 in L. GOV. pending receipt.	04/03/2024 - Senate E.Q.			Low	Other
SB 1505	Stern	Aircraft registration.		04/09/2024 - April 9 set for first hearing canceled at the request of author.	02/29/2024 - Senate TRANS.			Low	Other
SB 1510	Stern	Permitting: electric vehicle charging.		02/29/2024 - Referred to Com. on RLS.	02/16/2024 - Senate RLS.	Intent Bill		Low	Other
SCR 136	Durazo	Equity impact analysis of legislation.		04/15/2024 - Introduced. Referred to Com. on RLS.	04/15/2024 - Senate RLS.			Low	Other
AB 6	Friedman	Transportation planning: regional transportation plans: Solutions for Congested Corridors Program: reduction of greenhouse gas emissions.	3/16/2023	07/14/2023 - Failed Deadline pursuant to Rule 61(a)(10). (Last location was TRANS. on 6/14/2023)(May be acted upon Jan 2024)	07/14/2023 - Senate 2 YEAR			Low	Transportation
AB 99	Connolly	Department of Transportation: state roads and highways: integrated pest management.	7/13/2023	09/01/2023 - Failed Deadline pursuant to Rule 61(a)(11). (Last location was APPR. SUSPENSE FILE on 8/14/2023)(May be acted upon Jan 2024)	09/01/2023 - Senate 2 YEAR			Low	Transportation
AB 1774	Dixon	Vehicles: electric bicycles.		04/09/2024 - Coauthors revised. From committee: Do pass and re-refer to Com. on APPR. with recommendation: To Consent Calendar. (Ayes 15. Noes 0.) (April 8). Re-referred to Com. on APPR.	01/03/2024 - Assembly APPR.			Low	Transportation
AB 1778	Connolly	Vehicles: electric bicycles.	4/18/2024	04/18/2024 - Read third time and amended. Ordered to third reading.	04/10/2024 - Assembly THIRD READING			Low	Transportation
AB 1837	Papan	San Francisco Bay area: public transit: Regional Network Management Council.	3/21/2024	04/01/2024 - Re-referred to Com. on TRANS. In committee: Hearing postponed by committee.	03/21/2024 - Assembly TRANS.			Low	Transportation
AB 1953	Villapudua	Vehicles: weight limits.		04/08/2024 - Read third time. Passed. Ordered to the Senate. (Ayes 74. Noes 0.) In Senate. Read first time. To Com. on RLS. for assignment.	04/08/2024 - Senate RLS.			Low	Transportation
AB 2029	Jackson	Electric vehicle charging stations assessment.	4/22/2024	04/18/2024 - From committee: Amend, and do pass as amended and re-refer to Com. on APPR. with recommendation: To Consent Calendar. (Ayes 16. Noes 0.) (April 17). (Amended text released 4/22/2024)	04/17/2024 - Assembly APPR.			Low	Transportation
AB 2147	Mathis	Clean Transportation Program: hydrogen-fueling stations: report: job creation and workforce development.	4/1/2024	04/09/2024 - From committee: Do pass and re-refer to Com. on APPR. with recommendation: To Consent Calendar. (Ayes 15. Noes 0.) (April 8). Re-referred to Com. on APPR.	04/08/2024 - Assembly APPR.			Low	Transportation
AB 2234	Boerner	Vehicles: electric bicycles.	4/17/2024	04/18/2024 - Re-referred to Com. on TRANS.	02/26/2024 - Assembly TRANS.			Low	Transportation
AB 2290	Friedman	Transportation: Class III bikeways: bicycle facilities: Bikeway Quick-Build Project Pilot Program.	4/1/2024	04/09/2024 - From committee: Do pass and re-refer to Com. on APPR. (Ayes 11. Noes 4.) (April 8). Re-referred to Com. on APPR.	04/08/2024 - Assembly APPR.			Low	Transportation
AB 2325	Lee	San Francisco Bay Area Rapid Transit District: officers: designation and appointment.		02/26/2024 - Referred to Com. on L. GOV.	02/26/2024 - Assembly L. GOV.			Low	Transportation
AB 2427	McCarthy	Electric vehicle charging stations: permitting: curbside charging.	4/2/2024	04/11/2024 - Coauthors revised. From committee: Do pass and re-refer to Com. on TRANS. (Ayes 9. Noes 0.) (April 10). Re-referred to Com. on TRANS.	04/10/2024 - Assembly TRANS.			Low	Transportation
AB 2448	Jackson	Electric Vehicle Economic Opportunity Zone: County of Riverside.		04/16/2024 - From committee: Do pass and re-refer to Com. on APPR. (Ayes 7. Noes 0.) (April 16). Re-referred to Com. on APPR.	04/16/2024 - Assembly APPR.			Low	Transportation
AB 2535	Bonta	Trade Corridor Enhancement Program.	4/9/2024	04/10/2024 - Re-referred to Com. on TRANS. In committee: Hearing postponed by committee.	03/04/2024 - Assembly TRANS.			Low	Transportation
AB 2559	Petrie-Norris	Local planning: electric vehicle service equipment: permitting delays.	3/21/2024	04/16/2024 - From committee: Do pass and re-refer to Com. on APPR. with recommendation: To Consent Calendar. (Ayes 7. Noes 0.) (April 16). Re-referred to Com. on APPR.	04/16/2024 - Assembly APPR.			Low	Transportation
AB 2678	Wallis	Vehicles: high-occupancy vehicle lanes.	3/18/2024	04/09/2024 - From committee: Do pass and re-refer to Com. on APPR. (Ayes 15. Noes 0.) (April 8). Re-referred to Com. on APPR.	04/08/2024 - Assembly APPR.			Low	Transportation
AB 2697	Irwin	Transportation electrification: electric vehicle charging infrastructure.	4/9/2024	04/16/2024 - Coauthors revised. From committee: Do pass and re-refer to Com. on U. & E. (Ayes 14. Noes 0.) (April 15). Re-referred to Com. on U. & E.	04/15/2024 - Assembly U. & E.			Low	Transportation
AB 3219	Sanchez	Advanced Clean Fleets Regulation: local governments.	3/11/2024	03/12/2024 - Re-referred to Com. on TRANS.	03/11/2024 - Assembly TRANS.			Low	Transportation
SB 532	Wiener	San Francisco Bay area toll bridges: tolls: transit operating expenses.	6/29/2023	08/23/2023 - August 23 set for first hearing canceled at the request of author.	07/05/2023 - Assembly APPR.			Low	Transportation
SB 768	Caballero	California Environmental Quality Act: State Air Resources Board: vehicle miles traveled: study.	1/11/2024	01/29/2024 - Read third time. Passed. (Ayes 34. Noes 4.) Ordered to the Assembly. In Assembly. Read first time. Held at Desk.	01/29/2024 - Assembly DESK	Board Approval 4/19/2023	Work with Author	Medium	Transportation
SB 1031	Wiener	San Francisco Bay area: local revenue measure: transportation improvements.	4/16/2024	04/16/2024 - From committee with author's amendments. Read second time and amended. Re-referred to Com. on TRANS.	04/03/2024 - Senate TRANS.			Medium	Transportation
SB 1393	Niello	Advanced Clean Fleets Regulation Appeals Advisory Committee.		04/03/2024 - April 3 set for first hearing. Failed passage in committee. (Ayes 3. Noes 1.) Reconsideration granted.	02/29/2024 - Senate E.Q.			Low	Transportation
AB 1951	Fong, Vince	California Environmental Quality Act: exemption: roadside wildfire prevention projects.	3/21/2024	04/01/2024 - Re-referred to Com. on NAT. RES.	02/12/2024 - Assembly NAT. RES.			Low	Wildfire/Smoke/PSPS

