



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

BOARD OF DIRECTORS REGULAR MEETING

June 21, 2017

A meeting of the Bay Area Air Quality Management District Board of Directors will be held at 9:45 a.m. in the 1st Floor Board Room at the Air District Headquarters, 375 Beale Street, San Francisco, California 94105.

Questions About an Agenda Item

The name, telephone number and e-mail of the appropriate staff Person to contact for additional information or to resolve concerns is listed for each agenda item.

Meeting Procedures

The public meeting of the Air District Board of Directors begins at 9:45 a.m. The Board of Directors generally will consider items in the order listed on the agenda. However, any item may be considered in any order.

After action on any agenda item not requiring a public hearing, the Board may reconsider or amend the item at any time during the meeting.

This meeting will be webcast. To see the webcast, please visit <http://www.baaqmd.gov/about-the-air-district/board-of-directors/resolutionsagendasminutes> at the time of the meeting.

Public Comment Procedures

Persons wishing to make public comment must fill out a Public Comment Card indicating their name and the number of the agenda item on which they wish to speak, or that they intend to address the Board on matters not on the Agenda for the meeting.

Public Comment on Non-Agenda Matters, Pursuant to Government Code Section 54954.3 Persons submitting Public Comment Cards indicating they wish to speak on matters not on the agenda for the meeting will have three minutes each to address the Board on matters not on the agenda. All Public Comment Cards must be submitted in person to the Clerk of the Boards at the location of the meeting and prior to commencement of the meeting. Speakers typically are allowed three minutes each to speak, however, the Chairperson or other Board Member presiding at the meeting may limit the public comment for all speakers to fewer than three minutes per speaker, or make other rules to ensure that all speakers have an equal opportunity to be heard.

Members of the Board may engage only in very brief dialogue regarding non-agenda matters, and may refer issues raised to District staff for handling. In addition, the Chairperson may refer issues raised to appropriate Board Committees to be placed on a future agenda for discussion.

Public Comment on Agenda Items The public may comment on each item on the agenda as the item is taken up. Public Comment Cards for items on the agenda must be submitted in person to the Clerk of the Boards at the location of the meeting and prior to the Board taking up the particular item. Where an item was moved from the Consent Calendar to an Action item, no speaker who has already spoken on that item will be entitled to speak to that item again.

Speakers typically are allowed three minutes each to speak, however, the Chairperson or other Board Member presiding at the meeting may limit the public comment for all speakers to fewer than three minutes per speaker, or make other rules to ensure that all speakers have an equal opportunity to be heard. The Chairperson or other Board Member presiding at the meeting may, with the consent of persons representing both sides of an issue, allocate a block of time (not to exceed six minutes) to each side to present their issue.

BOARD OF DIRECTORS REGULAR MEETING AGENDA

WEDNESDAY
JUNE 21, 2017
9:45 A.M.

BOARD ROOM
1ST FLOOR

CALL TO ORDER

Chairperson, Liz Kniss

Opening Comments
Roll Call
Pledge of Allegiance

The Chair shall call the meeting to order and make opening comments. The Clerk of the Boards shall take roll of the Board members. The Chair shall lead the Pledge of Allegiance.

COMMENDATIONS/PROCLAMATIONS/AWARDS

1. *The Board of Directors will recognize outgoing Larry Greene, for his service, leadership, and dedication to protecting air quality in the Bay Area.*

CONSENT CALENDAR (ITEMS 2 –7)

Staff/Phone (415) 749-

2. Minutes of the Board of Directors Special Meeting Budget Hearing of May 17, 2017 and Special Meeting of May 31, 2017

Clerk of the Boards/5073

The Board of Directors will consider approving the draft minutes of the Board of Directors Special Meeting Budget Hearing of May 17, 2017 and Special Meeting of May 31, 2017.

3. Board Communications Received from May 31, 2017 through June 20, 2017

J. Broadbent/5052

jbroadbent@baaqmd.gov

A copy of communications directed to the Board of Directors received by the Air District from May 31, 2017 through June 20, 2017, if any, will be at each Board Member's place.

4. Air District Personnel on Out-of-State Business Travel

J. Broadbent/5052

jbroadbent@baaqmd.gov

In accordance with Section 5.4 (b) of the Air District's Administrative Code, Fiscal Policies and Procedures Section, the Board is hereby notified that the attached memorandum lists Air District personnel who have traveled on out-of-state business in the preceding month.

5. Notices of Violations Issued and Settlements in Excess of \$10,000 in the month of May 2017
J. Broadbent/5052
jbroadbent@baaqmd.gov

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 May 2017.

6. Authorization to Execute Contract Amendments for My Air Online Development Services
J. Broadbent/5052
jbroadbent@baaqmd.gov

The Board of Directors will consider authorizing the Executive Officer/APCO to execute contract amendments to extend three (3) contracts for the development of the online permitting system in an amount not to exceed \$542,437.

7. Authorization to Execute Contract Amendments for Cloud Infrastructure & Data Analytics
J. Broadbent/5052
jbroadbent@baaqmd.gov

The Board of Directors will consider authorizing the Executive Officer/APCO to execute contract amendments for three (3) contracts for existing vendors assisting with cloud infrastructure and data analytics, in an amount not to exceed \$482,353.

COMMITTEE REPORTS

8. Report of the **Climate Protection Committee** Meeting of May 18, 2017
CHAIR: T. Barrett
J. Broadbent/5052
jbroadbent@baaqmd.gov

The Committee received the following reports:

A) Statewide Scoping Plan Update

1) None; receive and file.

B) Plan Bay Area 2040

1) None; receive and file.

C) Implementation of the 2017 Clean Air Plan

1) None; receive and file.

9. Report of the **Mobile Source Committee** Meeting of May 25, 2017

CHAIR: K. Mitchoff

J. Broadbent/5052
jbroadbent@baaqmd.gov

The Committee received the following reports:

A) Fiscal Year Ending (FYE) 2018 Transportation Fund for Clean Air (TFCA) Regional Fund Policies and Evaluation Criteria and a Proposed Amendment to One FYE 2017 TFCA Regional Fund Policy

- 1) *Approve the proposed FYE 2018 TFCA Regional Fund Policies and Evaluation Criteria presented in Attachment A; and*
- 2) *Approve the proposed amendment to the readiness policy in the FYE 2017 TFCA Regional Fund Policies*

B) Fiscal Year Ending (FYE) 2018 Transportation Fund for Clean Air (TFCA) County Program Manager (CPM) Expenditure Plans

- 1) *Approve the allocation of new FYE 2018 TFCA CPM Funds listed in Table 1; and*
- 2) *Authorize the Executive Officer/APCO to enter into funding agreements with the CPMs for the total funds to be programmed in FYE 2018, listed in Table 1*

C) Update on Regional Efforts to Deploy Electric Vehicles and Infrastructure

- 1) *None; receive and file.*

10. Report of the **Personnel Committee** Meeting of June 2, 2017

CHAIR: J. Spring

J. Broadbent/5052
jbroadbent@baaqmd.gov

The Committee received the following report:

A) Conduct Interviews and Consider Recommending Board of Directors Approval of Candidates for Appointment to the Air District's Hearing Board

- 1) *The appointment of Danny Cullenward as Attorney Category Alternate.*

PUBLIC HEARINGS

11. Public Hearing to Consider Adoption of Proposed Amendments to Air District Regulation 3: Fees and Approval of the Filing of a Notice of Exemption from the California Environmental Quality Act

J. Broadbent/5052
jbroadbent@baaqmd.gov

The Board of Directors will consider adoption of proposed amendments to Air District Regulation 3: Fees that would become effective on July 1, 2017, and approval of a Notice of Exemption from the California Environmental Quality Act.

12. Public Hearing to Consider Adoption of the Air District's Proposed Budget for Fiscal Year Ending (FYE) 2018

J. Broadbent/5052

jbroadbent@baaqmd.gov

The Board of Directors will hold a final Public Hearing and will consider the adoption of a resolution to approve the Proposed Budget for FYE 2018 and various budget related actions.

13. Continuation of Board Consideration of New Regulation 12: Miscellaneous Standards of Performance, Rule 16: Petroleum Refining Facility-Wide Emissions Limits (Rule 12-16) for Adoption and Certification of an Environmental Impact Report (EIR) Section Dealing with Rule 12-16

J. Broadbent/5052

jbroadbent@baaqmd.gov

The Board of Directors will receive a continuation of testimony and consider staff's recommendation to adopt New Regulation 12, Rule 16, and certify the associated EIR pursuant to the California Environmental Quality Act (CEQA).

CLOSED SESSION

14. **CONFERENCE WITH LEGAL COUNSEL**

ANTICIPATED LITIGATION (Government Code Section 54956.9 (d)(2))

Significant exposure to litigation pursuant to paragraph (2) of subdivision (d) of Section 54956.9.

OPEN SESSION

PUBLIC COMMENT ON NON-AGENDA MATTERS

15. **Public Comment on Non-Agenda Items, Pursuant to Government Code Section 54954.3**

Speakers will be allowed one minute each to address the Board on non-agenda matters.

BOARD MEMBERS' COMMENTS

16. *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)*

OTHER BUSINESS

17. Report of the Executive Officer/APCO

18. Chairperson's Report

19. Time and Place of Next Meeting:

Wednesday, July 19, 2017, at 375 Beale Street, San Francisco, CA 94109 at 9:45 a.m.

20. Adjournment

The Board meeting shall be adjourned by the Board Chair.

CONTACT:

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

(415) 749-5016
FAX: (415) 928-8560
BAAQMD homepage:
www.baaqmd.gov

- To submit written comments on an agenda item in advance of the meeting. Please note that all correspondence must be addressed to the “Members of the Board of Directors” and received at least 24 hours prior, excluding weekends and holidays, in order to be presented at that Board meeting. Any correspondence received after that time will be presented to the Board at the following meeting.
- To request, in advance of the meeting, to be placed on the list to testify on an agenda item.
- 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 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, Rex Sanders, at (415) 749-4951 or by email at rsanders@baaqmd.gov.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
375 BEALE STREET, SAN FRANCISCO, CALIFORNIA 94105
FOR QUESTIONS PLEASE CALL (415) 749-5016 or (415) 749-4941

EXECUTIVE OFFICE:
MONTHLY CALENDAR OF AIR DISTRICT MEETINGS

JUNE 2017

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Executive Committee <i>(Meets on the 3rd Monday of each Month)</i> - CANCELLED	Monday	19	9:30 a.m.	1 st Floor Board Room
Board of Directors Stationary Source Committee <i>(Meets on the 3rd Monday of each Month)</i> - CANCELLED	Monday	19	10:30 a.m.	1 st Floor Board Room
Board of Directors Regular Meeting <i>(Meets on the 1st & 3rd Wednesday of each Month)</i>	Wednesday	21	9:45 a.m.	1 st Floor Board Room
Board of Directors Mobile Source Committee <i>(Meets on the 4th Thursday of each Month)</i> - CANCELLED	Thursday	22	9:30 a.m.	1 st Floor Board Room
Board of Directors Budget & Finance Committee <i>(Meets on the 4th Wednesday of each Month)</i> - CANCELLED	Wednesday	28	9:30 a.m.	1st Floor, Yerba Buena Room #109

JULY 2017

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Regular Meeting <i>(Meets on the 1st & 3rd Wednesday of each Month)</i> - CANCELLED	Wednesday	5	9:45 a.m.	1 st Floor Board Room
Board of Directors Executive Committee <i>(Meets on the 3rd Monday of each Month)</i>	Monday	17	9:30 a.m.	1 st Floor Board Room
Board of Directors Stationary Source Committee <i>(Meets on the 3rd Monday of each Month)</i>	Monday	17	10:30 a.m.	1 st Floor Board Room
Board of Directors Regular Meeting <i>(Meets on the 1st & 3rd Wednesday of each Month)</i>	Wednesday	19	9:45 a.m.	1 st Floor Board Room
Board of Directors Climate Protection Committee <i>(Meets on the 3rd Thursday of every other Month)</i>	Thursday	20	9:30 a.m.	1 st Floor Board Room
Advisory Council Meeting <i>(Meets on Monday Quarterly)</i>	Monday	24	9:45 a.m.	1 st Floor Board Room
Board of Directors Budget & Finance Committee <i>(Meets on the 4th Wednesday of each Month)</i>	Wednesday	26	9:30 a.m.	1st Floor, Yerba Buena Room #109
Board of Directors Mobile Source Committee <i>(Meets on the 4th Thursday of each Month)</i>	Thursday	27	9:30 a.m.	1 st Floor Board Room

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Liz Kniss and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: June 7, 2017

Re: Minutes of the Board of Directors Special Meeting Budget Hearing of May 17, 2017
and Special Meeting of May 31, 2017

RECOMMENDED ACTION

Approve the attached draft minutes of the Board of Directors Special Meeting Budget Hearing of May 17, 2017 and Special Meeting of May 31, 2017.

DISCUSSION

Attached for your review and approval are the draft minutes of the Board of Directors Special Meeting Budget Hearing of May 17, 2017 and Special Meeting of May 31, 2017.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Marcy Hiratzka
Reviewed by: Maricela Martinez

Attachment 2A: Draft Minutes of the Board of Directors Meeting/Budget Hearing of May 17, 2017

Attachment 2B: Draft Minutes of the Board of Directors Special Meeting of May 31, 2017

AGENDA: 2A - ATTACHMENT

Draft Minutes - Board of Directors Special Meeting / Budget Hearing of May 17, 2017

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

Board of Directors Special Meeting / Budget Hearing
Wednesday, May 17, 2017

DRAFT MINUTES

Note: Audio and video recordings of the meeting are available on the website of the Bay Area Air Quality Management District at <http://www.baaqmd.gov/about-the-air-district/board-of-directors/resolutionsagendasminutes>

1. CALL TO ORDER

Chairperson, Liz Kniss, called the meeting to order at 9:53 a.m.

Roll Call:

Present: Chairperson Liz Kniss, Vice Chairperson David Hudson, Secretary Katie Rice; and Directors Margaret Abe-Koga, Teresa Barrett, Pauline Russo Cutter, John Gioia, Scott Haggerty, Rebecca Kaplan, Doug Kim, Hilary Ronen, Mark Ross, Pete Sanchez, Jeff Sheehy, Rod Sinks, Jim Spring, Brad Wagenknecht, and Shirlee Zane.

Absent: Directors David J. Canepa, Cindy Chavez, Carole Groom, Tyrone Jue, Nate Miley, and Karen Mitchoff.

2. PUBLIC COMMENT ON NON-AGENDA MATTERS:

No requests received.

PUBLIC HEARING

3. First Public Hearing to Consider Testimony on the Air District's Proposed Budget for Fiscal Year Ending (FYE) 2018. A Final Public Hearing is scheduled for Wednesday, June 21, 2017 to Consider Adoption of the Proposed Budget for FYE 2018.

Chair Kniss opened the public hearing.

Jack Broadbent, Executive Officer/Air Pollution Control Officer, introduced Jeff McKay, Deputy Air Pollution Control Officer, who gave the staff presentation *Special Meeting of the Board of Directors Budget Hearing*, including: outline; current Fiscal Year - projections FYE 2017; financial history - actions taken during downturn; services & supplies & capital (actuals); District Reserve funds - audited values excluding building proceeds; FYE 2018 Proposed Budget overview and increase; General Fund Revenue sources and expenditures; FYE 2018 proposed fees; FYE 2018 Full Time Equivalent staffing level; additional staffing; FYE 2018 use of Reserves; Clean Air Plan implementation; \$1.7 meteorology equipment; permit processing and Health Risk Assessment;

Technology Implementation Office; Reserves policy; fund balance and unfunded liabilities; CalPERS pension retirement overview, funding ratio, change in/estimated impact to rate of return, and possible strategy to address impact; Other Post-Employment Benefits (OPEB) retirement medical and overview; budget summary FYE 2018; and schedule.

NOTED PRESENT: Director Haggerty was noted present at 10:00 a.m.; Director Zane was noted present at 10:09 a.m.; and Director Ross was noted present at 10:17 a.m.

Public Comments:

No requests received.

Board Comments:

The Board and staff discussed Board members' jurisdictions' challenges with CalPERS and experiences with Public Agency Retirement Services (PARS); the District's short-term (versus long-term) staffing needs; the District's plans to retain the services of a consultant who can make informed recommendations to the District of how to pay down its OPEB obligations; the Board's suggestion of having staff recommend pre-funds for both CalPERS pension and OPEB, allocated by a target date, with the provision that the Board must vote *not* to adopt the recommendations; the Board's concern about the anticipated diversion of resources from core engineering functions to Health Risk Analyses, and the Board's request for a chart of staffing resource tradeoffs that would result if Proposed Regulations 12-16, 11-18, and 13-1 were implemented; the District's practice of balancing its budget with fund balance at the end of each year; new ways in which the District's reserves could be used, including loans for smaller businesses that might need to borrow funds to pay for fees associated with future District regulation; why the District has chosen not to seek a credit rating; the prospect of a revolving loan fund connected to the District's new Technology Implementation Office (TIO); the need to ensure that the District is appropriately staffed due to new regulation and the Clean Air Plan implementation; the pros and cons of pre-funding unfunded liabilities without first establishing a holistic strategy; the feasibility of a policy on OPEB and pension obligation payments as a prelude to considering bonds; the feasibility of dividing the implementation of Proposed Rule 11-18 into phases (based on size of the facilities and/or volumes of their emissions) in an effort to decrease the anticipated diversion of the District's staffing resources; how this Air District compares to other Air Districts in California regarding Rate of paydown of unfunded liability, based on CalPERS' determinations; the need for target dates for funding policies for unfunded liabilities; and the feasibility of adopting a policy regarding uses of rollover funds.

Chair Kniss closed the public hearing.

Board Action:

None; receive and file.

OTHER BUSINESS

4. BOARD MEMBERS' COMMENTS

None.

5. TIME AND PLACE OF NEXT MEETING

Wednesday, June 21, 2017, Bay Area Air Quality Management District Office, 1st Floor Board Room, 375 Beale Street, San Francisco, CA 94105 at 9:45 a.m.

6. ADJOURNMENT

The meeting adjourned at 10:58 a.m.

Marcy Hiratzka
Clerk of the Boards

AGENDA 2B – ATTACHMENT

Draft Minutes - Board of Directors Special Meeting of May 31, 2017

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

Board of Directors Special Meeting
Wednesday, May 31, 2017

DRAFT MINUTES

*Note: Audio recordings of the meeting are available on the website of the
Bay Area Air Quality Management District at
<http://www.baaqmd.gov/about-the-air-district/board-of-directors/resolutionsagendasminutes>*

CALL TO ORDER:

1. **Opening Comments:** Chairperson, Liz Kniss, called the meeting to order at 9:55 a.m.

Roll Call:

Present: Chairperson Liz Kniss; Vice Chairperson Dave Hudson; Secretary Katie Rice; and Directors Margaret Abe-Koga, Teresa Barrett, David J. Canepa, Cindy Chavez, Pauline Russo Cutter, John Gioia, Scott Haggerty, Rebecca Kaplan, Doug Kim, Karen Mitchoff, Hillary Ronen, Mark Ross, Pete Sanchez, Jeff Sheehy, Jim Spering, Brad Wagenknecht, and Shirlee Zane.

Absent: Directors Carole Groom, Tyrone Jue, Nate Miley, and Rod Sinks.

CONSENT CALENDAR (ITEMS 2 – 3)

2. **Minutes of the Board of Directors Regular Meeting of May 17, 2017**
3. **Board Communications Received from May 17, 2017 through May 30, 2017**

Public Comments:

No requests received.

Board Comments:

None.

Board Action:

Director Wagenknecht made a motion, seconded by Vice Chair Hudson, to **approve** the Consent Calendar Items 2 through 3, inclusive; and the motion **carried** by the following vote of the Board:

AYES: Abe-Koga, Barrett, Canepa, Chavez, Cutter, Gioia, Haggerty, Hudson, Kaplan, Kim, Kniss, Mitchoff, Rice, Ronen, Sanchez, Sheehy, Spering, Wagenknecht, and Zane.
NOES: None.
ABSTAIN: None.
ABSENT: Groom, Jue, Miley, Ross, and Sinks.

PUBLIC HEARING

4. Public Hearing to Consider Staff's Evaluation of Regulation 12, Rule 16: Petroleum Refining Facility-Wide Emissions Limits (Rule 12-16) and the Associated Environmental Impact Report (EIR)

Jack Broadbent, Executive Officer/Air Pollution Control Officer, introduced this item with a preliminary presentation entitled *Regulation 12, Rule 16*, including: staff recommendation; why this approach; and next steps.

Mr. Broadbent introduced Richard Corey, Executive Officer of the California Air Resources Board (CARB), and asked Mr. Corey to give remarks regarding how staff's recommendation will work in concert with actions that are anticipated to be part of CARB's revised Scoping Plan. Mr. Corey discussed the historical partnerships of California Air Districts and CARB; how the update of CARB's Scoping Plan is his key priority; the environmental justice community's need for additional community protection, community monitoring data, transparency of air pollution data, and opportunities for further reductions of all air pollutants; CARB's review of toxics programs, measures, and regulations to address the increasing susceptibility of youth to toxic pollutants; the establishment of a California Air Pollution Control Officers Association (CAPCOA) working group that focuses on additional industrial-source measures; and the District's focus on greenhouse gas (GHG) reductions. Mr. Broadbent thanked Mr. Corey for his leadership and Director Gioia acknowledged the strong partnership between the District and CARB.

Mr. Broadbent then introduced Eric Stevenson, Director of Meteorology, Measurement, and Rules, who gave the staff presentation *Regulation 12, Rule 16*, including: staff recommendation; summary of presentation; refinery rulemaking history – Board Resolution 2014-07, progress, work on Rule 12-16; Rule 12-16; criteria pollutants addressed through source-oriented rules; Draft Rule 11-18 addresses localized impacts; addressing GHG; timeline for proposed next steps for Rule 12-16; and further action.

Mr. Broadbent then thanked the refinery industry, labor community, and community advocates for their input and involvement up until this point in the rulemaking process.

Chair Kniss opened the hearing to public input.