Bill #	Author	Subject	Last Amended	Last Status - As of 4/22/2024	Location	Notes	Position	Priority (Low/Medium/High)	Category	
AB 2330	Holden	Endangered species: incidental take: wildfire preparedness activities.	4/1/2024	04/02/2024 - Re-referred to Com. on W., P., & W.	02/26/2024 - Assembly W.,P. & W.			Low	Wildfire/Smoke/PSPS	
SB 310	Dodd	Prescribed fire: civil liability; cultural burns.	6/28/2023	09/01/2023 - Failed Deadline pursuant to Rule 61(a)(11). (Last location was APPR. SUSPENSE FILE on 8/23/2023)(May be	09/01/2023 - Assembly 2 YEAR			Low	Wildfire/Smoke/PSPS	
SB 945	Alvarado-Gil	The Wildfire Smoke and Health Outcomes Data Act.	3/21/2024	04/17/2024 - From committee: Do pass and re-refer to Com. on APPR with recommendation: To consent calendar. (Ayes 7.	04/17/2024 - Senate APPR.			Low	Wildfire/Smoke/PSPS	
SB 1176	Niello	Wildfires: workgroup: toxic heavy metals.		04/11/2024 - Set for hearing April 24.	04/09/2024 - Senate E.Q.			Low	Wildfire/Smoke/PSPS	
Total Active Bills								155	Low: Medium: High:	133 17 5