Public Comments:

Public comments were given by the following speakers:

Greg Karras, Communities for a Better Environment (CBE); Lipo Chanthanasak, Asian Pacific Environmental Network (APEN); Heather Kuiper, DrPH; Ben Ostro, PhD; Robert Gould, MD;

Johnathan Heller, PhD; Emiliano Amaro, CBE; Alex Cohen, CBE; Puja Dahal, APEN; Laura Gracia, CBE; Bob Brown, Western States Petroleum Association; Kim Ronan, Valero; Larry Chaset, 350 Bay Area; Bill Quinn, California Council for Environmental and Economic Balance; Claire Broome, 350 Bay Area; Sue Fisher Jones, Valero; Nicole Mendoza, Chevron; Ron Espinoza, United Steelworkers; Callie Nguyen, Chevron; Patrick Owens, Shell; Kathy Wheeler, Shell; Walt Gill, Chevron; Carolyn Norr, 350 Bay Area; Shawn Lee, Chevron; Steven Yang, Chevron; Matthew Buell, Tesoro; Jed Holtzman, 350 Bay Area; Greg Feere, Contra Costa Building Trades Council (CCBTC); Bill Whitney, CCBTC; Mark Brett, Anvil Corporation; Derrick Kualapai, United Association of Plumbers; George Kikes, Martinez resident; Steve Grillo, Performance Contracting, Inc.; Kathleen McAfee, San Francisco State University; Stew Plock, Silicon Valley Climate Action Alliance; Dennis Hicks, Richmond resident; Jeralyn Moran, Peninsula Interfaith Climate Action Network; John Sakamoto, Eichleay; Albert Kueffner, Alameda Interfaith Climate Action Network; Linda Weiner, Sierra Club; George Smith, East Bay Leadership Council; Lynn McGuire, Environmental Resources Management; Andres Soto, CBE; Harold Burnett, Crocket resident; Richard Gray, 350 Bay Area; Melanie Chopko, Thrive Street Choir; Tian Harter, Mountain View resident; Ratha Lai, APEN; Clover Mann, Rodeo resident; Culoz Davis, Rodeo resident; Tom Stewart, Martinez resident; Judith Sullivan, Benicians for a Safe and Healthy Community; Fern Burch, El Cerrito resident; Frank Koval, Communications Workers of America Local 9415; Jeff Kilbreth, Richmond Progressive Alliance; Kelly Jones, 350 Marin; Lisa Ristorucci, MVCAN.org; Paul Adler, Phillips 66; Marc Ventura, Phillips 66; Mike Miller, Phillips 66; Richard Black, Phillips 66; Mike Avila, Phillips 66; Tyson Bagley, Phillips 66; Deborah Behles, CBE; Kevin Bundy, Center for Biological Diversity; and Brittney King, Sierra Club.

Chair Kniss announced that public input had concluded and that the balance of the discussion would be limited to the members of the Board and staff.

Board Comments:

Director Gioia presented a motion for the Board to consider, containing the following seven provisions:

1. Direct staff to revise Rule 12-16 to cap GHG emissions from Bay Area refineries and to prepare a revised staff report and the Final EIR reflecting this revised rule; this revised staff report shall discuss GHG caps as a backstop to ensure that GHG emissions from refineries do not increase due to changing crude slates or other actions.

2. The revised staff report and Final EIR responses to comments shall further describe the co-pollutant health benefits of Rule 12-16, in particular with respect to fence line communities in close proximity to refineries, as well as the relationship of Rule 12-16 to the revised AB 32 Scoping Plan.

3. Bring the revised Rule 12-16, revised staff report and the Final EIR to the Board for consideration and action at the June 21, 2017 Board meeting.

4. Staff shall return to the Board no later than September 2017 with a plan of how to prioritize development of additional rules to achieve the goal of reducing criteria pollutants, including Particulate Matter (PM) emissions, from refineries by 20% by 2020.

5. Staff will collaborate with CARB and CAPCOA to identify, and facilitate implementation of measures to protect the health of fence line communities by reducing air pollutant emissions from

California refineries and to achieve the State's and District's climate goals by reducing GHG emissions.

6. Bring Rule 13-1 (Refinery Carbon Intensity Cap) or other measure(s) developed through the CARB/CAPCOA collaboration to reduce GHG and other air pollutant emissions from refineries to the Board for consideration as expeditiously as practicable.

7. Bring Rule 11-18 to the Board for consideration in September 2017 to reduce health risks from toxic air contaminants emitted by refineries and other stationary sources throughout the Bay Area.

Based on this proposed motion, the Board and staff discussed the compatibility of staff's revisions to Rule 12-16 and CARB's revised Scoping Plan; the refinery industry's concern that refineries will be shut down due to the implementation of the Rule 12-16; the District's willingness to listen to all stakeholders; the issue of protecting local communities versus global protection; how the District plans to monitor criteria pollutants that will have been removed from the original provisions of Rule 12-16, should the revised Rule be implemented; the need for additional and immediate stakeholder meetings regarding staff-proposed changes to Rule 12-16; how the revised Rule is to have no sunset provision; when implementation would take effect, if the Rule was adopted; how long it may take to implement a statewide GHG cap on refineries; Board members' confusion due to conflicting messages from CARB; the anticipated impact Rule 12-16 may have on refineries; whether or not the Rule is beyond the District's legal authority; probability of litigation upon adoption of the Rule and when that litigation might occur; the Board's request for a list of required upgrades that each refinery would have to make in order to modernize and comply with the revised Rule; the Board's request for staff to address long-term socioeconomic impacts upon Rule implementation prior to June 21, 2017; the need for an evaluation of the District's rulemaking process; the need for local action, especially considering the President's anticipated withdrawal from the Paris Agreement; the District-proposed three-week turnaround of creating a revised Rule 12-16 hearing package for public review, conducting additional socioeconomic and required refinery modification analyses, and receiving and responding to new public comments; staff's proposal of a six-month check in with the Board upon Rule adoption; and the Board's request to amend the language of the seventh provision of the proposed motion.

At the suggestion of Chair Kniss, and prior to the Board's vote on this item, Director Gioia, revised the seventh provision of the proposed motion as follows:

7. Bring Rule 11-18 to the Board for consideration as expeditiously as practicable ~~in September 2017~~ to reduce health risks from toxic air contaminants emitted by refineries and other stationary sources throughout the Bay Area.

Board Action:

Director Gioia made a motion described above, seconded by Director Kaplan, and the motion **carried** by the following vote of the Board:

AYES: Abe-Koga, Barrett, Chavez, Cutter, Gioia, Haggerty, Hudson, Kaplan, Kim, Kniss, Rice, Ronen, Ross, Sheehy, Wagenknecht, and Zane.
NOES: Mitchoff, Sanchez, and Sperring.
ABSTAIN: None.
ABSENT: Canepa, Groom, Jue, Miley, and Sinks.

PUBLIC COMMENT ON NON-AGENDA MATTERS

5. Public Comment on Non-Agenda Items, Pursuant to Government Code Section 54954.3

No requests received.

BOARD MEMBERS' COMMENTS

6. Board Members' Comments

None.

OTHER BUSINESS

7. Report of the Executive Officer/Air Pollution Control Officer

Mr. Broadbent's presentation on ozone seasons has been posted on the District website.

8. Chairperson's Report

None.

9. Time and Place of Next Meeting

Wednesday, June 21, 2017, at 375 Beale Street, San Francisco, CA 94105 at 9:45 a.m.

10. Adjournment

The meeting adjourned at 1:33 p.m.

Marcy Hiratzka
Clerk of the Boards

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Liz Kniss and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: June 6, 2017

Re: Board Communications Received from May 31, 2017 through June 20, 2017

RECOMMENDED ACTION

None; receive and file.

DISCUSSION

Copies of communications directed to the Board of Directors received by the Air District from May 31, 2017, through June 20, 2017, if any, will be at each Board Member's place at the June 21, 2017 Board meeting.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Karen Fremming
Reviewed by: Maricela Martinez

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Liz Kniss and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: June 6, 2017

Re: Air District Personnel on Out-of-State Business Travel

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

In accordance with Section 5.4 (b) of the Air District's Administrative Code, Fiscal Policies and Procedures Section, the Board is hereby notified of District personnel who have traveled on out-of-state business.

The report covers the out-of-state business travel for the month of May 2017. The monthly out-of-state business travel report is presented in the month following travel completion.

DISCUSSION

The following out-of-state business travel activities occurred in the month of May 2017:

- Jack Broadbent, Executive Officer/APCO, attended the National Association of Clean Air Agencies Spring Meeting, Washington, District of Columbia, May 1, 2017 – May 3, 2017
- David Vintze, Air Quality Planning Manager, attended the American Planning Association Annual Conference, New York, May 5, 2017 – May 9, 2017.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Stephanie Osaze
Reviewed by: Rex Sanders

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Liz Kniss and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: June 6, 2017

Re: Notices of Violations Issued and Settlements in Excess of \$10,000 in the month of
May 2017

RECOMMENDED ACTION

None; receive and file.

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 month prior to this report.

BUDGET CONSIDERATION/FINANCIAL IMPACT

The amounts of civil penalties collected are included in the Air District's general fund budget.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Brian C. Bunger

Attachment 5A: Notices of Violations for the Month of May 2017

NOTICES OF VIOLATIONS ISSUED

The following Notice(s) of Violations were issued in May 2017:

Alameda						
Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comments
Alta Bates Summit Medical Center	A7780	Oakland	A56335A	5/22/17	2-1-301	No Authority to Construct
Berkeley Farms Inc	B1596	Hayward	A55859A	5/5/17	2-1-302	No permit to operate since May 01, 2016
Berkeley Farms Inc	B1596	Hayward	A55860A	5/11/17	2-1-301	Unpermitted wastewater treatment system (unpermitted sources).
Berkeley Farms Inc	B1596	Hayward	A55860B	5/11/17	2-1-302	Unpermitted wastewater treatment system (unpermitted sources).
Berkeley Farms Inc	B1596	Hayward	A55862A	5/18/17	1-301	Public nuisance (excess odor complaints May 5, 2017).
P.W. Stephens Environmental Inc.	V8868	Hayward	A56890A	5/17/17	11-2-401.3	Late Notification
PARC Environmental, Livermore	X5693	Livermore	A56989A	5/25/17	11-2-304.3	Disposal at an improper disposal site
PARC Environmental, Livermore	X5693	Livermore	A56989B	5/25/17	11-2-304.6	No waste manifest
R.B. Construction Inc	W5350	Fremont	A56988A	5/15/17	11-2-303.6	Containment breach
R.B. Construction Inc	W5350	Fremont	A56988B	5/15/17	11-2-401.3	Failure to wait ten working days

Contra Costa						
Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comments
Air Liquide Large Industries US LP	B7419	Rodeo	A56411A	5/24/17	1-522.4	Failure to report SO2 monitor out of service
Air Liquide Large Industries US LP	B7419	Rodeo	A56412A	5/24/17	2-6-307	SO2 emissions exceeded p/c standard; RCA 07A33
Air Liquide Large Industries US LP	B7419	Rodeo	A56413A	5/24/17	2-6-307	– SO2 emissions exceeded p/c standard; RCA 07A50
Air Liquide Large Industries US LP	B7419	Rodeo	A56414A	5/24/17	1-522.8	Late reporting of monthly monitoring data
Henkel Corporation-Aerospace Group	B2855	Pittsburg	A55822A	5/18/17	2-1-301	No Authority to Construct
Henkel Corporation-Aerospace Group	B2855	Pittsburg	A55822B	5/18/17	2-1-302	No Permit to Operate
John Muir Medical Center	B0742	Walnut Creek	A56245A	5/4/17	9-7-403	No annual source testing
John Muir Medical Center	B0742	Walnut Creek	A56245B	5/4/17	9-7-506	No annual source testing
Kaiser Antioch Deer Valley	B6855	Antioch	A57303A	5/18/17	9-7-403	No demonstration of initial compliance
Kaiser Antioch Deer Valley	B6855	Antioch	A57305A	5/18/17	9-7-403	No demonstration of initial compliance
Kaiser Antioch Deer Valley	B6855	Antioch	A57306A	5/18/17	9-7-403	No demonstration of initial compliance
Phillips 66 Company - San Francisco Refinery	A0016	Rodeo	A56410A	5/11/17	2-6-307	NOx concentration excess; RCA 07B64

Pinole-Hercules Wastewater Treatment Plant	A1194	Pinole	A56911A	5/16/17	2-1-301	no A/C for modifications (not submitting an Authority to Construct (A/C) to the Air District for modifications being made to the facility)
SFPP, L P	A4022	Concord	A56252A	5/11/17	8-5-322.3	Cumulative length of gaps > 5% of circumference
Shell Martinez Refinery	A0011	Martinez	A56188A	5/8/17	6-1-302	E07A76 >20% opacity >3min/hr
Shell Martinez Refinery	A0011	Martinez	A56189A	5/8/17	6-1-302	E07A76 >20% opacity >3min/hr
Shell Martinez Refinery	A0011	Martinez	A56190A	5/8/17	6-1-302	E07A76 >20% opacity >3min/hr
Shell Martinez Refinery	A0011	Martinez	A56191A	5/8/17	9-1-307	E07C40 >250ppm SO2
Shell Martinez Refinery	A0011	Martinez	A56192A	5/8/17	6-1-302	E07A76 >20% opacity >3min/hr
Shell Martinez Refinery	A0011	Martinez	A56193A	5/8/17	6-1-302	E07A76 >20% opacity >3min/hr
Shell Martinez Refinery	A0011	Martinez	A56194A	5/8/17	6-1-302	E07A76 >20% opacity >3min/hr
Shell Martinez Refinery	A0011	Martinez	A56195A	5/8/17	9-1-307	E07C40 >250ppm SO2
Shell Martinez Refinery	A0011	Martinez	A56196A	5/8/17	9-1-307	E07C40 >250ppm SO2
Shell Martinez Refinery	A0011	Martinez	A56197A	5/8/17	9-1-307	E07C40 >250ppm SO2
Shell Martinez Refinery	A0011	Martinez	A56198A	5/17/17	9-1-307	E07C40 >250ppm SO2

ST Shore Terminals LLC	A0581	Crockett	A56909A	5/4/17	8-5-306.2	P/V valve and gauge hatch not gas tight
ST Shore Terminals LLC	A0581	Crockett	A56910A	5/4/17	8-5-306.2	Gauge hatch not gas tight
Tesoro Refining & Marketing Company LLC	B2758	Martinez	A56219A	5/5/17	2-6-307	Failure to maintain SO2 monitor. RAT - 959
Tesoro Refining & Marketing Company LLC	B2758	Martinez	A56220A	5/5/17	1-522.6	Failure to maintain NOx monitor, 114-17 CEM
Tesoro Refining & Marketing Company LLC	B2758	Martinez	A56221A	5/5/17	9-2-301	WFRD GLM, valid H2S excess. RCA #06Z49
Tesoro Refining & Marketing Company LLC	B2758	Martinez	A56222A	5/5/17	9-2-301	WfRd GLM, valid H2S excess. RCA #07A59
Tesoro Refining & Marketing Company LLC	B2758	Martinez	A56223A	5/25/17	8-18-301	Open ended line on Tk-649, leak > 10k ppm.
West Contra Costa County Landfill	A1840	Richmond	A56488A	5/17/17	2-6-307	Non-compliance, Major Facility Review

Marin						
Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comments
Kaiser Permanente San Rafael Medical Center	A3947	San Rafael	A55781A	5/23/17	9-7-307	Final Emission Limits

San Francisco						
Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comments
MFD	Y7378	San Francisco	A56891A	5/23/17	11-2-303	No Survey & no On-Site Representative

MFD	Y7378	San Francisco	A56891B	5/23/17	11-2-304	RACM not in sealed, labeled, leak-tight containers
MFD	Y7378	San Francisco	A56892A	5/23/17	11-2-502	No Manifest
SFD	Y7432	San Francisco	A56893A	5/26/17	11-2-401.3	Late Notification

San Mateo						
Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comments
Browning-Ferris Industries of CA, Inc	A2266	Half Moon Bay	A56515A	5/11/17	8-34-301.2	Components and surface leak above standard
Browning-Ferris Industries of CA, Inc	A2266	Half Moon Bay	A56515B	5/11/17	8-34-303	Components and surface leak above standard
Pearl Therapeutics, Inc	E2728	Redwood City	A56610A	5/4/17	2-1-307	Failure to Meet Permit Conditions
Seton Medical Center	A1000	Daly City	A56589A	5/25/17	9-7-307.3	Final Emission Limits
Seton Medical Center	A1000	Daly City	A56589B	5/25/17	9-7-403	Initial Demonstration of Compliance
Seton Medical Center	A1000	Daly City	A56590A	5/25/17	9-7-403	Initial Demonstration of Compliance
Seton Medical Center	A1000	Daly City	A56590B	5/25/17	9-7-506	Initial Demonstration of Compliance
SFPP, LP	A4021	Brisbane	A56513A	5/3/17	2-6-307	No permanently installed H2O pressure gauge
SFPP, LP	A4021	Brisbane	A56514A	5/5/17	2-6-307	Loading racks not vapor & liquid leak tight

SFPP, LP	A4021	Brisbane	A56514B	5/5/17	8-33-309.5	Loading racks not vapor & liquid leak tight
SFPP, LP	A4021	Brisbane	A56514C	5/5/17	8-33-309.6	Components and surface leak above standard

Santa Clara						
Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comments
Good Samaritan Hospital	A0453	San Jose	A56534A	5/23/17	9-7-506	Did not perform annual source tests on boilers, S-15, S-16, S-17
Quimby Cleaners	A4520	San Jose	A56674A	5/4/17	1-410	Failure to renew drycleaner registration
Regional Medical Center of San Jose	A2457	San Jose	A56533A	5/19/17	9-7-506	Did not perform annual source test on boiler, S-1
Residence	Y7648	Morgan Hill	A57181A	5/22/17	6-3-308	Burning on WSTA
Vivid Inc	B1467	Santa Clara	A55642A	5/2/17	2-1-307	Exceeded usage limit-P/C#26165 2(a).
Zero Waste Energy Development Company, LLC	E1277	San Jose	A55694A	5/1/17	2-1-307	Violation of PC# 26393, #52 and #53, linked to RCA#07C65, 07C69, 07C80, 07C89 and 07C85.

Solano						
Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comments
Ball Metal Beverage Container Corp	A0148	Fairfield	A56063A	5/25/17	2-6-307	P/C# 18728 coating throughput limit exceeded at S# 63
Valero Refining Company - California	B2626	Benicia	A56462A	5/8/17	1-301	Public Nuisance (Flaring)

Valero Refining Company - California	B2626	Benicia	A56463A	5/8/17	6-1-301	Opacity Violation
Valero Refining Company - California	B2626	Benicia	A56464A	5/8/17	6-1-301	Opacity Violation
Valero Refining Company - California	B2626	Benicia	A56465A	5/8/17	6-1-302	Opacity Violation
Valero Refining Company - California	B2626	Benicia	A56465B	5/8/17	2-6-307	Opacity Violation
Valero Refining Company - California	B2626	Benicia	A56466A	5/8/17	6-1-301	Opacity Violation
Valero Refining Company - California	B2626	Benicia	A56467A	5/9/17	1-301	Public Nuisance (Excessive Emissions)
Valero Refining Company - California	B2626	Benicia	A56468A	5/11/17	6-1-301	Opacity Violation
Valero Refining Company - California	B2626	Benicia	A56469A	5/23/17	2-6-307	3-hr CO limit excess
Valero Refining Company - California	B2626	Benicia	A56470A	5/23/17	2-6-307	LPFG 3-hr and calendar day avg. excess
Valero Refining Company - California	B2626	Benicia	A56470B	5/23/17	10	LPFG 3-hr avg. excess
Valero Refining Company - California	B2626	Benicia	A56472A	5/23/17	2-6-307	NOx 3-hr and lb/hr excess

SETTLEMENTS FOR \$10,000 OR MORE REACHED

There were 2 settlement(s) for \$10,000 or more completed in April 2017.

- 1) On April 27, 2017, the District reached settlement with The John Stewart Company for \$15,000, regarding the allegations contained in the following 1 Notice of Violation:

NOV #	Issuance Date	Occurrence Date	Regulation	Comments from Enforcement
A56554A	8/11/16	8/8/16	CCR	Failure to implement provision of ADMP. Failing the adequately wet test method.

- 2) On April 27, 2017, the District reached settlement with East Bay Municipal Utility District for \$17,700, regarding the allegations contained in the following 4 Notices of Violation:

NOV #	Issuance Date	Occurrence Date	Regulation	Comments from Enforcement
A53679A	11/12/15	10/22/15	2-6-307	DEV #4345, E #06W77, P/O COND #18860-3, H2S7340
A56328A	7/1/16	6/7/16	2-6-307	E#06Z39. P/O cond 18860 parts 1+2, venting
A56330A	9/27/16	8/16/16	2-6-307	E#07A03, p/o cond 18860, Part 3, (higher) H2S
A56331A	9/27/16	8/25/16	2-6-307	E# 07A1, P/O Condition 18860, Part 3, (higher) H2S

There were 4 settlement(s) for \$10,000 or more completed in May 2017.

- 1) On May 4, 2017, the District reached settlement with Chevron U.S.A. Inc. for \$16,000, regarding the allegations contained in the following 3 Notice of Violation:

NOV #	Issuance Date	Occurrence Date	Regulation	Comments from Enforcement
A26687A	3/3/14	1/23/14	8-33-309	8-33-309.5 ST #14125 P/V >3000 ppmv and not vapor leak free
A53253A	5/15/14	2/6/14	8-33-309	8-33-309.5 Failed Source Test (ST-14131), TOC >3000 ppm
A53864A	4/28/15	1/13/15	8-33-309	8-33-309.5 Source Test #15067, P/V Valve emissions >3000 ppm

- 2) On May 4, 2017, the District reached settlement with Donald Von Raesfeld Power Plant for \$16,500, regarding the allegations contained in the following 3 Notice of Violation:

NOV #	Issuance Date	Occurrence Date	Regulation	Comments from Enforcement
A51383A	6/17/14	4/20/14	2-6-307	NOx excess - P/C #24252-20(a) - RCA #06P65
A51390A	5/16/16	9/23/15	2-6-307	Failed Source Test #OS-6007; Includes #4
A55633A	9/14/16	7/21/15	2-6-307	NOX exceedance; P/C #24252-#20(a)(b) includes S#4 RCA #06V74

3) On May 10, 2017, the District reached settlement with Chevron U.S.A. Inc. for \$181,000, regarding the allegations contained in the following 26 Notice of Violation:

NOV #	Issuance Date	Occurrence Date	Regulation	Comments from Enforcement
A53857A	11/18/14	2/21/14	12-11-506	12-11-506.1 Dev #'s 3868 & 3869, No flare monitoring 2/21-2/26/14, District not notified w/in 24 hrs
A53857B	11/18/14	2/21/14	12-11-507	Dev #'s 3868 & 3869, No flare monitoring 2/21-2/26/14, District not notified w/in 24 hrs
A53858A	11/18/14	2/2/14	2-6-307	Dev #3847, Title V standard condition 1.A, Flash point exemption exceeded at T-3074 & T-3138
A53858B	11/18/14	2/2/14	2-1-301	Dev #3847, Title V standard condition 1.A, Flash point exemption exceeded at T-3074 & T-3138
A53859A	12/9/14	1/27/14	2-6-307	Dev# 3828, 40CFR60 subpart J (60.104(2)(1))
A53859B	12/9/14	1/27/14	10	Dev# 3828, 40CFR60 subpart J (60.104(2)(1))
A53861A	1/27/15	1/30/14	8-10-302.1	Dev #3834, PVD monitoring not conducted
A53862A	2/2/15	12/18/14	1-301	6 confirmed complaints for visible flaring
A53862B	2/2/15	12/18/14	2-6-307	6 confirmed complaints for visible flaring
A53865A	5/13/15	9/19/14	2-6-307	Episode #06r98, H2S excesses in violation of 40CFR 60.104 (2) (1) + PC# 8773, part 5
A53865B	5/13/15	9/19/14	10	Episode #06r98, H2S excesses in violation of 40CFR 60.104 (2) (1) + PC# 8773, part 5
A53866A	5/13/15	9/20/14	9-10-305	Episode #'s 06R99 + 06S00, CO excesses
A53868A	6/30/15	7/15/14	10	Dev#3963, 40 CFR 60 Subpart J [60.104(a)(i)]
A53868B	6/30/15	7/15/14	2-6-307	Dev#3963, 40 CFR 60 Subpart J [60.104(a)(i)]

A53869A	6/30/15	8/7/14	10	Dev# 3980, 40 CFR 60 Subpart J (60.104(a)(i))
A53869B	6/30/15	8/7/14	2-6-307	Dev# 3980, 40 CFR 60 Subpart J (60.104(a)(i))
A53872A	8/28/15	12/18/08	8-8-313	8-8-313.2 No inspections or inspection records for all WW collection sys components at Long Wharf
A53872B	8/28/15	12/18/08	8-8-505	8-8-505 No inspections or inspection records for all WW collection system components at Long Wharf
A54257A	2/9/16	8/6/14	10	DEV #3981, 40 CFR 60 SUBPARTS (60.104(A)(1))
A54258A	2/9/16	5/5/14	10	DEV #3919, 40 CFR 60 SUBPART J (60.104(a)(1))
A54259A	2/9/16	12/19/13	10	DEV #3798, 40 CFR 60 Subpart J (60.104(a)(1))
A54260A	2/9/16	9/26/14	1-510	Failure to maintain meteorological equipment w/in limits specified by BAAQMD Manual of Procedures.
A54261A	2/16/16	9/14/14	8-10-501	PVD monitoring not conducted on 3 vessels.
A54262A	3/3/16		10	DEV #4050, 40 CFR 60 subpart J (60.104(a)(i)).
A54262B	3/3/16			Per Amend notes: Remove violation of Reg 2 Rule 6 Section 307.
A54263A	4/12/16	7/12/14	2-6-307	PC #'s 11066 Part 7A (A5) & Standard Condition F.
A54263B	4/12/16	7/12/14	1-523.3	RCA report not submitted.
A54265A	4/12/16	10/22/14	10	40 CFR 60 Subpart J (603104(2)(1)).
A54266A	4/12/16	11/4/14	1-523	RCA report not submitted.
A54266B	4/12/16	11/4/14	2-6-307	PC #8869
A54267A	4/21/16	2/16/11	8-10-302.1	Instrument used to monitor vessels is not calibrated per EPA Method 21
A54267B	4/21/16	2/16/11	8-10-502	Instrument used to monitor vessels no calibrated per EPA Method 21.
A54270A	4/21/16	10/8/14	2-6-307	PC #21232, Part 2; Late RCA report for inoperative monitor.
A54270B	4/21/16	10/8/14	9-10-502	Fires lit without CEM's in service.

A54270C	4/21/16	10/8/14	1-522.5	No daily calibration of CEMs while boiler in operation.
A54270D	4/21/16	10/9/14	1-522.4	Inoperative monitor (CEM) not reported within 24 hours.
A54270E	4/21/16	10/8/14	9-10-504	No records of NOx, CO, or O2 data while boiler in operation.
A54271A	4/21/16	12/25/14	10	DEV #4087, 40 CFR Subpart J 60.104(a)(1).
A54417A	5/11/16	9/19/09	8-18-401	Failed to tag and monitor connectors, valves. DEV 3948
A54417B	5/11/16	9/19/09	8-18-402	Failed to tag and monitor connectors, valves. DEV 3948
A54418A	5/11/16		8-8-402.4	Failed to monitor waste water components @ 4 pump stations. DEV 4007.
A54419A	5/11/16	9/19/09	8-18-401	Failed to tag and monitor 10 valves & 1 pump; DEV 3911
A54419B	5/11/16	9/19/09	8-18-402	Failed to tag and monitor 10 valves & 1 pump; DEV 3911
A54422A	6/15/16	12/20/14	12-11-502.3	Samples taken late; DEV #4081

- 4) On May 19, 2017, the District reached settlement with Republic Services of Sonoma County, Inc. for \$15,750, regarding the allegations contained in the following 3 Notice of Violation:

NOV #	Issuance Date	Occurrence Date	Regulation	Comments from Enforcement
A52695A	7/28/15	7/27/15	8-34-303	Leaks in excess of 500 ppm (Well #217 @ 900 ppm, Well #227 @ 6000 ppm)
A52696A	7/28/15	7/27/15	8-34-301.2	Leak on engine @ cylinder head #3 in excess of 1000 ppm (5000 ppm)
A52697A	7/28/15	7/27/15	8-34-301.2	Leak on engine @ cylinder head #3 in excess of 1000 ppm (6000 ppm)

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Liz Kniss and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: June 13, 2017

Re: Authorization to Execute Contract Amendments for My Air Online Development
Services

RECOMMENDED ACTION

Recommend the Board of Directors authorize the Executive Officer/APCO to execute contract amendments with the following vendors in the amounts listed below:

Vendor	Amount	Service Description
C&G Technology Services	\$74,904	Software product management and quality assurance services.
Clearsparc, Inc.	\$304,965	Software architecture, design, development, build and release management services.
IT Dependz	\$162,568	Software product management and quality assurance services.
TOTAL	\$542,437	

BACKGROUND

Air District staff is recommending semi-annual contract amendments for vendors assisting with the development of the permitting and compliance systems of the My Air Online Program to meet the calendar year end 2017 goals.

DISCUSSION

My Air Online Program

The My Air Online Program is composed of the design, implementation and maintenance of online permitting and compliance systems and the public website. In the first half of the 2017 calendar year, the My Air Online Program aims to complete the following:

- Migration of legacy registered sources (char-broilers, mobile refinishing and graphic arts operations) of air pollution to newer online permitting platform
- Mobile inspections for asbestos renovation and demolition notifications
- Online stipulated abatement order agreements for small boilers
- Enhanced air quality complaint wizard for the public
- Enhanced air quality complaint dispatching and assignment

Staff plan to complete the following items for the remainder of the FYE 2017:

- Training & rollout of new Asbestos Renovation/Demolition compliance program
- Enhanced investigations for air quality complaints
- Enforcement action (violations & notices to comply) processing
- Enhanced facility inspection dashboards and forms
- Initial design for complex facility emissions inventory reporting

To continue progress on the Permitting & Compliance System portion of the My Air Online program, staff is recommending the continued use of proven vendors' familiar with Air District systems for the second half of the 2017 calendar year. The Air District has used these firms to assist with the design, development and testing of the permitting and compliance software systems, and they have performed well.

Vendor	Type of Services	Initial Contract	Procurement Method
C&G Technology Services	Software development and testing services for permitting and compliance systems software.	FYE 2013	Selected the firm and resources through a vendor interview process.
Clearsparc, Inc.	Software architecture, design, development, build and release management services for permitting and compliance systems software.	FYE 2015	Request for Qualifications (RFQ). One of three firms to respond. Had staff expertise and availability to perform the required scope of work.
IT Dependz	Business analysis, software development, automated testing and quality assurance services for permitting and compliance systems software.	FYE 2010	Selected the firm and resources through a vendor interview process.

***Note:** Contracts for the My Air Online program are currently reviewed in six-month increments, and request board authorizations for extensions as needed. These requests typically are accompanied with a status update to the Executive Committee and/or full Board. We anticipate a request for additional authorizations and corresponding status update in approximately six months. District staff are planning to conduct a updated request for qualifications for vendor resources in the second half of 2017.*

BUDGET CONSIDERATION/FINANCIAL IMPACT

Funding for the vendor contract recommendations is included in the FYE 2017 budget will be funded from the My Air Online (#125) program.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Jaime A. Williams
Reviewed by: Damian Breen

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Liz Kniss and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: June 15, 2017

Re: Authorization to Execute Contract Amendments for Cloud Infrastructure & Data Analytics

RECOMMENDED ACTION

Recommend the Board of Directors authorize the Executive Officer/APCO to execute contract amendments with the following vendors in the amounts listed below:

Vendor	Amount	Service Description
Cylogy, Inc.	\$50,000	Website cloud infrastructure implementation and SMS alerting integration.
Northwest Cadence	\$205,928	Cloud data analytics infrastructure and professional services.
SoftwareOne	\$226,425	Microsoft authorized reseller of Azure cloud services for local government.
TOTAL	\$482,353	

BACKGROUND

Air District staff is recommending contract amendments for existing vendors assisting with cloud infrastructure and data analytics to meet 2017 calendar year end goals.

DISCUSSION

Over the past several years, the Air District has been investing in cloud services to support information technology needs, and data analytics technologies to improve efficiency, strategic decision making and allocation of resources. These efforts include hosting of online permitting and compliance systems (Production System), wood smoke strategic incentives programs, and an air quality data visualization pilot.

To continue supporting the Air District’s cloud infrastructure and enhance data analytics capabilities, staff plans to focus on the following activities in the second half of the 2017 calendar year:

- Migration of the public website to a cloud infrastructure
- Simple message service (SMS) integration to allow mass distributions of text messages to support various programs including Spare the Air.
- Ongoing software cloud service support for permitting, compliance, and incentive programs
- Expansion of big data ingress, storage, analysis and visualization capabilities for air quality monitoring, compliance, emissions inventory and incentive programs.

Staff recommends the continued use of vendors proven familiar with Air District systems for the remainder of Fiscal Year End (FYE) 2017. The Air District has successfully collaborated with Cylogy, Inc., Northwest Cadence, and SoftwareOne in the design, development and testing of the website content management system, cloud services and data analytics in prior engagements.

Vendor	Type of Services	Initial Contract	Procurement Method
Cylogy, Inc.	Backend website content management system integration, customization and infrastructure support.	FYE 2013	Request for Proposal (RFP) rebid in FYE 2014. One of four firms to respond that had appropriate staff, expertise, and availability to perform the required scope of work.
Northwest Cadence	Azure cloud, big data and business intelligence professional services.	FYE 2016	Recommended vendor interviews from Microsoft’s Gold partner network.
SoftwareOne	Authorized reseller of Microsoft licensed products and services.	FYE 2016	Microsoft requires that all software and service purchases be conducted by a designated authorized reseller to local governments.

BUDGET CONSIDERATION/FINANCIAL IMPACT

Funding for the vendor contract recommendations is included in the FYE 2017 budget and will be funded from the My Air Online (#125) program.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Jaime A. Williams
Reviewed by: Damian Breen

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Liz Kniss and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: June 6, 2017

Re: Report of the Climate Protection Committee Meeting of May 18, 2017

RECOMMENDED ACTION

The Climate Protection Committee (Committee) received only informational items and has no recommendations of approval by the Board of Directors (Board).

BACKGROUND

The Committee met on Thursday, May 18, 2017, and received the following reports:

- A) Statewide Scoping Plan Update
- B) Plan Bay Area 2040; and
- C) Implementation of the 2017 Clean Air Plan

Chairperson Teresa Barrett will provide an oral report of the Committee meeting.

BUDGET CONSIDERATION/FINANCIAL IMPACT

- A) None.
- B) None; and
- C) Resources to begin implementation of the 2017 Plan have been included in the Fiscal Year Ending (FYE) and he proposed FYE 2018 budgets.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Marcy Hiratzka
Reviewed by: Maricela Martinez

Attachment 8A: 05/18/17 – Climate Protection Committee Meeting Agenda #4
Attachment 8B: 05/18/17 – Climate Protection Committee Meeting Agenda #5
Attachment 8C: 05/18/17 – Climate Protection Committee Meeting Agenda #6

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Teresa Barrett and Members
of the Climate Protection Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: May 11, 2017

Re: Statewide Scoping Plan Update

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

The Statewide Climate Change Scoping Plan (Scoping Plan) describes the framework for California's efforts to reduce emissions of greenhouse gases (GHGs) and protect the climate. The initial Scoping Plan was adopted by the Air Resources Board (ARB) in 2008, in response to AB 32, the Global Warming Solution Act signed into law in 2006. The Scoping Plan must be updated every five years. The first update to the Scoping Plan was approved by the ARB Board in May 2014. In 2016, the Legislature passed SB 32, which codifies a 2030 GHG emissions reduction target of 40 percent below 1990 levels. The Legislature also passed AB 197, companion legislation which provides additional direction for developing the Scoping Plan.

DISCUSSION

ARB is moving forward with a second update to the Scoping Plan to reflect the 2030 target codified by SB 32, as well as making significant progress toward the long-term target of reducing GHG emissions 80 percent below 1990 levels pursuant to the Governor's Executive Order S-3-05. ARB released the Proposed Scoping Plan Update in January 2017. Air District staff has followed this process closely and provided comments on the proposed update, and considered Scoping Plan policies and programs in the recently-adopted 2017 Clean Air Plan. The ARB governing board is expected to take action on the Scoping Plan Update in June 2017. ARB staff will describe the Proposed Scoping Plan Update to the Committee.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: David Burch
Reviewed by: Henry Hilken

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Teresa Barrett and Members
of the Climate Protection Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: May 11, 2017

Re: Plan Bay Area 2040

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

The Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) have been working together to update Plan Bay Area (PBA). The two agencies issued the Draft Plan Bay Area 2040 in early April, as a limited and focused update to the initial PBA adopted in 2013. PBA 2040 describes the long-range regional transportation and land use strategy; serves as the region's "sustainable communities strategy" pursuant to Senate Bill 375; and provides a strategy to reduce per-capita greenhouse gases (GHG) emissions from light-duty cars and trucks in order to achieve the State-mandated target for the Bay Area. MTC and ABAG are currently holding a series of nine open houses across the Bay Area to receive public input on the Draft PBA 2040, with adoption of the plan by their governing boards slated for July 2017.

DISCUSSION

The Bay Area economy has grown rapidly since 2010, and the region is currently grappling with the impacts of the rapid increase in jobs, on our housing, and transportation sectors. PBA 2040 projects that the Bay Area will continue to experience robust growth over the next several decades, adding 2.4 million new residents and 1.3 million new jobs from 2010 to 2040. While economic growth brings many benefits, it also poses challenges in terms of longer commutes and more traffic congestion, increased emissions of air pollutants and GHGs, displacement of lower-income families from desirable urban neighborhoods, more development pressures in outlying areas. Managing the anticipated growth to address these challenges will be critical to protect the environment and promote social equity.

Since the transportation sector is the largest source of air pollutants and GHGs in the Bay Area, PBA 2040 will play a critical role in achieving our air quality and climate protection goals. Pursuant to the requirements of Senate Bill 375, the plan focuses on reducing per-capita GHG emissions from light-duty vehicles, and providing sufficient housing for all income levels of the

projected regional population. The land use and transportation strategy described in PBA 2040 is based upon directing future growth to “priority development areas” (PDAs) in existing communities that are well-served by existing transportation infrastructure and amenable to transit, biking, and walking. To complement the land use strategy, PBA 2040 also describes a transportation investment strategy for the \$300 billion in revenues anticipated through 2040. The transportation investment strategy focuses on maintenance and modernization to improve the operational efficiency of the existing transit and roadway network.

PBA 2040 also identifies specific programs to improve air quality and protect the climate. To help reduce per-capita GHG emissions from light- and medium-duty vehicles, the plan will direct \$226 million through 2040 to continue and expand successful climate initiatives, including transportation demand management programs, car-sharing, and advanced-technology and low-emission vehicles. In addition, PBA 2040 identifies \$350 million for a Clean Fuels and Impact Reduction program to implement the Freight Emissions Reduction Action Plan. The freight plan was developed by MTC in conjunction with the Air District and other stakeholders as a companion document to PBA 2040.

The land-use policies and transportation investments in PBA 2040 will play an important role in helping to implement the comprehensive set of transportation sector measures described in the Air District’s recently-adopted 2017 Clean Air Plan (2017 CAP). In combination, the 2017 CAP and PBA 2040 provide a roadmap to accommodate growth, while protecting the Bay Area’s environment and quality of life.

MTC staff will describe PBA 2040 and explain how the plan complements the air quality and climate protection strategy described in the 2017 Clean Air Plan.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: David Burch
Reviewed by: Henry Hilken

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Teresa Barrett and Members
of the Climate Protection Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: May 5, 2017

Re: Implementation of the 2017 Clean Air Plan

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

On April 19, 2017, the Board of Directors adopted *Spare the Air – Cool the Climate*, the Air District's 2017 Clean Air Plan (Plan). The Plan serves as an update to the Bay Area's regional air quality plan pursuant to state ozone planning requirements. In addition to ozone precursors, the Plan addresses emissions of other criteria pollutants, toxic air contaminants and greenhouse gases. The Plan proposes an ambitious and comprehensive set of 85 control measures designed to reduce these emissions over the next three to five years.

DISCUSSION

The Plan's control strategy includes an aggressive rule-making schedule, as well as many non-regulatory control measures that identify activities the Air District will undertake to achieve GHG and air pollutant emission reductions. Non-regulatory measures include grants and incentives, support for local government activities, outreach and education activities, collaborations with different stakeholder groups, research, etc. Staff will update the Committee on the implementation strategy for the Plan and early actions for which implementation has already begun.

BUDGET CONSIDERATION/FINANCIAL IMPACT

Resources to begin implementation of the 2017 Plan have been included in the Fiscal Year Ending (FYE) 2017 and the proposed FYE 2018 budgets.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Abby Young
Reviewed by: Henry Hilken

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Liz Kniss and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: June 6, 2017

Re: Report of the Mobile Source Committee Meeting of May 25, 2017

RECOMMENDED ACTION

The Mobile Source Committee (Committee) recommends Board of Directors' approval of the following items:

- A) Fiscal Year Ending (FYE) 2018 Transportation Fund for Clean Air (TFCA) Regional Fund Policies and Evaluation Criteria and a Proposed Amendment to One FYE 2017 TFCA Regional Fund Policy
 - 1) Approve the proposed FYE 2018 TFCA Regional Fund Policies and Evaluation Criteria presented in Attachment A; and
 - 2) Approve the proposed amendment to the readiness policy in the FYE 2017 TFCA Regional Fund Policies
- B) Fiscal Year Ending (FYE) 2018 Transportation Fund for Clean Air (TFCA) County Program Manager (CPM) Expenditure Plans
 - 1) Approve the allocation of new FYE 2018 TFCA CPM Funds listed in Table 1; and
 - 2) Authorize the Executive Officer/APCO to enter into funding agreements with the CPMs for the total funds to be programmed in FYE 2018, listed in Table 1
- C) Update on Regional Efforts to Deploy Electric Vehicles and Infrastructure
 - 1) None; receive and file

BACKGROUND

The Committee met on Thursday, May 25, 2017, and received the following reports:

- A) Fiscal Year Ending (FYE) 2018 Transportation Fund for Clean Air (TFCA) Regional Fund Policies and Evaluation Criteria and a Proposed Amendment to One FYE 2017 TFCA Regional Fund;
- B) Fiscal Year Ending (FYE) 2018 Transportation Fund for Clean Air (TFCA) County Program Manager (CPM) Expenditure Plans; and
- C) Update on Regional Efforts to Deploy Electric Vehicles and Infrastructure

Chairperson Karen Mitchoff will provide an oral report of the Committee meeting.

BUDGET CONSIDERATION/FINANCIAL IMPACT

- A) None. The Air District distributes “pass-through” funds to grantees on a reimbursement basis. Administrative costs for the TFCA Regional Fund program are provided by the funding source;
- B) None. TFCA CPM revenues are generated from Department of Motor Vehicles registration fees and 40% of the revenues are passed through to the CPMs; and
- C) None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Aloha Galimba
Reviewed by: Maricela Martinez

Attachment 9A: 05/17/17 – Mobile Source Committee Meeting Agenda #4
Attachment 9B: 05/17/17 – Mobile Source Committee Meeting Agenda #5
Attachment 9C: 05/17/17 – Mobile Source Committee Meeting Agenda #6

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Karen Mitchoff and Members
of the Mobile Source Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: May 10, 2017

Re: Fiscal Year Ending (FYE) 2018 Transportation Fund for Clean Air (TFCA) Regional
Fund Policies and Evaluation Criteria and a Proposed Amendment to One FYE 2017
TFCA Regional Fund Policy

RECOMMENDATIONS

Recommend Board of Directors:

1. Approve the proposed FYE 2018 TFCA Regional Fund Policies and Evaluation Criteria presented in Attachment A; and
2. Approve the proposed amendment to the readiness policy in the FYE 2017 TFCA Regional Fund Policies.

BACKGROUND

In 1991, the California State Legislature authorized the Bay Area Air Quality Management District (Air District) 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 statutory authority for the Transportation Fund For Clean Air (TFCA) and requirements of the program are set forth in California Health and Safety Code Sections 44241 and 44242. The authorizing legislation requires that the Air District's Board of Directors (Board) adopt cost-effectiveness criteria that govern the use of TFCA funds.

Sixty percent of TFCA funds are allocated by the Board to eligible projects and programs implemented directly by the Air District (e.g., Spare the Air, Plug-in Electric Vehicle Program) and to a program referred to as the TFCA Regional Fund. The Board approved an allocation of \$29.24 million, including \$13.93 million in new TFCA monies, for FYE 2018 on April 19, 2017.

Per Board direction on December 16, 2009, the Executive Officer/APCO is authorized to execute grant agreements with project sponsors who propose projects with individual grant award amounts up to \$100,000 for projects that meet the respective governing policies and guidelines. TFCA Regional Fund projects with grant award amounts over \$100,000 are brought to the Air District's Mobile Source Committee for consideration at least on a quarterly basis.

DISCUSSION

Outreach

The proposed FYE 2018 Policies reflect extensive feedback received from stakeholders over the past year. On January 26, 2017, the Air District posted the proposed policies on the Air District's website and opened the public comment period. The public comment process was advertised via the Air District's TFCA grants email notification system, which was sent to more than 800 stakeholders and to representatives from each of the nine Bay Area Congestion Management Agencies (CMA). The process was also advertised at other public meetings, such as the January 2017 CMA Directors' meeting. Three webinar workshops were held to discuss the policies and proposed changes for FYE 2018 (on February 14, 15, and March 2, 2017); in total, these webinars were attended by 35 stakeholders. The Air District received six sets of comments by the close of the comment period on March 13, 2017. Attachment C provides a summary of the six public comments received by the deadline along with staff's responses.

Proposed FYE 2018 Policies

The proposed FYE 2018 Policies (Attachment A) include both general requirements that are applicable to all TFCA Regional Fund project types, as well as project-specific requirements for nine project categories. Public stakeholder input received over the past year and during the public comment period was reviewed and considered for incorporation into the proposed FYE 2018 Policies. Language and grammatical revisions were also made for clarification purposes. A redline copy of the FYE 2018 policies that shows the changes from the previous year policies are included as Attachment B. Table 1 below shows the key revisions proposed in the FYE 2018 Policies.