AMENDED IN ASSEMBLY APRIL 4, 2024
AMENDED IN ASSEMBLY MARCH 21, 2024
CALIFORNIA LEGISLATURE—2023–24 REGULAR SESSION

ASSEMBLY BILL

No. 2851

Introduced by Assembly Member Bonta

February 15, 2024

An act to add Section 25150.87 to the Health and Safety Code, relating to air pollution.

LEGISLATIVE COUNSEL'S DIGEST

AB 2851, as amended, Bonta. Metal shredding facilities: fence-line *air quality* monitoring.

~~Existing law imposes various limitations on emissions of air contaminants for the control of air pollution from vehicular and nonvehicular sources. Existing law generally designates the State Air Resources Board as the state agency with the primary responsibility for the control of vehicular air pollution and air pollution control and air quality management districts with the primary responsibility for the control of air pollution from all sources other than vehicular sources.~~

Existing law defines a “fence-line monitoring system,” for purposes of specified laws requiring the monitoring of toxic air contaminants from nonvehicular sources, to mean monitoring equipment that measures and records air pollutant concentrations at or adjacent to a stationary source that may be useful for detecting or estimating emissions of pollutants from the source, including the quantity of fugitive emissions, and in supporting enforcement efforts.

Existing law requires the Department of Toxic Substances Control to adopt, and revise when appropriate, standards and regulations for the

management of hazardous wastes to protect against hazards to the public health, to domestic livestock, to wildlife, or to the environment, including the operation of metal shredding facilities for appliance recycling. *Existing law authorizes the department to collect an annual fee from all metal shredding facilities that are subject to the requirements of the hazardous waste control laws, and to deposit those fees into a subaccount in the Hazardous Waste Control Account. Existing law makes those moneys available to the department, upon appropriation by the Legislature, to reimburse the department's costs to implement the hazardous waste control laws applicable to metal shredder facilities.*

This bill would require, on or before July 1, 2025, the department, in consultation with ~~the state board and~~ affected local air pollution control and air quality management districts, to develop ~~standards requirements~~ for facilitywide fenceline air quality monitoring at metal shredding facilities. ~~The bill would require the standards to require monitoring of specified substances, such as lead and zinc: facilities. Those requirements would include, among other things, monitoring light fibrous material, lead, zinc, cadmium, and any other substance required to be monitored by the department, and a requirement that, if the monitoring indicates a potential adverse impact on air quality or public health, the local public health department issue a community notification, as provided. The bill would also require each local public health department to issue a community notification regarding the adverse impacts on air quality and public health as a result of the operation of metal shredding facilities in that jurisdiction, as provided, and to provide a biannual assessment to the local governmental entity for the jurisdiction in which the metal shredding facility is located. all metal shredding facilities that are subject to the hazardous waste control laws to implement the fenceline air quality monitoring requirements. The bill would require the department to ensure the successful oversee and enforce the implementation of those the fenceline air quality monitoring standards requirements on or before December 31, 2025. The bill would also authorize any regulatory costs incurred by the department in implementing the bill's requirements to be reimbursed from the subaccount in the Hazardous Waste Control Account. By imposing new duties on local public health departments, the bill would impose a state-mandated local program.~~

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:

1 SECTION 1. Section 25150.87 is added to the Health and
2 Safety Code, to read:

3 25150.87. (a) On or before July 1, 2025, the department, in
4 consultation with ~~the State Air Resources Board and~~ affected local
5 air pollution control and air quality management districts, shall
6 develop ~~standards~~ *requirements* for facilitywide fence-line air
7 quality monitoring at metal shredding facilities, as defined in
8 Section 25150.82, that are subject to this chapter.