Table 1: Summary of Key Revisions to TFCA Regional Fund Policies and Evaluation Criteria

Policy # and Title	Description of Proposed Change
#2. TFCA Cost-Effectiveness	Add the cost-effectiveness for Hydrogen Stations.
#8. Readiness	Revise the time frame to allow a project to commence 12 months from the date the funding agreement is fully executed.
#32. Bikeways	Clarify the distance that a proposed bikeway must be from a qualifying location is based on the bikeable distance.

Amendment to Policy #8 of the FYE 2017 TFCA Regional Fund Policies

The solicitations for the FYE 2017 Regional Fund Programs are released as they are developed and new solicitations are expected to open later this year. While the current Policy #8 (Readiness) requires projects to commence by the end of calendar year 2017, funding awards will be made and funding agreements will be generated throughout calendar year 2017, and project sponsors have expressed concerns meeting this requirement for projects awarded close to the deadline. To address this issue, staff is recommending a change to Policy #8 (Readiness) in the Board-adopted FYE 2017 TFCA Regional Fund Policies. The proposed amendment allows Project Sponsors one year from the date that the funding agreement is executed to commence their projects.

BUDGET CONSIDERATION / FINANCIAL IMPACT

None. The Air District distributes “pass-through” funds to grantees on a reimbursement basis. Administrative costs for the TFCA Regional Fund program are provided by the funding source.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Michael Neward
Reviewed by: Karen Schkolnick

- Attachment A: Proposed TFCA Regional Fund Policies and Evaluation Criteria for FYE 2018 (Clean)
- Attachment B: Proposed TFCA Regional Fund Policies and Evaluation Criteria for FYE 2018 (Redline)
- Attachment C: Comments Received and Staff Responses to Proposed FYE 2018 Policies

**TFCA REGIONAL FUND POLICIES
AND EVALUATION CRITERIA FOR FYE 2018**

The following policies apply to the Bay Area Air Quality Management District’s (Air District) Transportation Fund for Clean Air (TFCA) Regional Fund for fiscal year ending (FYE) 2018

BASIC ELIGIBILITY

1. **Eligible Projects:** Only projects that result in the reduction of motor vehicle emissions within the Air District’s jurisdiction are eligible. Projects must conform to the provisions of the California Health and Safety Code (HSC) sections 44220 et seq. and Air District Board of Directors adopted TFCA Regional Fund Policies and Evaluation Criteria for FYE 2018.

Projects must achieve surplus emission reductions, i.e., reductions that are beyond what is required through regulations, contracts, and other legally binding obligations at the time the Air District executes the project’s funding agreement.

2. **TFCA Cost-Effectiveness:** Projects must not exceed the maximum cost-effectiveness (C-E) limit noted in Table 1. Cost-effectiveness (\$/weighted ton) is based on the ratio of TFCA funds awarded divided by the sum of surplus emissions reduced of reactive organic gases (ROG), nitrogen oxides (NOx), and weighted PM10 (particulate matter 10 microns in diameter and smaller) over a project’s useful life.

Table 1: Maximum Cost-Effectiveness for FYE 2018 TFCA Regional Fund Projects

Policy #	Project Category	Maximum C-E (\$/weighted ton)
22	On-Road Truck Replacements	\$90,000
23	Light-Duty Zero- and Partial-Zero Emissions Vehicles for Fleets	\$250,000
24	Heavy-Duty Zero- and Partial-Zero- Emissions Vehicles	\$250,000
25	Hydrogen Stations	\$500,000
26	Reserved	Reserved
27	Reserved	Reserved
28	Existing Shuttle/Feeder Bus Services	\$200,000; \$250,000 for services in CARE Areas or PDAs
29	Pilot Trip Reduction — in Community Air Risk Evaluation (CARE) areas or Priority Development Areas (PDAs)	\$250,000
30	Existing Regional Ridesharing Services	\$150,000
31	Electronic Bicycle Lockers	\$250,000
32	Bikeways	\$250,000

3. **Consistent with Existing Plans and Programs:** All project categories must comply with the Transportation Control and Mobile Source Control measures included in the Air District's most recently approved strategy(ies) for achieving and maintaining State and national ozone standards; those plans and programs established pursuant to California Health & Safety Code (HSC) sections 40233, 40717 and 40919; and, when specified, other adopted Federal, State, regional, and local plans and programs.
4. **Eligible Recipients and Authority to Apply:** Applicants must have the legal authority, as well as the financial and technical capability, to complete projects. In addition, the following conditions apply:
 - a. **Eligible Recipients:**
 - i. **Public agencies** are eligible to apply for all project categories.

Agenda 4 – Attachment A: Proposed TFCA Regional Fund Policies and Evaluation Criteria for FYE 2018 (Clean)

- ii. **Non-public entities** are only eligible to apply for Clean Air Vehicle Projects and advanced technology demonstrations that are permitted pursuant to HSC section 44241b(7).
 - b. **Authority to Apply:** Applicants must demonstrate that they have the authority to submit the application, to enter into a funding agreement, to carry out the project, and to bind the entity to perform these tasks by including either: 1) a signed letter of commitment from the applicant’s representative with authority (e.g., Chief Executive or Financial Officer, Executive Director, or City Manager); or 2) a signed resolution from the governing body (e.g., City Council, Board of Supervisors, or Board of Directors).
5. **Viable Project and Matching Funds:** Applicants must demonstrate that they have adequate funds to cover all stages of their proposed project(s) from commencement through completion. Unless otherwise specified in policies #22 through 32, project applicants must demonstrate evidence that they have at least 10% of the total eligible project costs (matching funds) from a non-Air District source available and ready to commit to the proposed projects.
6. **Minimum Grant Amount:** \$10,000 per project.
7. **Maximum Grant Amount:** Unless otherwise specified in policies #22 through 32, the maximum grant award amounts are:
 - a. Each public agency may be awarded up to \$1,500,000 per calendar year; and
 - b. Each non-public entity may be awarded up to \$500,000 per calendar year.
8. **Readiness:** Unless otherwise specified in policies #22 through 32, projects must commence by the end of calendar year 2018 or a total of 12 months from the date of execution of funding agreement by the Air District, whichever is later. For purposes of this policy, “commence” means a tangible preparatory action taken in connection with the projects’ operation or implementation, for which the project sponsor can provide documentation of the commencement date and action performed. “Commence” can mean the issuance of a purchase order to secure project vehicles and equipment; commencement of shuttle/feeder bus and ridesharing service; or the delivery of the award letter for a construction contract.
9. **Maximum Two Years Operating Costs:** Unless otherwise specified in policies #22 through 32, FYE 2018 TFCA Regional Funds may be used to support up to two years of operating costs for service-based projects (i.e., Trip Reduction Projects)
10. **Project Revisions:** The Air District will consider only requests for modifications to approved projects that are within the same project categories, achieve the same or better cost-effectiveness, comply with all TFCA Regional Fund Policies, and are in compliance with all applicable federal and State laws, and Air District rules and regulations. The Air District may also approve minor modifications, such as to correct typographical mistakes in the grant agreements or to change the name of the grantees, without re-evaluating the proposed modification in light of the regulations, contracts, and other legally-binding obligations that are in effect at the time the minor modification was proposed.

APPLICANT IN GOOD STANDING

11. **In Compliance with Air Quality Regulations:** Applicants must certify that, at of the time of the application and at the time of issuance of the grant, they are in compliance with all local, State, and federal air quality regulations. Applicants who have an unresolved violation of Air District, state or federal air quality rules or regulations are not eligible for funding. The Air District may terminate a grant agreement and seek reimbursement of distributed funds from project sponsors who were not eligible for funding at the time of the grant.
12. **In Compliance with Agreement Requirements:** Project sponsors who have failed to meet contractual requirements such as project implementation milestones or monitoring and reporting requirements for any project funded by the Air District may not be considered eligible for new funding until such time as all of the unfulfilled obligations are met.

13. **Independent Air District Audit Findings and Determinations:** Project sponsors who have failed either a fiscal audit or a performance audit for a prior Air District funded project will be excluded from future funding for three (3) years from the date of the Air District’s final determination in accordance with HSC section 44242. Additionally, project sponsors with open projects will not be reimbursed until all audit recommendations and remedies have been satisfactorily implemented.

A failed fiscal audit means an uncorrected audit finding that confirms an ineligible expenditure of funds. A failed performance audit means that a project was not implemented as set forth in the project funding agreement.

Project sponsors must return funds that the Air District has determined were expended in a manner contrary to the TFCA Regional Funds’ requirements and/or requirements of HSC Code section 44220 et seq.; the project did not result in a surplus reduction of air pollution from the mobile sources or transportation control measures pursuant to the applicable plan; the funds were not spent for surplus reduction of air pollution pursuant to a plan or program to be implemented by the TFCA Regional Fund; or otherwise failed to comply with the approved project scope, as set forth in the project funding agreement. Applicants who failed to reimburse such funds to the Air District from prior Air District funded projects will be excluded from future TFCA funding.

14. **Executed Funding Agreement:** Only a fully-executed funding agreement (i.e., signed by both the project sponsor and the Air District) constitutes the Air District’s award of funds for a project. Approval of an application for the project by the Air District Board of Directors or notices such as a transmittal letter announcing the proposed award do not constitute a final obligation on the part of the Air District to fund a project.

Applicants must sign funding agreements within 60 days from the date the agreements were transmitted to them in order to remain eligible for award of TFCA Regional Funds. Applicants may request, in writing, an extension of up to no more than 180 days from the transmittal date to sign the grant agreements, which includes the basis for an extended signature period. At its discretion, the Air District may authorize such an extension.

15. **Maintain Appropriate Insurance:** Project sponsors must obtain and maintain general liability insurance and additional insurance that is appropriate for its specific project type throughout the life of the project, with coverage being no less than the amounts specified in the respective funding agreement. Project sponsors shall require their subcontractors to obtain and maintain such insurance of the type and in the amounts required by the grant agreements.

INELIGIBLE PROJECTS

16. **Planning Activities:** The costs of preparing or conducting feasibility studies are not eligible. Other planning activities may be eligible, but only if the activities are both: 1) directly related to the implementation of a specific project or program, and 2) directly contribute to the project’s emissions reductions.
17. **Cost of Developing Proposals and Grant Applications:** The costs to prepare grant applications are not eligible.
18. **Duplication:** Projects that have previously received TFCA Regional or County Program Manager funds and do not propose to achieve additional emission reductions are not eligible.

USE OF TFCA FUNDS

19. **Combined Funds:** Unless otherwise specified in policies #22 through 32, TFCA County Program Manager Funds may not be combined with TFCA Regional Funds to fund a TFCA Regional Fund project.
20. **Administrative Costs:** Unless otherwise specified in policies #22 through 32, TFCA Regional Funds may not be used to pay for administrative costs (i.e., the costs associated with administering a TFCA Regional Fund grant). In cases where administrative costs may be paid for by TFCA Regional Funds, they are limited

to a maximum of five percent (5%) of total TFCA Regional Funds expended on a project and are only available to projects sponsored by public agencies. To be eligible for reimbursement, administrative costs must be clearly identified in the project budget at the time of application and in the funding agreement between the Air District and the project sponsor.

21. **Expend Funds within Two Years:** Project sponsors must expend the grant funding within two (2) years of the effective date of their grant agreement. Applicants may request a longer period in the application, by submitting evidence that a longer period is justified to complete the project due to its unique circumstance. Project sponsors may request a longer period before the end of the agreements' second year in the event that significant progress has been made in the implementation of the project. If the Air District approves a longer period, the parties shall memorialize the approval and length of the extension formally (i.e., in writing) in the grant agreement or in an amendment to the executed grant agreement.

ELIGIBLE PROJECT CATEGORIES

To be eligible for TFCA Regional funding, a proposed project must meet the purposes and requirements for the particular category's type of project.

Clean Air Vehicle Projects

22. **On-Road Truck Replacements:** The project will replace Class 6, Class 7, or Class 8 diesel-powered trucks that have a gross vehicle weight rating (GVWR) of 19,501 lbs. or greater (per vehicle weight classification definition used by Federal Highway Administration (FHWA)) with new or used trucks that have an engine certified to the 2010 California Air Resources Board (CARB) emissions standards or cleaner. The existing trucks must be registered with the California Department of Motor Vehicles (DMV) to an address within the Air District's jurisdiction, and must be scrapped after replacement.
23. **Light-Duty Zero- and Partial-Zero-Emissions Vehicles for Fleets:** The project will accelerate the deployment of zero- and partial-zero-emissions light-duty vehicles:
- a. Each project (fleet deployment) must consist of the purchase or lease of three or more new vehicles registered to a single owner;
 - b. Each vehicle must be 2017 model year or newer, and have a GVWR of 14,000 lbs. or lighter;
 - c. Each vehicle must be maintained and operated within the Air District's jurisdiction for a minimum of three years and 15,000 miles;
 - d. Eligible vehicle types include plug-in hybrid-electric, plug-in electric, and fuel cell vehicles approved for on-road use by the CARB; and
 - e. Project Sponsors may request authorization of up to 50% of the TFCA Funds awarded for each vehicle to be used to pay for costs directly related to the purchase and installation of alternative fueling infrastructure and/or equipment used to power the new vehicle.
 - f. Vehicles that are solely powered by gasoline, natural gas, or diesel, and retrofit projects are not eligible.
 - g. The amount of TFCA funds awarded may not exceed 90% of the vehicle's cost after all other grants and applicable manufacturer and local/state/federal rebates and discounts are applied.
24. **Heavy-Duty Zero- and Partial-Zero-Emissions Vehicles:** The project will help fleet operators achieve significant voluntary emission reductions by encouraging the replacement of older, compliant vehicles with the cleanest available technology, and help fleet operators who are expanding their fleet to choose the cleanest available technology:
- a. Vehicles must be new, 2017 model year or newer, and have a GVWR of greater than 14,000 lbs.;
 - b. Vehicles may be purchased or leased;
 - c. Each vehicle must be maintained and operated within the Air District's jurisdiction for a minimum of three years and 15,000 miles;

Agenda 4 – Attachment A: Proposed TFCA Regional Fund Policies and Evaluation Criteria for FYE 2018 (Clean)

- d. Eligible vehicles must be approved by the CARB; and
 - e. Project Sponsors may request authorization of up to 50% of the TFCA Funds awarded for each vehicle to be used to pay for costs directly related to the purchase and installation of alternative fueling infrastructure and/or equipment used to power the new vehicle.
 - f. Projects that seek to scrap and replace a vehicle in the same weight-class as the proposed new vehicle may qualify for additional TFCA funding. Costs related to the scrapping and/or dismantling of the existing vehicle are not eligible for reimbursement with TFCA funds.
 - g. Vehicles that are solely powered by gasoline, natural gas, or diesel, and retrofit projects are not eligible.
 - h. The amount of TFCA funds awarded may not exceed 90% of a vehicle's cost after all other grants and applicable manufacturer and local/state/federal rebates and discounts are applied.
25. **Hydrogen Stations:** These projects are intended to accelerate the deployment of hydrogen fueling stations. Funding may be used for the purchase and installation of equipment for new dispensing facilities and for upgrades and improvements that expand access to existing refueling sites. The following additional conditions must also be met:
- a. Stations must be located within the Air District's jurisdiction and be available and accessible to the public;
 - b. Equipment and infrastructure must be designed, installed, and maintained as required by the existing recognized codes and standards and approved by the local/state authority; and
 - c. Each station must be maintained and operated for a minimum of three years.
 - d. TFCA funding may not be used to pay for fuel or on-going operations and maintenance costs.
 - e. TFCA funding is limited to 25% of the total project cost and may not exceed a maximum award amount of \$250,000 per station.
 - f. Stations must have received a passing score and/or received approval for funding from a State or federal agency.

26. **Reserved.**

27. **Reserved.**

Trip Reduction Projects

28. **Existing Shuttle/Feeder Bus Services:** The project will reduce single-occupancy vehicle commute-hour trips by providing the short-distance connection between a mass transit hub and one or more definable commercial hubs or employment centers:
- a. The service must provide direct service connections between a mass transit hub (e.g., a rail or Bus Rapid Transit (BRT) station, ferry or bus terminal, or airport) and a distinct commercial or employment location;
 - b. The service's schedule must be coordinated to have a timely connection with the corresponding mass transit service;
 - c. The service must be available for use by all members of the public;
 - d. TFCA Regional Funds may be used to fund only shuttle services to locations that are under-served and lack other comparable service. For the purposes of this policy, "comparable service" means that there exists, either currently or within the last three years, a direct, timed, and publicly accessible service that brings passengers to within one-third (1/3) mile of the proposed commercial or employment location from a mass transit hub. A proposed service will not be deemed "comparable" to an existing service if the passengers' proposed travel time will be at least 15 minutes shorter and at least 33% shorter than the existing service's travel time to the proposed destination;
 - e. **Reserved.**

Agenda 4 – Attachment A: Proposed TFCA Regional Fund Policies and Evaluation Criteria for FYE 2018 (Clean)

- f. TFCA Regional Funds may be used to fund services only during commuter peak-hours, i.e., 5:00-10:00 AM and/or 3:00-7:00 PM;
- g. Matching funds must be provided to cover at least 10% of the total project cost and must include only direct operational costs. Administrative costs are not eligible for use as matching funds. For shuttle/feeder bus service projects, the total project cost is the sum of direct operational costs (i.e., shuttle driver wages and fuel) and the administrative costs paid for by TFCA Regional Funds;
- h. Project Sponsors must be either: (1) a public transit agency or transit district that directly operates the shuttle/feeder bus service, or (2) a city, county, or any other public agency; and
- i. Applicants must submit a letter of concurrence from the transit district or transit agency that provides service in the area of the proposed route, certifying that the service does not conflict with existing service.
- j. Projects that would operate in Highly Impacted Communities or Episodic Areas as defined in the Air District Community Air Risk Evaluation (CARE) Program, or in Priority Development Areas (PDAs), may qualify for funding at a higher cost-effectiveness limit (see Policy #2).

29. **Pilot Trip Reduction:** The project will reduce single-occupancy commute-hour vehicle trips by encouraging mode-shift to other forms of shared transportation. Pilot projects are defined as projects that serve an area where no similar service was available within the past three years, or will result in significantly expanded service to an existing area. Funding is designed to provide the necessary initial capital for the startup of Pilots, with the goal of transitioning the project to be financially self-sustaining within three years from the project's start date:

- a. The proposed project must be located in a Highly Impacted Community or Episodic Area as defined in the Air District Community Air Risk Evaluation (CARE) Program, or in a Priority Development Area (PDA);
- b. Applicants must demonstrate the project will reduce single-occupancy commute-hour vehicle trips and result in a reduction in emissions of criteria pollutants;
- c. The proposed service must be available for use by all members of the public;
- d. Applicants must attend a mandatory pre-application workshop to discuss their proposed project with the Air District; and
- e. Applicants must provide a written plan documenting steps that would be taken to ensure that the project will be financially self-sustaining within three years.

In addition, for pilot service projects:

- f. If the local transit provider is not a partner, the applicant must demonstrate that they have attempted to have the service provided by the local transit agency. The transit provider must have been given the first right of refusal and determined that the proposed project does not conflict with existing service;
- g. Applicants must provide data and/or other evidence demonstrating the public's need for the service, including a demand assessment survey and letters of support from potential users;
- h. Pilot shuttle/feeder bus and ridesharing service projects must comply with all applicable requirements in policies #28 and #30.

30. **Existing Regional Ridesharing Services:** The project will provide carpool, vanpool, and other rideshare services. For TFCA Regional Fund eligibility, ridesharing projects must be comprised of riders from at least five counties within Air District's jurisdiction, with no one county accounting for more than 80% of all riders, as verified by documentation submitted with the application.

If a project includes ride-matching services, *only* ride-matches that are not already included in the Metropolitan Transportation Commission's (MTC) regional ridesharing program are eligible for TFCA Regional Funds. Projects that provide a direct or indirect financial transit or rideshare subsidy are also eligible under this category. Applications for projects that provide a direct or indirect financial transit or rideshare subsidy *exclusively* to employees of the project sponsor are not eligible.

Bicycle Projects

31. **Electronic Bicycle Lockers:** The project will expand the public’s access to new electronic bicycle lockers. The project must be included in an adopted countywide bicycle plan, Congestion Management Plan (CMP), or the Metropolitan Transportation Commission’s Regional Bicycle Plan, and must serve a major activity center (e.g. transit station, office building, or school). The electronic bicycle lockers must be publicly accessible and available for use by all members of the public.

Costs for maintenance, repairs, upgrades, rehabilitation, operations, and project administration are not eligible for TFCA Regional Funds.

The maximum award amount is based on the number of lockers, at the rate of \$2,500 per locker, for example, a quad contains four lockers and would be eligible for a maximum award amount of \$10,000.

Monies expended by Project Sponsors to pay for the purchase and installation of lockers and for administrative costs (i.e., the costs associated with administering a TFCA Regional Fund grant) are eligible for use as matching funds. Monies expended by the Project Sponsor to maintain, repair, upgrade, rehabilitate, or operate the electronic lockers are not eligible for use as matching funds.

32. **Bikeways:** The project will construct and/or install new bikeways that are included in an adopted countywide bicycle plan, Congestion Management Plan (CMP), countywide transportation plan (CTP), city general plan or area-specific plan, or the Metropolitan Transportation Commission’s Regional Bicycle Plan. To be eligible for funding, the purpose of bikeways that are included in an adopted city general plan or area-specific plan must be to reduce motor vehicle emissions or traffic congestion. Projects must have completed all applicable State and federal environmental reviews and either have been deemed exempt by the lead agency or have been issued the applicable negative declaration or environmental impact report or statement.

All bikeway projects must, where applicable, be consistent with design standards published in the California Highway Design Manual, or conform to the provisions of the Protected Bikeway Act of 2014.

Projects must reduce vehicle trips made for utilitarian purposes (e.g., work or school commuting) and cannot be used exclusively for recreational use. Projects must also meet at least one of the following conditions:

- a. Be located within one-half mile biking distance from the closer of a public transit station/stop (e.g., local, county- wide or regional transit stops/stations/terminals) or a bike share station;
- b. Be located within one-half mile biking distance from a major activity center that serves at least 2,500 people per day (e.g., employment centers, schools, business districts);
- c. Be located within one-half mile biking distance from three activity centers (e.g., employment centers, schools, business districts).

Projects are limited to the following types of bikeways:

- a. New Class-I bicycle paths;
- b. New Class-II bicycle lanes;
- c. New Class-III bicycle routes; or
- d. New Class-IV cycle tracks or separated bikeways.

REGIONAL FUND EVALUATION CRITERIA:

1. Projects must meet all of the applicable TFCA Regional Fund policies.
2. Applications will also be evaluated using the evaluation process listed in Table 2:

Table 2: Evaluation Process by Project Category

Policy #	Project Category	Evaluation Process
22	On-Road Truck Replacements	Applications will be reviewed on a first-come, first-served basis, and funding amounts for eligible projects will be determined based on a project’s cost-effectiveness and conformity to their respective project specific Policy requirements.
23	Light-Duty Zero- and Partial-Zero-Emissions Vehicles for Fleets	
24	Heavy-Duty Zero- and Partial-Zero- Emissions Vehicles	
25	Hydrogen Stations	Applications will be reviewed after the submittal deadline and eligible projects will be ranked based on their cost-effectiveness score and conformity to Policy #25.
26	Reserved	Reserved
27	Reserved	Reserved
28	Existing Shuttle/Feeder Bus Services	Applications will be reviewed after the submittal deadline and eligible projects will be ranked based on their cost-effectiveness score and conformity to their respective project specific Policy requirements.
29	Pilot Trip Reduction	
30	Existing Regional Ridesharing Services	
31	Electronic Bicycle Lockers	Applications will be reviewed on a first-come, first-served basis, and eligible projects will be recommended for funding until funding has been depleted.
32	Bikeways	Applications will be reviewed after the submittal deadline and eligible projects will be ranked based on their cost-effectiveness score and conformity to Policy #32. Projects that serve regional or county-wide transit stops/stations/terminals (e.g., BART, Caltrain, Capitol Corridor, ferry terminals) or bike share stations will receive a higher priority.

3. Up to sixty percent (60%) of TFCA Regional Funds will be prioritized for projects that meet one or more of the following criteria:
 - a. Projects in Highly Impacted Communities or Episodic Areas as defined in the Air District Community Air Risk Evaluation (CARE) Program;
 - b. Projects in Priority Development Areas (PDAs).

**TFCA REGIONAL FUND POLICIES
AND EVALUATION CRITERIA FOR FYE ~~2017~~2018**

The following policies apply to the Bay Area Air Quality Management District’s (Air District) Transportation Fund for Clean Air (TFCA) Regional Fund for fiscal year ending (FYE) ~~2017~~2018-

BASIC ELIGIBILITY

1. **Eligible Projects:** Only projects that result in the reduction of motor vehicle emissions within the Air District’s jurisdiction are eligible. Projects must conform to the provisions of the California Health and Safety Code (HSC) sections 44220 et seq. and Air District Board of Directors adopted TFCA Regional Fund Policies and Evaluation Criteria for FYE ~~2017~~2018.

Projects must achieve surplus emission reductions, i.e., reductions that are beyond what is required through regulations, contracts, and other legally binding obligations at the time the Air District executes the project’s funding agreement.

2. **TFCA Cost-Effectiveness:** Projects must not exceed the maximum cost-effectiveness (C-E) limit noted in Table 1. Cost-effectiveness (\$/weighted ton) is based on the ratio of TFCA funds awarded divided by the sum of surplus emissions reduced of reactive organic gases (ROG), nitrogen oxides (NOx), and weighted PM10 (particulate matter 10 microns in diameter and smaller) over a project’s useful life.

Table 1: Maximum Cost-Effectiveness for FYE ~~2016~~ TFCA Regional Fund Projects

Policy #	Project Category	Maximum C-E (\$/weighted ton)
22	On-Road Truck Replacements	\$90,000
23	Light-Duty Zero- and Partial-Zero Emissions Vehicles for Fleets	\$250,000
24	Heavy-Duty Zero- and Partial-Zero- Emissions Vehicles	\$250,000
25	Hydrogen Stations Reserved	\$500,000Reserved
26	Reserved	Reserved
27	Reserved	Reserved
28	Existing Shuttle/Feeder Bus Services	\$200,000; \$250,000 for services in CARE Areas or PDAs
29	Pilot Trip Reduction — in Community Air Risk Evaluation (CARE) areas or Priority Development Areas (PDAs)	\$250,000
30	Existing Regional Ridesharing Services	\$150,000
31	Electronic Bicycle Lockers	\$250,000
32	Bikeways	\$250,000

3. **Consistent with Existing Plans and Programs:** All project categories must comply with the Transportation Control and Mobile Source Control measures included in the Air District's most recently approved strategy(ies) for achieving and maintaining State and national ozone standards; those plans and programs established pursuant to California Health & Safety Code (HSC) sections 40233, 40717 and 40919; and, when specified, other adopted Federal, State, regional, and local plans and programs.
4. **Eligible Recipients and Authority to Apply:** Applicants must have the legal authority, as well as the financial and technical capability, to complete projects. In addition, the following conditions apply:
 - a. **Eligible Recipients:**
 - i. **Public agencies** are eligible to apply for all project categories.

Agenda 4 – Attachment B: Proposed TFCA Regional Fund Policies and Evaluation Criteria for FYE 2018 (Redline)

- ii. **Non-public entities** are only eligible to apply for Clean Air Vehicle Projects and advanced technology demonstrations that are permitted pursuant to HSC section 44241b(7).
 - b. **Authority to Apply:** Applicants must demonstrate that they have the authority to submit the application, to enter into a funding agreement, to carry out the project, and to bind the entity to perform these tasks by including either: 1) a signed letter of commitment from the applicant’s representative with authority (e.g., Chief Executive or Financial Officer, Executive Director, or City Manager); or 2) a signed resolution from the governing body (e.g., City Council, Board of Supervisors, or Board of Directors).
5. **Viable Project and Matching Funds:** Applicants must demonstrate that they have adequate funds to cover all stages of their proposed project(s) from commencement through completion. Unless otherwise specified in policies #22 through 32, project applicants must demonstrate evidence that they have at least 10% of the total eligible project costs (matching funds) from a non-Air District source available and ready to commit to the proposed projects.
6. **Minimum Grant Amount:** \$10,000 per project.
7. **Maximum Grant Amount:** Unless otherwise specified in policies #22 through 32, the maximum grant award amounts are:
 - a. Each public agency may be awarded up to \$1,500,000 per calendar year; and
 - b. Each non-public entity may be awarded up to \$500,000 per calendar year.
8. **Readiness:** Unless otherwise specified in policies #22 through 32, projects must commence by the end of calendar year ~~2017~~2018 or a total of 12 months from the date of execution of funding agreement by the Air District, whichever is later. For purposes of this policy, “commence” means a tangible preparatory action taken in connection with the projects’ operation or implementation, for which the project sponsor can provide documentation of the commencement date and action performed. “Commence” can mean the issuance of a purchase order to secure project vehicles and equipment; commencement of shuttle/feeder bus and ridesharing service; or the delivery of the award letter for a construction contract.
9. **Maximum Two Years Operating Costs:** Unless otherwise specified in policies #22 through 32, ~~FYE~~ 2017FYE 2018 TFCA Regional Funds may be used to support up to two years of operating costs for service-based projects (i.e., Trip Reduction Projects)
10. **Project Revisions:** The Air District will consider only requests for modifications to approved projects that are within the same project categories, achieve the same or better cost-effectiveness, comply with all TFCA Regional Fund Policies, and are in compliance with all applicable federal and State laws, and Air District rules and regulations. The Air District may also approve minor modifications, such as to correct typographical mistakes in the grant agreements or to change the name of the grantees, without re-evaluating the proposed modification in light of the regulations, contracts, and other legally-binding obligations that are in effect at the time the minor modification was proposed.

APPLICANT IN GOOD STANDING

11. **In Compliance with Air Quality Regulations:** Applicants must certify that, at of the time of the application and at the time of issuance of the grant, they are in compliance with all local, State, and federal air quality regulations. Applicants who have an unresolved violation of Air District, state or federal air quality rules or regulations are not eligible for funding. The Air District may terminate a grant agreement and seek reimbursement of distributed funds from project sponsors who were not eligible for funding at the time of the grant.
12. **In Compliance with Agreement Requirements:** Project sponsors who have failed to meet contractual requirements such as project implementation milestones or monitoring and reporting requirements for any project funded by the Air District may not be considered eligible for new funding until such time as all of the unfulfilled obligations are met.

13. **Independent Air District Audit Findings and Determinations:** Project sponsors who have failed either a fiscal audit or a performance audit for a prior Air District funded project will be excluded from future funding for three (3) years from the date of the Air District’s final determination in accordance with HSC section 44242. Additionally, project sponsors with open projects will not be reimbursed until all audit recommendations and remedies have been satisfactorily implemented.

A failed fiscal audit means an uncorrected audit finding that confirms an ineligible expenditure of funds. A failed performance audit means that a project was not implemented as set forth in the project funding agreement.

Project sponsors must return funds that the Air District has determined were expended in a manner contrary to the TFCA Regional Funds’ requirements and/or requirements of HSC Code section 44220 et seq.; the project did not result in a surplus reduction of air pollution from the mobile sources or transportation control measures pursuant to the applicable plan; the funds were not spent for surplus reduction of air pollution pursuant to a plan or program to be implemented by the TFCA Regional Fund; or otherwise failed to comply with the approved project scope, as set forth in the project funding agreement. Applicants who failed to reimburse such funds to the Air District from prior Air District funded projects will be excluded from future TFCA funding.

14. **Executed Funding Agreement:** Only a fully-executed funding agreement (i.e., signed by both the project sponsor and the Air District) constitutes the Air District’s award of funds for a project. Approval of an application for the project by the Air District Board of Directors or notices such as a transmittal letter announcing the proposed award do not constitute a final obligation on the part of the Air District to fund a project.

Applicants must sign funding agreements within 60 days from the date the agreements were transmitted to them in order to remain eligible for award of TFCA Regional Funds. Applicants may request, in writing, an extension of up to no more than 180 days from the transmittal date to sign the grant agreements, which includes the basis for an extended signature period. At its discretion, the Air District may authorize such an extension.

15. **Maintain Appropriate Insurance:** Project sponsors must obtain and maintain general liability insurance and additional insurance that is appropriate for its specific project type throughout the life of the project, with coverage being no less than the amounts specified in the respective funding agreement. Project sponsors shall require their subcontractors to obtain and maintain such insurance of the type and in the amounts required by the grant agreements.

INELIGIBLE PROJECTS

16. **Planning Activities:** The costs of preparing or conducting feasibility studies are not eligible. Other planning activities may be eligible, but only if the activities are both: 1) directly related to the implementation of a specific project or program, and 2) directly contribute to the project’s emissions reductions.
17. **Cost of Developing Proposals and Grant Applications:** The costs to prepare grant applications are not eligible.
18. **Duplication:** Projects that have previously received TFCA Regional or County Program Manager funds and do not propose to achieve additional emission reductions are not eligible.

USE OF TFCA FUNDS

19. **Combined Funds:** Unless otherwise specified in policies #22 through 32, TFCA County Program Manager Funds may not be combined with TFCA Regional Funds to fund a TFCA Regional Fund project.
20. **Administrative Costs:** Unless otherwise specified in policies #22 through 32, TFCA Regional Funds may not be used to pay for administrative costs (i.e., the costs associated with administering a TFCA Regional Fund grant). In cases where administrative costs may be paid for by TFCA Regional Funds, they are limited

to a maximum of five percent (5%) of total TFCA Regional Funds expended on a project and are only available to projects sponsored by public agencies. To be eligible for reimbursement, administrative costs must be clearly identified in the project budget at the time of application and in the funding agreement between the Air District and the project sponsor.

21. **Expend Funds within Two Years:** Project sponsors must expend the grant funding within two (2) years of the effective date of their grant agreement. Applicants may request a longer period in the application, by submitting evidence that a longer period is justified to complete the project due to its unique circumstance. Project sponsors may request a longer period before the end of the agreements' second year in the event that significant progress has been made in the implementation of the project. If the Air District approves a longer period, the parties shall memorialize the approval and length of the extension formally (i.e., in writing) in the grant agreement or in an amendment to the executed grant agreement.

ELIGIBLE PROJECT CATEGORIES

To be eligible for TFCA Regional funding, a proposed project must meet the purposes and requirements for the particular category's type of project.

Clean Air Vehicle Projects

22. **On-Road Truck Replacements:** The project will replace Class 6, Class 7, or Class 8 diesel-powered trucks that have a gross vehicle weight rating (GVWR) of 19,501 lbs. or greater (per vehicle weight classification definition used by Federal Highway Administration (FHWA)) with new or used trucks that have an engine certified to the 2010 California Air Resources Board (CARB) emissions standards or cleaner. The existing trucks must be registered with the California Department of Motor Vehicles (DMV) to an address within the Air District's jurisdiction, and must be scrapped after replacement.
23. **Light-Duty Zero- and Partial-Zero-Emissions Vehicles for Fleets:** The project will accelerate the deployment of zero- and partial-zero-emissions light-duty vehicles:
- a. Each project (fleet deployment) must consist of the purchase or lease of three or more new vehicles registered to a single owner;
 - b. Each vehicle must be 2016⁷ model year or newer, and have a GVWR of 14,000 lbs. or lighter;
 - c. Each vehicle must be maintained and operated within the Air District's jurisdiction for a minimum of three years and 15,000 miles;
 - d. Eligible vehicle types include plug-in hybrid-electric, plug-in electric, and fuel cell vehicles approved for on-road use by the CARB; and
 - e. Project Sponsors may request authorization of up to 50% of the TFCA Funds awarded for each vehicle to be used to pay for costs directly related to the purchase and installation of alternative fueling infrastructure and/or equipment used to power the new vehicle.
 - f. Vehicles that are solely powered by gasoline, natural gas, or diesel, and retrofit projects are not eligible.
 - g. The amount of TFCA funds awarded may not exceed 90% of the vehicle's cost after all other grants and applicable manufacturer and local/state/federal rebates and discounts are applied.
24. **Heavy-Duty Zero- and Partial-Zero-Emissions Vehicles:** The project will help fleet operators achieve significant voluntary emission reductions by encouraging the replacement of older, compliant vehicles with the cleanest available technology, and help fleet operators who are expanding their fleet to choose the cleanest available technology:
- a. Vehicles must be new, 2016⁷ model year or newer, and have a GVWR of greater than 14,000 lbs.;
 - b. Vehicles may be purchased or leased;
 - c. Each vehicle must be maintained and operated within the Air District's jurisdiction for a minimum of three years and 15,000 miles;

Agenda 4 – Attachment B: Proposed TFCA Regional Fund Policies and Evaluation Criteria for FYE 2018 (Redline)

- d. Eligible vehicles must be approved by the CARB; and
 - e. Project Sponsors may request authorization of up to 50% of the TFCA Funds awarded for each vehicle to be used to pay for costs directly related to the purchase and installation of alternative fueling infrastructure and/or equipment used to power the new vehicle.
 - f. Projects that seek to scrap and replace a vehicle in the same weight-class as the proposed new vehicle may qualify for additional TFCA funding. Costs related to the scrapping and/or dismantling of the existing vehicle are not eligible for reimbursement with TFCA funds.
 - g. Vehicles that are solely powered by gasoline, natural gas, or diesel, and retrofit projects are not eligible.
 - h. The amount of TFCA funds awarded may not exceed 90% of a vehicle’s cost after all other grants and applicable manufacturer and local/state/federal rebates and discounts are applied.
25. **Hydrogen Stations:** These projects are intended to accelerate the deployment of hydrogen fueling stations. Funding may be used for the purchase and installation of equipment for new dispensing facilities and for upgrades and improvements that expand access to existing refueling sites. The following additional conditions must also be met:
- a. Stations must be located within the Air District’s jurisdiction and be available and accessible to the public;
 - b. Equipment and infrastructure must be designed, installed, and maintained as required by the existing recognized codes and standards and approved by the local/state authority; and
 - c. Each station must be maintained and operated for a minimum of three years.
 - d. TFCA funding may not be used to pay for fuel or on-going operations and maintenance costs.
 - e. TFCA funding is limited to 25% of the total project cost and may not exceed a maximum award amount of \$250,000 per station.
 - f. Stations must have received a passing score and/or received approval for funding from a State or Federal agency.

26. **Reserved.**

27. **Reserved.**

Trip Reduction Projects

28. **Existing Shuttle/Feeder Bus Services:** The project will reduce single-occupancy vehicle commute-hour trips by providing the short-distance connection between a mass transit hub and one or more definable commercial hubs or employment centers:
- a. The service must provide direct service connections between a mass transit hub (e.g., a rail or Bus Rapid Transit (BRT) station, ferry or bus terminal, or airport) and a distinct commercial or employment location;
 - b. The service’s schedule must be coordinated to have a timely connection with the corresponding mass transit service;
 - c. The service must be available for use by all members of the public;
 - d. TFCA Regional Funds may be used to fund only shuttle services to locations that are under-served and lack other comparable service. For the purposes of this policy, “comparable service” means that there exists, either currently or within the last three years, a direct, timed, and publicly accessible service that brings passengers to within one-third (1/3) mile of the proposed commercial or employment location from a mass transit hub. A proposed service will not be deemed “comparable” to an existing service if the passengers’ proposed travel time will be at least 15 minutes shorter and at least 33% shorter than the existing service’s travel time to the proposed destination;
 - e. **Reserved.**

Agenda 4 – Attachment B: Proposed TFCA Regional Fund Policies and Evaluation Criteria for FYE 2018 (Redline)

- f. TFCA Regional Funds may be used to fund services only during commuter peak-hours, i.e., 5:00-10:00 AM and/or 3:00-7:00 PM;
- g. Matching funds must be provided to cover at least 10% of the total project cost and must include only direct operational costs. Administrative costs are not eligible for use as matching funds. For shuttle/feeder bus service projects, the total project cost is the sum of direct operational costs (i.e., shuttle driver wages and fuel) and the administrative costs paid for by TFCA Regional Funds;
- h. Project Sponsors must be either: (1) a public transit agency or transit district that directly operates the shuttle/feeder bus service, or (2) a city, county, or any other public agency; and
- i. Applicants must submit a letter of concurrence from the transit district or transit agency that provides service in the area of the proposed route, certifying that the service does not conflict with existing service.
- j. Projects that would operate in Highly Impacted Communities or Episodic Areas as defined in the Air District Community Air Risk Evaluation (CARE) Program, or in Priority Development Areas (PDAs), may qualify for funding at a higher cost-effectiveness limit (see Policy #2).

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- a. The proposed project must be located in a Highly Impacted Community or Episodic Area as defined in the Air District Community Air Risk Evaluation (CARE) Program, or in a Priority Development Area (PDA);
- b. Applicants must demonstrate the project will reduce single-occupancy commute-hour vehicle trips and result in a reduction in emissions of criteria pollutants;
- c. The proposed service must be available for use by all members of the public;
- d. Applicants must attend a mandatory pre-application workshop to discuss their proposed project with the Air District; and
- e. Applicants must provide a written plan documenting steps that would be taken to ensure that the project will be financially self-sustaining within three years.

In addition, for pilot service projects:

- f. If the local transit provider is not a partner, the applicant must demonstrate that they have attempted to have the service provided by the local transit agency. The transit provider must have been given the first right of refusal and determined that the proposed project does not conflict with existing service;
- g. Applicants must provide data and/or other evidence demonstrating the public's need for the service, including a demand assessment survey and letters of support from potential users;
- h. Pilot shuttle/feeder bus and ridesharing service projects must comply with all applicable requirements in policies #28 and #30.

30. **Existing Regional Ridesharing Services:** The project will provide carpool, vanpool, and other rideshare services. For TFCA Regional Fund eligibility, ridesharing projects must be comprised of riders from at least five counties within Air District's jurisdiction, with no one county accounting for more than 80% of all riders, as verified by documentation submitted with the application.

If a project includes ride-matching services, *only* ride-matches that are not already included in the Metropolitan Transportation Commission's (MTC) regional ridesharing program are eligible for TFCA Regional Funds. Projects that provide a direct or indirect financial transit or rideshare subsidy are also eligible under this category. Applications for projects that provide a direct or indirect financial transit or rideshare subsidy *exclusively* to employees of the project sponsor are not eligible.

Bicycle Projects

31. **Electronic Bicycle Lockers:** The project will expand the public’s access to new electronic bicycle lockers. The project must be included in an adopted countywide bicycle plan, Congestion Management Plan (CMP), or the Metropolitan Transportation Commission’s Regional Bicycle Plan, and must serve a major activity center (e.g. transit station, office building, or school). The electronic bicycle lockers must be publicly accessible and available for use by all members of the public.

Costs for maintenance, repairs, upgrades, rehabilitation, operations, and project administration are not eligible for TFCA Regional Funds.

The maximum award amount is based on the number of lockers, at the rate of \$2,500 per locker, for example, a quad contains four lockers and would be eligible for a maximum award amount of \$10,000.

Monies expended by Project Sponsors to pay for the purchase and installation of lockers and for administrative costs (i.e., the costs associated with administering a TFCA Regional Fund grant) are eligible for use as matching funds. Monies expended by the Project Sponsor to maintain, repair, upgrade, rehabilitate, or operate the electronic lockers are not eligible for use as matching funds.

32. **Bikeways:** The project will construct and/or install new bikeways that are included in an adopted countywide bicycle plan, Congestion Management Plan (CMP), countywide transportation plan (CTP), city general plan or area-specific plan, or the Metropolitan Transportation Commission’s Regional Bicycle Plan. To be eligible for funding, the purpose of bikeways that are included in an adopted city general plan or area-specific plan must be to reduce motor vehicle emissions or traffic congestion. Projects must have completed all applicable State and federal environmental reviews and either have been deemed exempt by the lead agency or have been issued the applicable negative declaration or environmental impact report or statement.

All bikeway projects must, where applicable, be consistent with design standards published in the California Highway Design Manual, or conform to the provisions of the Protected Bikeway Act of 2014.

Projects must reduce vehicle trips made for utilitarian purposes (e.g., work or school commuting) and cannot be used exclusively for recreational use. Projects must also meet at least one ~~or more~~ of the following conditions:

- a. Be located within one-half mile ~~(1/2) biking distance~~ from the closer of a public transit station/stop (e.g., local, county- wide or regional transit stops/stations/terminals, ~~bike share station~~) or a bike share station;
- b. Be located within one-half mile ~~(1/2) biking distance~~ from a major activity center that serves at least 2,500 people per day (e.g., employment centers, schools, business districts);
- c. Be located within one-half mile ~~(1/2) biking distance~~ from three activity centers (e.g., employment centers, schools, business districts).

Projects are limited to the following types of bikeways:

- a. New Class-I bicycle paths;
- b. New Class-II bicycle lanes;
- c. New Class-III bicycle routes; or
- d. New Class-IV cycle tracks or separated bikeways.

REGIONAL FUND EVALUATION CRITERIA:

1. Projects must meet all of the applicable TFCA Regional Fund policies.
2. Applications will also be evaluated using the evaluation process listed in Table 2:

Table 2: Evaluation Process by Project Category

Policy #	Project Category	Evaluation Process
22	On-Road Truck Replacements	Applications will be reviewed on a first-come, first-served basis, and funding amounts for eligible projects will be determined based on a project’s cost-effectiveness and responsiveness <u>conformity</u> to their respective project specific Policy requirements.
23	Light-Duty Zero- and Partial-Zero-Emissions Vehicles for Fleets	
24	Heavy-Duty Zero- and Partial-Zero- Emissions Vehicles	
25	Reserved <u>Hydrogen Stations</u>	<u>Applications will be reviewed after the submittal deadline and eligible projects will be ranked based on their cost-effectiveness score and conformity to Policy #25.</u> Reserved
26	Reserved	Reserved
27	Reserved	Reserved
28	Existing Shuttle/Feeder Bus Services	Applications will be reviewed after the submittal deadline and eligible projects will be ranked based on their cost-effectiveness score and responsiveness <u>conformity</u> to their respective project specific Policy requirements.
29	Pilot Trip Reduction	
30	Existing Regional Ridesharing Services	
31	Electronic Bicycle Lockers	Applications will be reviewed on a first-come, first-served basis, and eligible projects will be recommended for funding until funding has been depleted.
32	Bikeways	Applications will be reviewed after the submittal deadline and eligible projects will be ranked based on their cost-effectiveness score and responsiveness <u>conformity</u> to Policy #32. Projects that serve regional or county-wide transit stops/stations/terminals (e.g., BART, Caltrain, Capitol Corridor, ferry terminals) or bike share stations will receive a higher priority.