9 (b) ~~The standards requirements developed pursuant to~~
10 subdivision (a) shall ~~do~~ *include, but not be limited to*, all of the
11 following:

12 (1) ~~Require monitoring of the following substances previously~~
13 ~~identified by the department: Monitoring of light fibrous material,~~
14 ~~lead, zinc, cadmium, and nickel. These standards may also require~~
15 ~~the monitoring of additional substances: nickel, and any other~~
16 ~~substance required to be monitored by the department.~~

17 (2) ~~Require each local public health department to issue a~~
18 ~~community notification regarding the adverse impacts on air quality~~
19 ~~and public health as a result of the operation of metal shredding~~
20 ~~facilities in that jurisdiction and assist in identifying the underlying~~
21 ~~causes of the air pollution.~~

22 (3) ~~Require each local public health department to provide a~~
23 ~~biannual assessment to the local governmental entity for the~~
24 ~~jurisdiction in which the metal shredding facility is located.~~

25 (2) *Monitoring at prescribed frequencies of substances*
26 *monitored pursuant to paragraph (1).*

27 (3) *Reporting on the results of the monitoring required pursuant*
28 *to this subdivision to the department, the local air district or local*

1 *air quality management district, and the local public health*
2 *department.*

3 *(4) If the monitoring required pursuant to this subdivision*
4 *indicates a potential adverse impact on air quality or public health,*
5 *requiring the local public health department to issue a community*
6 *notification to the public for the area in which the metal shredding*
7 *facility is located that informs the public that the facility is causing*
8 *the potential adverse impact on air quality or public health.*

9 *(c) All metal shredding facilities subject to this chapter shall*
10 *implement the facilitywide fenceline air quality monitoring*
11 *requirements developed pursuant to this section.*

12 ~~(e)~~
13 *(d) The department shall ~~ensure the successful~~ oversee and*
14 *enforce the implementation of the facilitywide fenceline air quality*
15 *monitoring ~~standards~~ requirements developed pursuant to this*
16 *section on or before December 31, 2025.*

17 *(e) Any regulatory costs incurred by the department in*
18 *implementing this section may be reimbursed by the fee on metal*
19 *shredding facilities imposed pursuant to subdivision (a) of Section*
20 *25150.84.*

21 SEC. 2. If the Commission on State Mandates determines that
22 this act contains costs mandated by the state, reimbursement to
23 local agencies and school districts for those costs shall be made
24 pursuant to Part 7 (commencing with Section 17500) of Division
25 4 of Title 2 of the Government Code.

O



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

AGENDA: 18

State Legislative Bills Update

**Board of Directors Meeting
May 1, 2024**

**Alan Abbs
Legislative Officer
aabbs@baaqmd.gov**

Presentation Outcome



- The Board of Directors (Board) will consider adopting a position on a pending legislative bill, as recommended by staff.
- Note – typically, staff presents recommendations on pending legislative bills to the Policy, Grants, and Technology Committee (Committee) for the Committee’s consideration to recommend to the Board that the Board take positions on high-priority bills where appropriate. However, as there was no Committee meeting in April due to lack of quorum, staff is presenting their recommendation on a pending legislative bill directly to the Board for the Board’s consideration.

Presentation Outline



Staff will present a recommendation to the Board for the following pending legislative bill:

- **Assembly Bill (AB) 2851 (Bonta)** - Metal shredding facilities: fence-line air quality monitoring.

Presentation Requested Action



Support

- AB 2851 (Bonta) - Metal shredding facilities: fence-line air quality monitoring.

Action Item: AB 2851 (Bonta)



Metal shredding facilities: fence-line air quality monitoring.

If passed, AB 2851 would require the Department of Toxic Substances Control (DTSC), in consultation with affected air districts, to develop requirements for facility-wide fenceline air quality monitoring at metal shredding facilities. If the monitoring required indicates a potential adverse impact on air quality or public health, the local health department will issue a community notification to the public. DTSC shall oversee and enforce the implementation of the facility-wide fenceline air quality monitoring requirements developed on or before December 31, 2025.

Action Item: AB 2851 (Bonta) (cont.)



Metal shredding facilities: fence-line air quality monitoring.

- Double-referred to the Assembly Environmental Safety and Toxic Materials Committee and the Assembly Natural Resources Committee.
 - Environmental Safety and Toxic Materials – Passed (Vote: 5-2)
 - Natural Resources – Passed (Vote: 8-2)
- Next Step: Assembly Appropriations Committee

Staff Recommendation: Support

Recap: Presentation Requested Action



Support

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Questions / Discussion