3. Up to sixty percent (60%) of TFCA Regional Funds will ~~receive a higher priority for~~be prioritized for projects that meet one or more of the following criteria:
 - a. Projects in Highly Impacted Communities or Episodic Areas as defined in the Air District Community Air Risk Evaluation (CARE) Program;
 - b. Projects in Priority Development Areas (PDAs).

Agenda 4 Attachment C: Comments Received and Staff Responses to Proposed FYE 2018 TFCA Regional Fund Policies

Committer and Agency	Comment	Staff Response
<p>Peter Skinner; SamTrans, San Mateo County Transit District</p>	<p>(In Reference to Policy # 29, Pilot Trip Reduction): The first sentence states “The project will reduce single-occupancy commute-hour vehicle trips by encouraging mode-shift to other forms of shared transportation. Pilot projects are defined as projects that serve an area where <i>no similar service</i> was available within the past three years, or will result in significantly expanded service to an existing area.”</p> <p>What type of service are you referring to in the highlighted text? Are you referring to transportation services in general (such as traditional transit service like a bus) or just similar to the pilot?</p> <p>If the answer is transportation services in general, it should be refined to just refer to a program similar to the pilot. An example of an acceptable pilot might be a transit agency wants to eliminate underperforming bus routes and try a pilot program to provide vouchers for Transportation Network Carriers (such as Uber or Lyft) to encourage people who would not take traditional transit service (bus) to take a more personalized transportation service. Without taking into account the cost effectiveness of the program or other requirements, a proposal like this should be considered under the pilot program criteria.</p>	<p>“Similar service” in the sentence “no similar service was available within the last three years” refers to both traditional transit services (e.g. fixed-route shuttle bus) and any trip reduction/mobility programs that are similar to the proposed project, such as an on-demand services program coordinated and/or sponsored by a local agency in the same area as the proposed project.</p>
<p>Zachary Kahn; BYD America</p>	<p>We would strongly encourage the BAAQMD to amend the current proposed draft, which allows funding to be utilized for non zero-emission technologies, and instead focus funding on zero emission technologies only. Diverting funding that could be utilized for zero emission technologies towards legacy partial-zero polluting technologies diminishes the opportunity to leverage the TFCA Zero Emission program to its maximum potential. Now that zero emission battery electric technology is fully mature and cost competitive with legacy technologies, there is simply no reason to keep funneling public dollars into polluting legacy technologies. Possible cuts to other funding sources that promote clean air and clean transportation only make it more important to focus programs like the TFCA around zero emission technologies.</p>	<p>The proposed policies are designed to provide higher levels of funding for projects that deploy zero emissions vehicles, while still providing opportunities for replacement of older diesel vehicles to cleaner options.</p>

Agenda 4 Attachment C: Comments Received and Staff Responses to Proposed FYE 2018 TFCA Regional Fund Policies

Committer and Agency	Comment	Staff Response
<p>Erik Neandross and JoAnne Golden-Stewart; Gladstein, Neandross & Associates</p>	<p>The Draft FYE 2017 TFCA Regional Fund notes that “new vehicles that are solely powered by gasoline, natural gas, or diesel, and retrofit projects are not eligible” for funding. However, given recent advancements in ultra-low NOx emitting natural gas vehicles (NGVs), especially when used in conjunction with increasingly available renewable natural gas (RNG) fuel, this advanced NGV technologies can provide an immediate, cost-effective opportunity for TFCA to achieve critical emission reductions. Natural gas already powers growing number of trucks and buses in key niches, such as sanitation and solid waste, school and transit buses, urban delivery, port drayage, and, where the fueling infrastructure supports it, long-haul trucking. Having an immediate, easily-integrated engine and drop-in renewable fuel option for existing fleets creates the opportunity for significant and meaningful criteria pollutant and GHG reductions</p> <p>Given that the TFCA has already identified a maximum cost-effectiveness threshold for heavy-duty zero- and partial-zero emission vehicles of \$250,000 per weighted ton, we strongly urge the BAAQMD to provide a technology-neutral solicitation where all clean and renewable technologies can compete, thereby supporting significantly more cost-effective and immediate air quality improvements for the region. We also request the reinstatement of natural gas fueling stations for funding eligibility. Both the proposed FY 2017 and current FY 2016 funding plans exclude natural gas fueling stations from eligibility, and conversations with BAAQMD staff indicate that this is due in part to the perception that NGVs don’t help the BAAQMD achieve surplus emission reductions. As the following analysis will show, support for new, advanced NGVs and supporting refueling infrastructure can have a significant near-term impact on criteria pollutant and GHG emissions and impacts.</p>	<p>Natural gas and low-NOx heavy-duty vehicles are eligible for funding under policy #22, which applies to projects that replace older diesel vehicles, with cleaner options.</p> <p>The Air District has previously provided grant funds to CNG fueling infrastructure; However, the current heavy-duty engine standards are the same for diesel and CNG trucks so there are no surplus emissions benefits between the two technologies. Since the fueling stations funded by the Air District are required to be available and accessible to the public, it would be difficult to ensure that only vehicles with engines certified to the optionally cleaner low-NOx standards utilize the funded infrastructure (vs. traditional CNG vehicles certified to the current standards). The Air District would like to focus on accelerating the deployment of fueling stations that can only be used by the clean motor vehicle technologies that are available to provide surplus emissions reduction benefits today, e.g. hydrogen fuel cell vehicles.</p>
<p>Dana Turrey; Sonoma County Transportation Authority</p>	<p>The Sonoma County Transportation Authority (SCTA) would like to see the Regional Fund Policies allow for Bike Share projects, consistent with the County Program Manager Fund policy number 30</p>	<p>In 2015, the Air District transferred bikeshare funding and oversight responsibilities to the Metropolitan Transportation Commission (MTC), with the understanding that the Air District would maintain responsibility for funding and oversight to support the acceleration of electric vehicles in the region. For that reason, the policies for bikeshare are not included in these policies. However, funding for this project category is still available through the TFCA’s County Program Manager Fund.</p>

Agenda 4 Attachment C: Comments Received and Staff Responses to Proposed FYE 2018 TFCA Regional Fund Policies

Committer and Agency	Comment	Staff Response
<p>Maria Timofeyeva; ALTRANS</p>	<p>I'm a manager of a community shuttle program. It carries about 15,000 people per month and runs around the town. One of the destinations is a Caltrain station. It is privately owned but is available for public for free. We serve senior communities, public schools, movie theater, shopping plazas, etc.</p> <p>So, since our program is not a first/last mile service, we are not going to buy any new vehicles next year because we already have our own electric plus gas backup buses, I wonder under which category we should apply for a grant. Will a specific category for community shuttle programs which already exists in Palo Alto, Mountain View, S.San Francisco, ect. be added?</p> <p>With all the changes coming from VTA we are looking for a support to be able to increase service to some areas of the community and would like to have resources to create new routes.</p> <p>From webinar: I have a question regarding a community shuttle programs. Will they be eligible or only shuttles going to work places? Our program is using electric buses.</p>	<p>The authorizing legislation for the TFCA requires that sponsors of feeder bus and shuttle service projects be a public agency. Non-public agencies are eligible to apply for vehicle based-projects, such as funding to deploy zero-emissions or 2010-standard and cleaner vehicles.</p> <p>Additionally, non-public entities are also eligible to apply to the District's <i>Charge!</i> Program, which provides funding to support the purchase and installation of electric vehicle charging equipment.</p>
<p>Tong Reanna; City of Palo Alto</p>	<p>For bikeshare projects, are you still requiring bike systems to be part of Bay Area Bike Share?</p>	<p>The TFCA Regional Fund does not include any requirements for Bikeshare projects. Anyone interested in learning about available funding opportunities and requirements for a bicycle sharing systems are encouraged to contact their local liaison for the County Program Manager Fund.</p>

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Karen Mitchoff and Members
of the Mobile Source Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: May 10, 2017

Re: Fiscal Year Ending (FYE) 2018 Transportation Fund for Clean Air (TFCA) County
Program Manager (CPM) Expenditure Plans

RECOMMENDATIONS

Recommend Board of Directors:

1. Approve the allocation of new FYE 2018 TFCA CPM Funds listed in Table 1; and
2. Authorize the Executive Officer/APCO to enter into funding agreements with the CPMs for the total funds to be programmed in FYE 2018, listed in Table 1.

BACKGROUND

In 1991, the California State Legislature authorized the Bay Area Air Quality Management District (Air District) 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. The statutory authority for the TFCA and requirements of the program are set forth in California Health and Safety Code (HSC) Sections 44241 and 44242. The authorizing legislation requires the Air District Board of Directors (Board) to annually adopt policies that govern the use of TFCA funding to maximize emissions reductions and public health benefit. Policies for the upcoming FYE 2018 cycle were adopted by the Board on November 16, 2016.

By law, forty percent (40%) of these revenues are distributed to the designated CPM in each of the nine counties within the Air District's jurisdiction and the funds are distributed proportionally to the fees generated in each county.

Every year, each CPM submits an expenditure plan application to the Air District specifying the funding available for projects and program administration for the upcoming fiscal year. The authorizing legislation allows CPMs to allocate and use up to 5% of new TFCA monies that were received prior to January 1, 2016, and up to 6.25% of new TFCA monies that are received after January 1, 2016, to fund their administrative costs. CPMs are also required to allocate any available TFCA funds to eligible projects within six months of the Board's approval of their expenditure plan.

DISCUSSION

FYE 2018 Expenditure Plans

For FYE 2018, seven of the nine CPMs submitted compliant expenditure plan applications by the March 3, 2017 deadline, and two CPMs submitted applications by March 14, 2017.

Table 1 shows the funds that are estimated to be available to CPMs in FYE 2018:

- **Column A** (highlighted in blue) shows the amount of new TFCA funds (revenue monies) that are projected for each county in FYE 2018.
- **Column B** shows the amount of TFCA funds that were reported by CPMs in their expenditure plans that are available for reprogramming from prior-year projects that were recently completed under budget or canceled, and interest earned.
- **Column C** shows the sum of columns A and B, and is the total amount of funds that are estimated to be available to each of the nine CPMs in FYE 2018.

Table 1: FYE 2018 TFCA Funding for County Program Managers

	A	B	C
County Program Manager	Estimated New TFCA Funds	TFCA Funds to be Reprogrammed*	Total FYE 2017 Funds
Alameda County Transportation Commission	\$2,024,825	\$195,463	\$2,220,288
Contra Costa Transportation Authority	\$1,509,966	\$22,242	\$1,532,208
Transportation Authority of Marin	\$356,940	\$138,463	\$495,403
Napa Valley Transportation Authority	\$199,236	\$22,315	\$221,551
San Francisco County Transportation Authority	\$736,049	\$36,714	\$772,763
San Mateo City/County Association of Governments	\$1,079,043	\$464,611	\$1,543,654
Santa Clara Valley Transportation Agency	\$2,482,587	\$408,718	\$2,891,305
Solano Transportation Authority	\$312,902	\$2,660	\$315,562
Sonoma County Transportation Authority	\$644,505	\$11,650	\$656,155
TOTAL	\$9,346,053	\$1,302,836	\$10,648,889

*Based on funds available for reprogramming from prior-year CPM projects that were recently completed under budget or canceled, and interest earned.

Summary of Projects Awarded CPM TFCA Funding in FYE 2017

At the March 2017 meeting of the Mobile Source Committee, Board Members inquired about the types of projects that are funded by the County Program Managers. Attachment 1 lists the projects that were awarded TFCA funds by the CPMs in FYE 2017.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None. TFCA CPM revenues are generated from Department of Motor Vehicles registration fees and 40% of the revenues are passed through to the CPMs.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Michael Neward
Reviewed by: Chengfeng Wang and Karen Schkolnick

Attachment 1: Summary of projects that were awarded TFCA funds by the County Program Managers in FYE 2017

AGENDA 5 - ATTACHMENT 1

Summary of projects that were awarded TFCA funds by the County Program Managers in Fiscal Year Ending (FYE) 2017

Project #	Project Category	Project Description	Award Amount	Project Sponsor	Emission Reductions (Tons per year)			County
					ROG	NO _x	PM	
17ALA01	Shuttle & Rideshare	Countywide SR2S Program, FYs 16/17 & 17/18	\$ 100,000.00	Alameda County Transportation Commission (CTC)	0.1581	0.0781	0.0687	Alameda
17ALA02	Shuttle & Rideshare	Countywide Bicycling, Transit and Carpool Promotion Programs	\$ 105,000.00	Alameda County Transportation Commission (CTC)	0.5731	0.5288	0.8729	Alameda
17ALA03	Bicycle Facilities	San Pablo Ave Cycle Track Gap Closure	\$ 123,000.00	City of Albany	0.0243	0.0149	0.0244	Alameda
17ALA04	Bicycle Facilities	Hearst Ave Class 2 Bike Lanes	\$ 88,000.00	City of Berkeley	0.0175	0.0107	0.0175	Alameda
17ALA05	Arterial Management & Signal Timing	South Fremont Arterial Management	\$ 425,000.00	City of Fremont	0.1420	0.5166	0.0000	Alameda
17ALA06	Shuttle & Rideshare	Oakland Broadway B Shuttle	\$ 264,000.00	City of Oakland	0.2572	0.0648	0.3609	Alameda
17ALA07	Shuttle & Rideshare	Bernal Ave Park and Ride Lot	\$ 189,000.00	City of Pleasanton	0.1600	0.1580	0.2707	Alameda
17ALA08	Shuttle & Rideshare	San Leandro LINKS Shuttle, Fys 17/18 & 18/19	\$ 104,000.00	City of San Leandro	0.1000	0.0531	0.0879	Alameda
17ALA09	Shuttle & Rideshare	CSUEB - Hayward BART 2nd Shuttle, FY 17/18	\$ 128,000.00	California State University, East Bay	0.1767	0.1619	0.2685	Alameda
17ALA10	Shuttle & Rideshare	LAVTA Rte 30 BRT Operations, FYs 17/18-18/19	\$ 318,000.00	Livermore Amador Valley Transit Authority (LAVTA)	0.4356	-0.3581	0.5940	Alameda
17CC01	Other Trip Reduction Programs	West Contra Costa Trip Reduction Program	\$ 316,676.81	West Contra Costa Transportation Advisory Committee (WCCTAC)	1.7984	1.5742	2.5227	Contra Costa
17CC02	Other Trip Reduction Programs	Central/East SOV Trip/Emissions Reduction Program	\$ 801,666.00	Contra Costa Transportation Authority	3.2594	2.9819	4.8994	Contra Costa
17CC03	Other Trip Reduction Programs	Southwest Contra Costa County Emissions/Trip Reduction Program	\$ 283,602.00	City of San Ramon	1.3092	1.0699	1.6434	Contra Costa
17MAR01	Bicycle Facilities	Gate 6/Bridgeway Intersection Improvements	\$ 344,659.00	City of Sausalito	0.0833	0.0696	0.1441	Marin
17NAP01	Electric Vehicles	Calistoga EV Charging Station	\$ 8,000.00	City of Calistoga	0.0044	0.0033	0.0006	Napa
17NAP02	Bicycle Facilities	Donaldson Way Sidewalk Gap Project	\$ 101,249.00	City of American Canyon	0.0165	0.0101	0.0165	Napa
17NAP03	Other Trip Reduction Programs	SNCI Napa County Marketing and Commute Incentives	\$ 50,000.00	Solano Napa Commuter Information (SNCI)	0.5525	0.5523	0.4586	Napa
17SF01	Shuttle & Rideshare	Gator Pass Implementation Project	\$ 350,000.00	San Francisco State University	1.9735	1.7514	2.8293	San Francisco
17SF02	Electric Vehicles	Alternative Fuel Taxicab Vehicle Incentive Program	\$ 250,000.00	San Francisco Municipal Transportation Agency	0.6111	0.3849	0.0030	San Francisco
17SF03	Other Trip Reduction Programs	San Francisco Emergency Ride Home Program	\$ 36,269.00	San Francisco Department of the Environment	0.1217	0.1066	0.1708	San Francisco
17SF04	Bicycle Facilities	Short-Term Bicycle Parking	\$ 335,988.00	San Francisco Municipal Transportation Agency	0.1692	0.1079	0.1352	San Francisco
17SM01	Shuttle & Rideshare	Countywide Voluntary Trip Reduction Program	\$ 525,000.00	Peninsula Traffic Congestion Relief Alliance	5.8827	5.2591	8.6000	San Mateo
17SM02	Shuttle & Rideshare	SamTrans Shuttle Program	\$ 109,000.00	SamTrans	0.2166	0.1294	0.3512	San Mateo
17SM03	Shuttle & Rideshare	San Carlos Transit Connector Shuttle	\$ 162,860.00	SamTrans and City of San Carlos	0.0782	0.0544	0.0812	San Mateo
17SM04	Bicycle Facilities	SamTrans Bike Racks on Buses	\$ 160,128.00	SamTrans	0.0800	0.0500	0.0600	San Mateo
17SM05	Arterial Management & Signal Timing	San Mateo County Smart Corridor - South San Francisco Expansion	\$ 267,012.00	City/County Association of Governments of San Mateo County	0.5600	0.2400	0.0000	San Mateo
17SC01	Shuttle & Rideshare	DASH Shuttle	\$ 826,000.00	Santa Clara Valley Transportation Authority	1.2218	1.1672	2.0252	Santa Clara
17SC02	Arterial Management & Signal Timing	Lafayette Signal Timing Project	\$ 210,000.00	City of Santa Clara	0.1514	0.3595	0.0029	Santa Clara
17SC03	Arterial Management & Signal Timing	Bowers Signal Timing Project	\$ 590,000.00	City of Santa Clara	0.3001	0.7335	0.0275	Santa Clara
17SC04	Other Trip Reduction Programs	School Improvements	\$ 290,000.00	City of Santa Clara	0.2901	0.1338	0.1439	Santa Clara
17SC05	Arterial Management & Signal Timing	Fremont Avenue Signal Timing Improvements	\$ 55,321.00	City of Sunnyvale	0.2592	0.4183	0.0000	Santa Clara
17SC06	Arterial Management & Signal Timing	Mary Avenue Signal Timing Improvements	\$ 98,724.00	City of Sunnyvale	0.2571	0.7038	0.0000	Santa Clara
17SC07	Arterial Management & Signal Timing	Hollenbeck Avenue Signal Timing Improvements	\$ 59,869.00	City of Sunnyvale	0.1438	0.3394	0.0000	Santa Clara
17SC08	Arterial Management & Signal Timing	Remington Drive Signal Timing Improvements	\$ 38,897.00	City of Sunnyvale	0.1388	0.3162	0.0000	Santa Clara
17SC10	Arterial Management & Signal Timing	Weekend Signal Timing Coordination of Capitol Expressway, Foothill Expressway, Lawrence Expressway, and San Tomas Expressway	\$ 180,000.00	County of Santa Clara Roads and Airports Department	0.4249	1.1575	0.0000	Santa Clara
17SC11	Bicycle Facilities	Interim Bicycle Improvement through I-280/Page Mill Interchange Area	\$ 125,000.00	Santa Clara County	0.0302	0.0185	0.0302	Santa Clara

AGENDA 5 - ATTACHMENT 1

Summary of projects that were awarded TFCA funds by the County Program Managers in Fiscal Year Ending (FYE) 2017

Project #	Project Category	Project Description	Award Amount	Project Sponsor	Emission Reductions (Tons per year)			County
					ROG	NO _x	PM	
17SC12	Bicycle Facilities	Mary Avenue Bicycle and Traffic Calming Project	\$ 245,000.00	City of Sunnyvale	0.0483	0.0297	0.0483	Santa Clara
17SC13	Other Trip Reduction Programs	Safe Routes to School - Pedestrian Infrastructure Improvements	\$ 415,961.00	City of Sunnyvale	0.3254	0.1553	0.1274	Santa Clara
17SOL01	Other Trip Reduction Programs	Solano Commute Alternatives Outreach and Incentive Program	\$ 340,664.00	Solano Transportation Authority/Solano Napa Commuter Information	2.6513	2.6902	2.3013	Solano
17SON01	Other Trip Reduction Programs	Santa Rosa Trip Reduction Incentive Program	\$ 234,670.00	City of Santa Rosa - Transit Division	0.7660	0.5322	0.7233	Sonoma
17SON02	Electric Vehicles	Santa Rosa EV Chargers, Public Access Courthouse Square Reunification Project	\$ 25,000.00	City of Santa Rosa	0.0192	0.0141	0.0015	Sonoma
17SON03	Other Trip Reduction Programs	Transit Marketing Program	\$ 71,265.00	Sonoma County Transit	0.1702	0.1490	0.2389	Sonoma
17SON04	Shuttle & Rideshare	Sonoma County Transit - SMART / Airport Area Shuttle	\$ 70,000.00	Sonoma County Transit	0.0315	0.0191	0.0227	Sonoma
17SON05	Bicycle Facilities	Sebastopol Local City Streets Bikeway Gap Closures	\$ 50,000.00	City of Sebastopol	0.0204	0.0160	0.0320	Sonoma
17SON06	Other Trip Reduction Programs	Youth Bus Pass Subsidy Program	\$ 13,000.00	City of Petaluma	0.0589	0.0342	0.0386	Sonoma
17SON07	Other Trip Reduction Programs	Petaluma Transit Marketing	\$ 67,731.00	City of Petaluma	0.3128	0.1818	0.2051	Sonoma
17SON08	Arterial Management & Signal Timing	Petaluma Transit: Transit Signal Priority Project	\$ 52,724.00	City of Petaluma	0.0569	0.0363	0.0455	Sonoma

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Karen Mitchoff and Members
of the Mobile Source Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: May 10, 2017

Re: Update on Regional Efforts to Deploy Electric Vehicles and Infrastructure

RECOMMENDATIONS

None; receive and file.

BACKGROUND

The Bay Area is home to over 5 million on-road vehicles that are responsible for approximately 40% of the criteria pollutants and 36% of the greenhouse gases emitted in the region.^{1, 2} Additionally, the heavy-duty vehicles in this population are responsible for over 80% of the cancer health risk from toxic air contaminants, principally due to diesel particulate matter (DPM) emissions. The Bay Area Air Quality Management District's (Air District) Community Air Risk Evaluation (CARE) program has shown that DPM has disproportionate impacts on communities located along Bay Area highways and around major cargo hubs such as the Port of Oakland.

Because these emissions adversely affect the region's air quality and impacts the region's most vulnerable communities, the Air District has invested over \$146 million in funding since 2012, and has concentrated significant portions of its grant, enforcement, and educational and outreach programs (e.g., Spare the Air) to reduce tailpipe emissions from these vehicles. These efforts have directly resulted in the deployment of 1,561 passenger electric vehicles (EVs), 271 zero emissions heavy duty trucks and buses, 1,041 publicly available Level 2 and 53 DC fast chargers, 1,400 residential chargers and 12 hydrogen fueling stations.

In addition, the Air District estimates that its investments have expanded the region's network of 4,483 publicly available EV chargers by over 24% and have helped the region achieve the highest EV adoption rates in the country, with more than 91,000 EVs, or 38% of California's EV population, registered to Bay Area drivers.

¹ BAAQMD, [Bay Area Emissions Inventory Summary Report: Criteria Air Pollutants Base Year 2011](#), May 2014.

² BAAQMD, [Bay Area Emissions Inventory Summary Report: Greenhouse Gases Base Year 2011](#), January 2015.

DISCUSSION

While significant progress is being made to reduce emissions from the transportation sector, the Air District's electric vehicle deployment roadmap – *The Bay Area Plug-In Electric Vehicle Readiness Plan (2013)* – shows that the region needs to deploy 247,000 electric vehicles by the year 2025 in order to meet the requirements in the California Air Resources Board's light duty vehicle regulation and the greenhouse gas emissions reductions targets set in the Metropolitan Transportation Commission's Plan Bay Area. In addition to these goals, the Air District's 2017 Clean Air Plan has set aggressive targets to decarbonize transportation, which extend far beyond 2025.

The Air District's investments and efforts have, and will continue to, play a significant role in catalyzing the Bay Area's shift towards zero emission transportation; however, it cannot complete these efforts alone. As part of this item, staff will update the Committee on the status of two significant new programs in development by the Pacific Gas & Electric Company and Volkswagen's - Electrify America.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Damian Breen

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Liz Kniss and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/Air Pollution Control Officer

Date: June 6, 2017

Re: Report of the Personnel Committee Meeting of June 2, 2017

RECOMMENDED ACTION

The Personnel Committee (Committee) recommends Board of Directors' approval of the following item:

- A) Conduct Interviews and Consider Recommending Board of Directors' Approval of Candidates for Appointment to the Air District's Hearing Board:
 - 1) The appointment of Danny Cullenward as Attorney Category Alternate

BACKGROUND

The Committee met on Friday, June 2, 2017 and received the following report and recommendations:

- A) Conduct Interviews and Consider Recommending Board of Directors' Approval of a Candidate for Appointment to the Air District's Hearing Board.

Chairperson Jim Spering will provide an oral report of the Committee meeting.

BUDGET CONSIDERATION/FINANCIAL IMPACT

- A) None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Karen Fremming
Reviewed by: Maricela Martinez

Attachment 10A: 06/02/17 – Personnel Committee Meeting Agenda #4

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Jim Spering and Members
of the Personnel Committee

From: Jack P. Broadbent
Executive Officer/APCO

Date: May 17, 2017

Re: Conduct Interviews and Consider Recommending Board of Directors Approval of
Candidates for Appointment to the Air District's Hearing Board

RECOMMENDED ACTION

Conduct interviews and consider recommending Board of Directors approval of candidates for appointment to the Air District's Hearing Board.

BACKGROUND

Pursuant to Section 40800 of the California Health and Safety Code, the Air District is required to maintain a Hearing Board consisting of five members including, one member who is a professional engineer registered as such pursuant to the Professional Engineers Act (Chapter 7 (commencing with Section 6700) of Division 3 of the Business and Professions Code), one member from the medical profession whose specialized skills, training, or interests are in the fields of environmental medicine, community medicine, or occupational/toxicologic medicine, one member admitted to the practice of law in this state, and two public members. The Air District board may also appoint one alternate for each member. The alternate shall have the same qualifications, specified in Section 40801, as the member for whom such person is the alternate. The alternate may serve only in the absence of the member, and for the same term as the member.

Pursuant to Division I, Section 8.6 of the Air District's Administrative Code, Hearing Board Member terms are limited to fifteen (15) consecutive years, with re-appointment possible after a three-year absence.

DISCUSSION

The Board of Directors recently appointed an alternate member in the Attorney category to a principal position in the Public Member category. As a result, there is one vacant position. Staff initiated a recruitment effort to fill the positions.

Staff outreached and advertised the positions to the following sites:

- Bay Area Newspapers
- Governmentjobs.com
- California Air Pollution Control Officers Association (CAPCOA)
- The Bar Association of San Francisco
- Alameda County Bar Association
- Lawcrossing.com
- Lawjobs.com
- Environmentaljobs.com
- Vetjobs.com
- Indeed.com
- Craigslist.org
- Community Mailing Lists

After extensive recruitment and outreach efforts, staff received a total of 9 applications. Staff and the Hearing Board Chair have assessed the candidates' experience and education relative to the position for which the candidates applied and have selected the top candidates with the most relevant qualifications to interview with the Personnel Committee.

Interviews of the candidates will occur during the Personnel Committee meeting. The length of each interview will be approximately fifteen minutes. The application materials of the candidates will be provided to you for your review.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Judy Yu
Reviewed by: Rex Sanders

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Liz Kniss and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: June 6, 2017

Re: Public Hearing to Consider Adoption of Proposed Amendments to Air District
Regulation 3: Fees and Approval of the Filing of a Notice of Exemption from the
California Environmental Quality Act

RECOMMENDED ACTION

Staff recommends that the Board of Directors consider adoption of proposed amendments to Air District Regulation 3: Fees that would become effective on July 1, 2017 and approve the filing of a California Environmental Quality Act (CEQA) Notice of Exemption.

BACKGROUND

Staff develops amendments to the Air District's fee regulation as a part of the annual budget preparation process. On March 7, 2012, the Board of Directors adopted a Cost Recovery Policy that established a goal of increasing fee revenue sufficient to achieve 85 percent recovery of regulatory program costs. The first of two public hearings necessary to adopt amendments to Regulation 3: Fees was conducted on April 19, 2017.

DISCUSSION

Consistent with the Cost Recovery Policy, draft amendments to specific fee schedules were made in consideration of cost recovery analyses conducted at the fee schedule-level, with larger increases being proposed for the schedules that have larger cost recovery gaps. Existing fee rates would be increased by 2.7, 7, 8, or 9 percent. Several fees that are administrative in nature, such as permit application filing fees and permit renewal processing fees would be increased by 2.7 percent, which is the annual increase in the Bay Area Consumer Price Index.

In addition, the following additional amendments are proposed: (1) New fees to help recover the costs for facility-wide Health Risk Assessments (HRAs) and Risk Reduction Plans required pursuant to proposed Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities; (2) A new fee equal to the risk screening fee to help recover the costs for each HRA scenario above three HRA scenarios in any permit application pursuant to Regulation 2, Rule 5; (3) Revise Fee Schedule A: Hearing Board Fees (Table I) to include diesel exhaust particulate matter in the schedule of toxic air contaminants subject to excess emissions fees; (4) Revise Fee Schedule H: Semiconductor and Related Operations, to directly calculate the fee

based on the gross throughput of organic solvent processed; (5) Update the SL factor in Fee Schedule N: Toxic Inventory Fees, to recover current costs and higher California Air Resources Board AB2588 annual fees for FYE 2017; (6) Change all Regulation 3 references of “health risk screening analysis” to “health risk assessment”; (7) Delete fees for Duplicate Permits and Duplicate Registrations in Section 3-309; and (8) Correct a few minor typographical errors.

A final Staff Report that is attached with this memorandum provides additional details regarding the proposed fee amendments.

BUDGET CONSIDERATION/FINANCIAL IMPACT

The proposed fee amendments are expected to increase fee revenue in FYE 2018 by approximately \$1.85 million relative to fee revenue that would be expected without the amendments.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Barry Young
Reviewed by: Jaime Williams

Attachment 11A: Staff Report – Proposed Amendments to BAAQMD Regulation 3: Fees - May 10, 2017
Attachment 11B: Staff Report – Appendix B Proposed Regulatory Language Regulation 3: Fees – June 21, 2017
Attachment 11C: California Environmental Quality Act (CEQA) – Notice of Exemption



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

STAFF REPORT

PROPOSED AMENDMENTS TO BAAQMD REGULATION 3: FEES

May 10, 2017

TABLE OF CONTENTS

1.	EXECUTIVE SUMMARY.....	1
2.	BACKGROUND.....	2
3.	PROPOSED FEE AMENDMENTS FOR FYE 2018	
	3.1 OVERVIEW OF PROPOSED AMENDMENTS.....	5
	3.2 PROPOSED RULE AMENDMENTS.....	8
4.	FEE REVENUE AND COSTS OF PROGRAM ACTIVITIES	13
5.	STATUTORY AUTHORITY FOR PROPOSED FEE INCREASES.....	15
6.	ASSOCIATED IMPACTS/RULE DEVELOPMENT REQUIREMENTS	
	6.1 EMISSIONS IMPACTS.....	17
	6.2 ECONOMIC IMPACTS.....	17
	6.3 ENVIRONMENTAL IMPACTS.....	19
	6.4 STATUTORY FINDINGS.....	20
7.	RULE DEVELOPMENT PROCESS.....	20
8.	PUBLIC COMMENTS.....	21
9.	CONCLUSIONS.....	28
	Appendix A – Cost Recovery Policy.....	A-1
	Appendix B – Proposed Regulatory Language – Regulation 3: Fees.....	B-1

1. EXECUTIVE SUMMARY

Air District staff has prepared proposed amendments to Air District Regulation 3: Fees for Fiscal Year Ending (FYE) 2018 (i.e., July 1, 2017 to June 30, 2018) that would increase revenue to enable the Bay Area Air Quality Management District (Air District) to continue to effectively implement and enforce regulatory programs for stationary sources of air pollution. The proposed fee amendments for FYE 2018 are consistent with the Air District's Cost Recovery Policy, which was adopted on March 7, 2012 by the Air District's Board of Directors (see Appendix A). This policy states that the Air District should amend its fee regulation, in conjunction with the adoption of budgets for FYE 2013 through FYE 2016, in a manner sufficient to increase overall recovery of regulatory program activity costs to 85 percent. 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.

A recently completed 2017 Cost Recovery Study (a copy of which is available on request) shows that for the most-recently completed fiscal year (FYE 2016), fee revenue recovered 82 percent of program activity costs.

Over the past several years, the Air District has been developing the infrastructure for consistent and efficient permit evaluation and processing, and completing projects intended to develop and improve programs within the Engineering Division. To improve program efficiency, the Air District is actively transitioning to the Production System, an on-line permitting system for the regulated community for high-volume source categories including gas stations, dry cleaners, and auto-body shops, and is expanding this system for additional source categories. These tools will increase efficiency and accuracy by allowing customers to submit applications, report data for the emissions inventory, pay invoices and have access to permit documents.

In May 2016, the Air District moved into 375 Beale Street. The vision for 375 Beale Street includes the sharing of limited business operations and technology functions between the Air District, Metropolitan Transportation Commission, and the Association of Bay Area Governments. These shared services between the partner agencies may result in some cost savings.

The Air District continues to be fiscally prudent by building its reserves in an effort set to address future pension and other post-employment benefits obligations, future capital equipment and facility needs, and uncertain fiscal situations either at local or State or federal level or external factors affecting the economy that could impact the District's ability to balance its budgets to fund the day-to-day operations. Staff will continue to identify and maintain a level of effort to achieve Air District mandates and continually monitor the pattern of revenues versus expenditures.

Opportunities for further cost containment measures will be developed and documented in the next Air District Cost Recovery Study. The Air District expects to release a

Request for Proposals for this Air District Cost Recovery Study in the next few months.

The projected cost recovery percentage for FYE 2017 is expected to be approximately 82%. This is based on the FYE 2016 permit fees expected to be collected compared to the salary and other expenditures budgeted included filled vacancies and added new positions in order to support mandated stationary source programs, ensure that core functions will be maintained at levels necessary to adequately service the regulated community, and address key policy initiatives such as the Refinery Emissions Reduction Strategy and the Climate Action Work Program.

The results of the 2017 Cost Recovery Study were used to establish proposed fee amendments for each existing fee schedule based on the degree to which existing fee revenue recovers the regulatory program activity costs associated with the schedule. Based on this approach, the fee rates in certain fee schedules would be raised by the annual increase in the Bay Area Consumer Price Index (2.7%), while other fee schedules would be increased by 7, 8, or 9 percent. Several fees that are administrative in nature (e.g. permit application filing fees and permit renewal processing fees) would be increased by 2.7 percent.

The proposed fee amendments would increase annual permit renewal fees for most small businesses that require Air District permits by less than \$100, with the exception of gas stations with more than four, three-product gasoline dispensing nozzles, which would have larger fee increases (e.g., a typical gas station with 10, three-product gasoline dispensing nozzles would have an increase of \$263 in annual permit renewal fees. For larger facilities, increases in annual permit renewal fees would range between 3.5 and 15 percent due to differences in the facility's size, type of emission sources, pollutant emission rates and applicable fee schedules. In accordance with State law, the Air District's amendments to Regulation 3 cannot cause an increase in overall permit fees by more than 15 percent in any calendar year. The proposed fee amendments would increase overall Air District fee revenue in FYE 2017 by approximately \$1.85 million relative to fee revenue that would be expected without the amendments.

Air District staff recommends that the Board of Directors receive testimony on April 19, 2017 regarding the proposed amendments to Regulation 3: Fees. Air District staff also recommend that the Board of Directors consider adoption of the proposed amendments to Regulation 3: Fees with an effective date of July 1, 2017, and approve the filing of a CEQA Notice of Exemption following the 2nd public hearing scheduled to consider this matter on June 21, 2017.

2. BACKGROUND

State law authorizes the Air District to assess fees to generate revenue to recover the reasonable costs of regulatory program activities for stationary sources of air pollution. The largest portion of Air District fees is collected under provisions that allow the Air District to impose permit fees sufficient to recover the costs of program activities related

to permitted sources. The Air District is also authorized to assess fees for: (1) area-wide or indirect sources of emissions which are regulated, but for which permits are not issued by the Air District, (2) sources subject to the requirements of the State Air Toxics Hot Spots Program (Assembly Bill 2588), and (3) activities related to the Air District's Hearing Board involving variances or appeals from Air District decisions on the issuance of permits. The Air District has established, and regularly updates, a fee regulation (Air District Regulation 3: Fees) under these authorities.

The Air District has analyzed whether fees result in the collection of a sufficient and appropriate amount of revenue in comparison to the costs of related program activities. In 1999, a comprehensive review of the Air District's fee structure and revenue was completed by the firm KPMG Peat Marwick LLP (*Bay Area Air Quality Management District Cost Recovery Study, Final Report: Phase One – Evaluation of Fee Revenues and Activity Costs*, KPMG Peat Marwick LLP, February 16, 1999). This 1999 Cost Recovery Study indicated that fee revenue did not nearly offset the full costs of program activities associated with sources subject to fees as authorized by State law. Property tax revenue (and in some years, reserve funds) had been used to close this cost recovery gap.

The Air District Board of Directors adopted an across-the-board fee increase of 15 percent, the maximum allowed by State law for permit fees, for FYE 2000 as a step toward more complete cost recovery. The Air District also implemented a detailed employee time accounting system to improve the ability to track costs by program activities moving forward. In each of the next five years, the Air District adjusted fees only to account for inflation (with the exception of FYE 2005, in which the Air District also approved further increases in Title V permit fees and a new permit renewal processing fee).

In 2004, the Air District funded an updated Cost Recovery Study. The accounting firm Stonefield Josephson, Inc. completed this study in March 2005 (*Bay Area Air Quality Management District Cost Recovery Study, Final Report*, Stonefield Josephson, Inc., March 30, 2005). This 2005 Cost Recovery Study indicated that a significant cost recovery gap continued to exist. The study also provided cost recovery results at the level of each individual fee schedule based on detailed time accounting data. Finally, the contractor provided a model that could be used by Air District staff to update the analysis of cost recovery on an annual basis using a consistent methodology.

For the five years following the completion of the 2005 Cost Recovery Study (i.e., FYE 2006 through 2010), the Air District adopted fee amendments that increased overall projected fee revenue by an average of 8.9 percent per year. In order to address fee equity issues, the various fees were not all increased in a uniform manner. Rather, individual fee schedules were amended based on the magnitude of the cost recovery gap for that schedule, with the schedules with the more significant cost recovery gaps receiving more significant fee increases. In FYE 2009, the Air District's fee amendments also included a new greenhouse gas (GHG) fee schedule. The GHG fee schedule recovers costs from stationary source activities related to the Air District's Climate Protection Program. In FYE 2011, the Air District adopted an across-the-board 5 percent

fee increase, except for the Title V fee schedule (Schedule P) which was increased by 10 percent (the Air District's 2010 Cost Recovery Study indicated that Fee Schedule P recovered only 46 percent of program activity costs).

In September 2010, the Air District contracted with the firm Matrix Consulting Group to complete an updated analysis of cost recovery that could be used in developing fee amendments for FYE 2012 and beyond. This study also included a review of the Air District's current cost containment strategies, and provided recommendations to improve the management of the Air District's costs and the quality of services provided to stakeholders. The study was completed in March 2011 (*Cost Recovery and Containment Study, Bay Area Air Quality Management District, Final Report, Matrix Consulting Group, March 9, 2011*). The 2011 Cost Recovery and Containment Study concluded that, for FYE 2010, overall fee revenue recovered 64 percent of related program activity costs. The study also provided cost recovery results at the level of each individual fee schedule based on detailed time accounting data, and provided a methodology for Air District staff to update the analysis of cost recovery on an annual basis using a consistent methodology.

The results of the 2011 Cost Recovery and Containment Study were used to establish fee amendments for FYE 2012 that were designed to increase overall fee revenue by 10 percent (relative to fee revenue that would result without the fee amendments). In order to address fee equity issues, the various fees were not all increased in a uniform manner. Rather, existing fee schedules were amended based on the magnitude of the cost recovery gap for that schedule, with the schedules with the more significant cost recovery gaps receiving more significant fee increases. Based on this approach, the fee rates in several fee schedules were not increased, while the fee rates in other fee schedules were increased by 10, 12, or 14 percent.

One of the recommendations made by Matrix Consulting Group in their 2011 Cost Recovery and Containment Study indicated that the Air District should consider the adoption of a Cost Recovery Policy to guide future fee amendments. Air District staff initiated a process to develop such a Policy in May 2011, and a Stakeholder Advisory Group was convened to provide input in this regard. A Cost Recovery Policy was adopted by the Air District's Board of Directors on March 7, 2012 (see Appendix A). This policy specifies that the Air District should amend its fee regulation, in conjunction with the adoption of budgets for FYE 2013 through FYE 2016, in a manner sufficient to increase overall recovery of regulatory program activity costs to 85 percent. 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.

Staff has updated the cost recovery analysis for the most recently completed fiscal year (FYE 2016) using the methodology established by Matrix Consulting Group. The 2017 Cost Recovery Study indicates that the overall cost recovery rate in FYE 2016 was 82%.

3. PROPOSED FEE AMENDMENTS FOR FYE 2018

3.1 OVERVIEW OF PROPOSED AMENDMENTS

A 2017 cost recovery study was used to establish proposed fee amendments for existing fee schedules based on the degree to which existing fee revenue recovers the activity costs associated with the schedule. Based on this approach, the fee rates in certain fee schedules would be increased by 7, 8, or 9 percent. Other fee schedules would be raised by 2.7%, the annual increase from 2015 to 2016 in the Bay Area Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) as reported by the United States Bureau of Labor Statistics. The specific basis for these proposed fee amendments is summarized in Table 1 as follows:

Table 1. Proposed Fee Changes Based on Cost Recovery by Fee Schedule

Revenue from Fee Schedule as a Percentage of Program Activity Costs	Fee Increase	Affected Fee Schedules
95 – 100% of costs	2.7%	M, U
85 – 95% of costs	7%	F, G3, T
75 – 84% of costs	8%	D, P
Less than 75% of costs	9%	A, E, G1, G2, G4, H, I, K, R, S, V

In addition to the proposed amendments to fee schedules, Air District staff is proposing to increase several administrative fees that appear in the Standards section of Regulation 3 by 2.7 percent. This includes permit application filing fees and permit renewal processing fees. Existing permit fees are well below the point of full cost recovery, and these fee increases are proposed to help the Air District reduce its cost recovery gap.

New Fees for Proposed Rule 11-18: Reduction of Risk from Air Toxic Emissions at Existing Facilities

Proposed Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18) represents a continuation of the Air District's longstanding efforts to reduce health risk in the Bay Area resulting from the emission of toxic air contaminants from stationary sources. The Air District Board of Directors is scheduled to consider the adoption of Rule 11-18 in May 2017.

Under Rule 11-18, the Air District would use annual toxic emissions inventories from each affected facility to conduct a site-specific Health Risk Assessment (HRA) to assess the potential for adverse health effects to the public from exposure to emissions of toxic air contaminants from the facility.

Using the results of the HRAs, the Air District would determine whether a facility's health risk impact exceeds any risk action level established in the Rule. Facilities that pose a health risk in excess of any risk action level would be required either to demonstrate that all significant sources of toxic emissions at the facility are controlled by Best Available Retrofit Control Technology for Toxic Pollutants (TBARCT), or to reduce the health risk below the risk action level through the implementation of a Risk Reduction Plan. Any facility required to implement a Risk Reduction Plan would first submit the Plan to the Air District for staff review and public comment.

Proposed Rule 11-18 – Estimated Costs and Fees

The Air District proposes new fees to help recover the costs for facility-wide Health Risk Assessments (HRAs) and Risk Reduction Plans required pursuant to proposed Rule 11-18. These fees would only become effective upon Board adoption of proposed Rule 11-18, and would be charged only in the event a facility-wide HRA or a Risk Reduction Plan is required pursuant to proposed Rule 11-18.

Estimated Proposed Rule 11-18 Costs:

The Air District has prepared and distributed a Request for Qualifications and has reviewed proposals from several Facility-Wide Health Risk Assessment contractors.

Based on the proposals received:

- For major facilities with many or large toxic emissions sources (e.g., refineries, chemical plants, large power plants, etc.), the Facility-Wide HRA total cost ranges from \$75,000 to \$100,000.
- For other facilities, the Facility-Wide HRA total cost depends on the number of toxic emissions sources, and the time, materials, and personnel required to conduct the analyses.
 - Medium-sized facilities would range from \$10,000 to \$75,000.
 - Smaller-sized facilities would range from \$1,000 to \$10,000.

There are approximately 75 Facility-Wide Health Risk Assessments that are expected to be submitted and conducted during FYE 2018.

11 major facilities (refineries, large power plants):

- **11 facilities x \$87,500 = \$962,500**

18 medium facilities:

- **18 facilities x \$42,500 = \$765,000**

47 smaller facilities:

- **47 facilities x \$5,500 = \$258,500**

Total = \$1,986,000

No Risk Reduction Plans are scheduled for submittal and review in FYE 2018, so no costs are estimated for this for FYE 2018 costs. Future costs for Risk Reduction Plan review and approval will range from \$1,500 to \$32,000 per facility depending on the number of sources at the facility subject to risk reduction pursuant to proposed Rule 11-18. The maximum cost for Rule 11-18 Risk Reduction Plan review is estimated in the below table.

Table 2. Estimated Maximum Cost for Rule 11-18 Risk Reduction Plan Review

	\$/hr	+202% fringe benefits and indirect costs	Hours	Estimated Cost
Air Quality Engineer	\$53.01	\$107.08	250	\$26,770.05
Senior Air Quality Engineer	\$58.44	\$118.05	20	\$2,360.98
Supervising Air Quality Engineer	\$64.44	\$130.17	20	\$2,603.38
Air Quality Engineering Manager	\$73.17	\$147.80	2	\$295.61
Director of Engineering	\$88.35	\$178.47	1	\$178.47
Totals				\$32,208.48

Estimated Proposed Rule 11-18 Fee Revenues:

Based on the proposed Regulation 3 Amendments, the Air District estimates FYE 2018 fee revenue sufficient to recover the Air District's costs for the 75 Facility-Wide Health Risk Assessments that are planned to be submitted and conducted during FYE 2018.

In FYE 2018, no fee revenue due to the submittal of Risk Reduction Plans is expected, since no Risk Reduction Plans are scheduled for submittal associated with Rule 11-18. Future costs for Risk Reduction Plan review are expected to be approximately 100% recovered by the fee revenue calculated pursuant to proposed Section 3-341.

3.2 PROPOSED RULE AMENDMENTS

The complete text of the proposed changes to Air District Regulation 3: Fees, has been prepared in strikethrough (deletion of existing text) and underline (new text) format, and is included in Appendix B. Proposed fee increases have been rounded to the nearest whole dollar.

Additional details on the proposed fee amendments follow.

- Section 3-302: Fees for New and Modified Sources

The proposed amendment to Section 3-302 is a 2.7 percent increase in the filing fee for permit applications for new/modified sources and abatement devices, from \$462 to \$474.

Also, proposing a new fee equal to the risk screening fee to help recover the costs for each HRA scenario above three HRA scenarios in any permit application pursuant to Regulation 2, Rule 5.

- Section 3-302.3: Fees for Abatement Devices

The proposed amendment to Section 3-302.3 is a 2.7 percent increase in the filing fee, from \$462 to \$474, and the not to exceed value will be increased from \$10,000 to \$10,270.

- Section 3-309: Duplicate Permit or Registration

Staff proposes to delete fees for Duplicate Permits and Duplicate Registrations in Section 309, since these requests are increasingly fulfilled using email, which results in lower costs.

- Section 3-311: Banking

The proposed amendment to Section 3-311 is a 2.7 percent increase in the filing fee for banking applications, from \$462 to \$474.

- Section 3-318: Public Notice Fee, Schools

The proposed amendment to Section 3-318.1 and 3-318.2 is a 2.7 percent increase in the fee, from \$2,146 to \$2,204 per application.

- Section 3-320: Toxic Inventory Fees

The proposed amendment to Section 3-320 is a 2.7 percent increase from \$9,141 to \$9,388.

- Section 3-327: Permit to Operate, Renewal Fees

The processing fees for renewal of Permits to Operate specified in subsections 3-327.1 through 3-327.6 would be increased by 2.7 percent.

- Fees for Risk Screening
 - Staff proposes to replace all references in Regulation 3 to “health risk screening analysis” with the phrase “health risk assessment”.
 - Section 3-329

No change in regulatory language is proposed for Section 3-329: Fee for Risk Screening. Increases in risk screening fees are instead specified in Schedules B, C, D, E, F, G-1, G-2, G-3, G-4, G-5, H, I, and K. For each applicable fee schedule, the base fee for each application that requires a Health Risk Screening Analysis would be increased by 2.7 percent from \$441 to \$474. The portion of the risk screening fee that is based on the type of source involved would be changed along with the proposed changes in Permit to Operate renewal fees listed in Table 1 for sources in Schedules B, C, D, E, F, G-1, G-2, G-3, G-4, G-5, H, I, and K.

- Section 3-337: Exemption Fee

The proposed amendment to Section 3-337 is a 2.7 percent increase in the filing fee for a certificate of exemption, from \$462 to \$474.

Fee Schedules:

Schedule A: Hearing Board Fees

Based on the cost recovery methodology listed in Table 1, the fees in Schedule A would be increased by 9 percent. The schedules of fees for excess emissions (Schedule A: Table I) and visible emissions (Schedule A: Table II) would also be increased by 9 percent.

Staff also proposes to amend Fee Schedule A: Hearing Board Fees (Table I) to include diesel exhaust particulate matter in the schedule of toxic air contaminants subject to

excess emissions fees. Diesel exhaust particulate matter is a subset of PM_{2.5} that is emitted by diesel engines. Although diesel PM accounts for a small portion (less than 10%) of the overall PM_{2.5} emission inventory, it has been called out for special attention by the ARB because of its toxicity. In 1998, in response to a comprehensive health assessment of diesel exhaust, ARB formally identified diesel PM as a toxic air contaminant (TAC), a special class of air pollutants that can impair public health even at very low exposures or dosages. TACs can cause both acute and chronic effects, including cancer. Diesel exhaust also contains more than 40 other TACs, including carcinogens such as benzene, arsenic, nickel, and formaldehyde. The Air District performed an analysis of TACs for its Community Risk Evaluation (CARE) program and found that diesel PM accounts for approximately 85% of the total cancer risk from TACs in the Bay Area. Diesel PM has been the focus of control efforts by both ARB and the Air District.

Schedule B: Combustion of Fuel

Based on the cost recovery methodology listed in Table 1, the fees in Schedule B would not be increased.

Schedule C: Stationary Containers for the Storage of Organic Liquids

Based on the cost recovery methodology listed in Table 1, the fees in Schedule C would not be increased.

Schedule D: Gasoline Transfer at Gasoline Dispensing Facilities, Bulk Plants and Terminals

Based on the cost recovery methodology listed in Table 1, the fees in Schedule D would be increased by 8 percent, except for the base fee for a health risk assessment for a source covered by Schedule D, which would be increased by 2.7 percent from \$462 to \$474.

Schedule E: Solvent Evaporating Sources

Based on the cost recovery methodology listed in Table 1, the fees in Schedule E would be increased by 9 percent, except for the base fee for a health risk assessment for a source covered by Schedule E, which would be increased by 2.7 percent from \$462 to \$474.

Schedule F: Miscellaneous Sources

Based on the cost recovery methodology listed in Table 1, the fees in Schedule F would be increased by 7 percent. The base fee for a health risk screening analysis for a source covered by Schedule F would be increased by 2.7 percent, from \$462 to \$474. The base fee for a health risk screening analysis in Schedule F is included in the RSF for the first TAC source in the application.

Schedule G-1: Miscellaneous Sources

Based on the cost recovery methodology listed in Table 1, the fees in Schedule G-1 would be increased by 9 percent, except for the base fee for a health risk screening analysis for a source covered by Schedule G-1, which would be increased by 2.7 percent from \$462 to \$474. The base fee for a health risk screening analysis in Schedule G-1 is included in the RSF for the first TAC source in the application.

Schedule G-2: Miscellaneous Sources

Based on the cost recovery methodology listed in Table 1, the fees in Schedule G-2 would be increased by 9 percent, except for the base fee for a health risk screening analysis for a source covered by Schedule G-2 which would be increased by 2.7 percent from \$462 to \$474. The base fee for a health risk screening analysis in Schedule G-2 is included in the RSF for the first TAC source in the application.

Schedule G-3: Miscellaneous Sources

Based on the cost recovery methodology listed in Table 1, the fees in Schedule G-3 would be increased by 7 percent, except for the base fee for a health risk screening analysis for a source covered by Schedule G-3, which would be increased by 2.7 percent from \$462 to \$474. The base fee for a health risk screening analysis in Schedule G-3 is included in the RSF for the first TAC source in the application.

Schedule G-4: Miscellaneous Sources

Based on the cost recovery methodology listed in Table 1, the fees in Schedule G-4 would be increased by 9 percent, except for the base fee for a health risk screening analysis for a source covered by Schedule G-4, which would be increased by 2.7 percent from \$462 to \$474. The base fee for a health risk screening analysis in Schedule G-4 is included in the RSF for the first TAC source in the application.

Schedule G-5: Miscellaneous Sources

Based on the cost recovery methodology listed in Table 1, the fees in Schedule G-5 would not be increased.

Schedule H: Semiconductor and Related Sources

Based on the cost recovery methodology listed in Table 1, the fees in Schedule H would be increased by 9 percent, except for the base fee for a health risk screening analysis for a source covered by Schedule H, which would be increased by 2.7 percent from \$462 to \$474.

The proposed amendments would revise Fee Schedule H: Semiconductor and Related Operations, to directly calculate the fee based on the gross throughput of organic solvent processed.

Schedule I: Dry Cleaners

Based on the cost recovery methodology listed in Table 1, the fees in Schedule I would be increased by 9 percent, except for the base fee for a health risk screening analysis for a source covered by Schedule I, which would be increased by 2.7 percent from \$462 to \$474.

Schedule K: Solid Waste Disposal Sites

Based on the cost recovery methodology listed in Table 1, the fees in Schedule K would be increased by 9 percent, except for the base fee for a health risk screening analysis for a source covered by Schedule K, which would be increased by 2.7 percent from \$462 to \$474.

Schedule L: Asbestos Operations

Based on the cost recovery methodology listed in Table 1, the fees in Schedule L would not be increased.

Schedule M: Major Stationary Source Fees

Schedule M is an emissions-based fee schedule that applies to various permitted facilities emitting 50 tons per year or more of organic compounds, sulfur oxides, nitrogen oxides, and/or PM₁₀. Air District staff is proposing a 2.7 percent increase in the Schedule M fee rate based on the annual increase in the Bay Area Consumer Price Index.

Schedule N: Toxic Inventory Fees

Based on the cost recovery methodology listed in Table 1, the base fee in Sections 2 and 3 would not be increased. The value of the variable F_T , the total amount of fees to be collected, used to calculate fees for Schedule N is proposed to be remain unchanged for FYE 2018.

However, the SL factor in Fee Schedule N: Toxic Inventory Fees, would be updated to recover current costs and higher California Air Resources Board AB2588 annual fees for FYE 2017.

Schedule P: Major Facility Review Fees

Based on the cost recovery methodology listed in Table 1, the fees in Schedule P would be increased by 8 percent.

Schedule Q: Excavation of Contaminated Soil and Removal of Underground Storage Tanks

Based on the cost recovery methodology listed in Table 1, the fees in Schedule Q would not be increased.

Schedule R: Equipment Registration Fees

Based on the cost recovery methodology listed in Table 1, the fees in Schedule R would be increased by 9 percent.

Schedule S: Naturally Occurring Asbestos Operations

Based on the cost recovery methodology listed in Table 1, the fees in Schedule S would be increased by 9 percent.

Schedule T: Greenhouse Gas Fees

Based on the cost recovery methodology listed in Table 1, the fees in Schedule T would be increased by 7 percent.

Schedule U: Indirect Source Review Fees

Based on the cost recovery methodology listed in Table 1, the fees in Schedule U would be increased by 2.7 percent.

Schedule V: Open Burning

Based on the cost recovery methodology listed in Table 1, the fees in Schedule V would be increased by 9 percent.

Schedule W: Petroleum Refining Emissions Tracking Fees

Based on the cost recovery methodology listed in Table 1, the fees in Schedule W would not be increased.

Schedule X: Major Stationary Source Community Air Monitoring Fees

Based on the cost recovery methodology listed in Table 1, the fees in Schedule X would not be increased.

4. FEE REVENUE AND COSTS OF PROGRAM ACTIVITIES

On an overall basis, the 2017 Cost Recovery Study (a copy of which is available on request) concluded that, for FYE 2016, fee revenue recovered 82 percent of regulatory program activity costs, with revenue of \$40 million and costs of \$49 million. This resulted

in a shortfall, or cost recovery gap, of \$9 million which was filled by county tax revenue. The proposed fee amendments for FYE 2018 are projected to increase overall Air District fee revenue by approximately \$1.85 million relative to fee revenue levels that would be expected without the amendments. Revenue in FYE 2018 is expected to remain below the Air District's regulatory program costs for both permitted and non-permitted sources.

The projected cost recovery percentage for FYE 2017 is expected to be approximately 82%. This is based on the FYE 2017 permit fees expected to be collected compared to the salary and other expenditures budgeted (plus new positions). This projected cost recovery of 82% is primarily due to filling vacancies and adding new positions to support mandated stationary source programs, ensure that core functions will be maintained at levels necessary to adequately service the regulated community, and address key policy initiatives such as the Refinery Emissions Reduction Strategy and the Climate Action Work Program.

For years, the Air District has implemented aggressive cost containment measures that included reducing capital expenditures and maintaining a hiring freeze that resulted in historically high staff vacancy rates.

In FYE 2018, the Air District proposes to fill more of these vacancies to support mandated stationary source programs, ensure that core functions will be maintained at levels necessary to adequately service the regulated community, and to further address key policy initiatives such as the Refinery Emissions Reduction Strategy and the Climate Action Work Program.

Over the past several years, the Air District has also been developing the infrastructure for consistent and efficient permit evaluation and processing, and complete projects intended to develop and improve programs within the Engineering Division. To improve program efficiency, the Air District is actively transitioning to the Production System, an on-line permitting system for the regulated community for high-volume source categories including gas stations, dry cleaners, and auto-body shops, and is expanding this system for additional source categories. These tools will increase efficiency and accuracy by allowing customers to submit applications, report data for the emissions inventory, pay invoices and have access to permit documents. The Division is currently working to design, test and deploy the next phase that will incorporate additional device types and functionality. Staff will continue to identify and maintain a level of effort to achieve Air District mandates and continually monitor the pattern of revenues versus expenditures.

In May 2016, the Air District moved into 375 Beale Street. The vision for 375 Beale Street includes the sharing of limited business operations and technology functions between the Air District, Metropolitan Transportation Commission, and the Association of Bay Area Governments. A shared services component was implemented prior to move-in, including personnel and shared business operations, IT license and maintenance agreements required for a shared services component for the agencies. The shared services component includes general services and technology functions,

personnel, conference room scheduling, conference room set-up, video conferencing, webcasting, copy/print/mail production and distribution, shared fleet management, shuttle service, wellness center, email, calendaring, telephone systems, wireless network, internet connectivity, printing, electronic file storage, and server rooms maintenance. These shared services between the partner agencies may result in some cost savings.

Future projections anticipate adequate revenue to meet projected expenditures with the assumption of continued attention to cost and permit fee analysis. The Air District continues to be fiscally prudent by building its reserves in an effort set to address future pension and other post-employment benefits obligations, future capital equipment and facility needs, and uncertain fiscal situations either at local or State level or external factors affecting the economy that could impact the District's ability to balance its budgets to fund the day-to-day operations. Staff will continue to identify and maintain a level of effort to achieve Air District mandates and continually monitor the pattern of revenues versus expenditures.

Opportunities for further cost containment measures will be developed and documented in the next Air District Cost Recovery Study. The Air District expects to release a Request for Proposals for this Air District Cost Recovery Study in the next few months.

5. STATUTORY AUTHORITY FOR PROPOSED FEE INCREASES

The Air District is a regional regulatory agency, and its fees are used to recover the costs of issuing permits, performing inspections, and other associated regulatory activities. The Air District's fees fall into the category specified in Section 1(e) of Article XIII C of the California Constitution which specifies that charges of this type assessed to regulated entities to recover regulatory program activity costs are not taxes. The amount of fee revenue collected by the Air District has been clearly shown to be much less than the costs of the Air District's regulatory program activities both for permitted and non-permitted sources.

The Air District's fee regulation, with its various fee schedules, is used to allocate regulatory program costs to fee payers in a manner which bears a fair or reasonable relationship to the payer's burden on, or benefits received from, regulatory activities. Permit fees are based on the type and size of the source being regulated, with minimum and maximum fees being set in recognition of the practical limits to regulatory costs that exist based on source size. Add-on fees are used to allocate costs of specific regulatory requirements that apply to some sources but not others (e.g., health risk screening fees, public notification fees, alternative compliance plan fees). Emissions-based fees are used to allocate costs of regulatory activities not reasonably identifiable with specific fee payers.

Since 2006, the Air District has used annual analyses of cost recovery performed at the fee-schedule level, which is based on data collected from a labor-tracking system, to adjust fees. These adjustments are needed as the Air District's regulatory program

activities change over time based on changes in statutes, rules and regulations, enforcement priorities, and other factors.

State law authorizes air districts to adopt fee schedules to cover the costs of various air pollution programs. California Health and Safety Code (H&S Code) section 42311(a) provides authority for an air district to collect permit fees to cover the costs of air district programs related to permitted stationary sources. H&S Code section 42311(f) further authorizes the Air District to assess additional permit fees to cover the costs of programs related to toxic air contaminants. H&S Code section 41512.7(b) limits the allowable percentage increase in fees for authorities to construct and permits to operate to 15 percent per year.

H&S Code section 44380(a) authorizes air districts to adopt a fee schedule that recovers the costs to the air district and State agencies of the Air Toxics Hot Spots Program (AB 2588). The section provides the authority for the Air District to collect toxic inventory fees under Schedule N.

H&S Code section 42311(h) authorizes air districts to adopt a schedule of fees to cover the reasonable costs of the Hearing Board incurred as a result of appeals from air district decisions on the issuance of permits. Section 42364(a) provides similar authority to collect fees for the filing of applications for variances or to revoke or modify variances. These sections provide the authority for the Air District to collect Hearing Board fees under Schedule A.

H&S Code section 42311(g) authorizes air districts to adopt a schedule of fees to be assessed on area-wide or indirect sources of emissions, which are regulated but for which permits are not issued by the air district, to recover the costs of air district programs related to these sources. This section provides the authority for the Air District to collect asbestos fees (including fees for Naturally Occurring Asbestos operations), soil excavation reporting fees, registration fees for various types of regulated equipment, for Indirect Source Review, and fees for open burning.

The proposed fee amendments are in accordance with all applicable authorities. The Air District fees subject to this rulemaking are in amounts no more than necessary to cover the reasonable costs of the Air District's regulatory activities, and the manner in which the Air District fees allocate those costs to a payer bear a fair and reasonable relationship to the payer's burdens on the Air District regulatory activities and benefits received from those activities. Permit fee revenue (after adoption of the proposed amendments) would still be well below the Air District's regulatory program activity costs associated with permitted sources. Similarly, fee revenue for non-permitted area wide sources would be below the Air District's costs of regulatory programs related to these sources. Hearing Board fee revenue would be below the Air District's costs associated with Hearing Board activities related to variances and permit appeals. Fee increases for authorities to construct and permits to operate would be less than 15 percent per year.

6. ASSOCIATED IMPACTS AND OTHER RULE DEVELOPMENT REQUIREMENTS

6.1 EMISSIONS IMPACTS

There will be no direct change in air emissions as a result of the proposed amendments.

6.2 ECONOMIC IMPACTS

The Air District must, in some cases, consider the socioeconomic impacts and incremental costs of proposed rules or amendments. Section 40728.5(a) of the California H&S Code requires that socioeconomic impacts be analyzed whenever an air district proposes the adoption, amendment, or repeal of a rule or regulation that will significantly affect air quality or emissions limitations. The proposed fee amendments will not significantly affect air quality or emissions limitations, and so a socioeconomic impact analysis is not required.

Section 40920.6 of the H&S Code specifies that an air district is required to perform an incremental cost analysis for a proposed rule, if the purpose of the rule is to meet the requirement for best available retrofit control technology or for a feasible measure. The proposed fee amendments are not best available retrofit control technology requirements, nor are they a feasible measure required under the California Clean Air Act; therefore, an incremental cost analysis is not required.

The financial impact of the proposed fee amendments on small businesses is expected to be minor. Many small businesses operate only one or two permitted sources, and generally pay only the minimum permit renewal fees. For the facilities shown in Table 4, increases in annual permit and registration renewal fees would be under \$100, except for a typical service station with ten, multiproduct gasoline nozzles.

Table 4. Changes in Annual Permit/Registration Renewal Fees for Typical Small Businesses

Facility Type	Facility Description	Fee Increase	Total Fee
Gas Station	10 multi-product gasoline nozzles	\$263	\$3,614
Dry Cleaner (permitted)	One machine: 1,400 lb/yr Perc emissions	\$39	\$666
Dry Cleaner (registered)	One machine: 800 lb/yr VOC emissions	\$19	\$225
Auto Body Shop	one spray booth: 400 gal/yr paint 100 gal/yr cleanup solvent	\$46	\$622
Back-up Generator	One 365 hp engine	\$2*	\$332

*Represents a 2.7% increase in the Permit Renewal Processing Fee.

For reference, Air District permit fees are generally well below that of the South Coast AQMD, the other major metropolitan air district in the state with a cost of living similar to that of the Bay Area. South Coast AQMD staff have indicated that their fee revenue recovers a much higher percentage of associated program activity costs (i.e., over 90 percent) relative to the Bay Area AQMD.

For larger facilities, such as refineries and power plants, increases in annual permit renewal fees would cover a considerable range due to differences in the facility's size, mix of emission sources, pollutant emission rates and applicable fee schedules. As shown in Table 5, the FYE 2018 annual permit fee increase for the five Bay Area refineries would range from approximately 13.1 to 15.0 percent. The annual permit fee increase for power generating facilities shown in Table 6 would range from approximately 3.5 to 3.7 percent. Projected FYE 2018 fee increases are based on TYE 2017 material throughput data. Table 5 and 6 also include current Permit to Operate fees paid and historical annual fee increases.

Table 5. Refinery Permit to Operate Fee Comparison

	Annual % Permit Fee Increase (Fiscal Year Ending)					Current Permit Fee (in millions)
	2014	2015	2016	2017	2018 Projected	
Chevron	3.4	12.1	9.3	14.7	13.1	\$3.64
Shell	1.2	12.4	5.8	15.0	15.0	\$3.12
Phillips 66	1.2	9.3	3.4	14.6	13.9	\$1.59
Valero	7.2	8.4	11.9	15.0	15.0	\$1.87
Tesoro	5.5	13.0	21.7	13.3	15.0	\$2.42

Table 6. Power Plant Permit to Operate Fee Comparison

	Annual % Fee Increase (Fiscal Year Ending)					Current Permit to Operate Fee
	2014	2015	2016	2017	2018 Projected	
Delta Energy	13.5	16.9	12.6	4.8	3.7	\$ 459,600
Los Medanos	11.3	15.0	15.0	4.8	3.5	\$ 326,900
Gateway	3.3	15.0	19.8	4.5	3.6	\$ 320,300
Crockett Cogen	2.1	15.0	11.5	7.9	3.5	\$ 222,700

6.3 ENVIRONMENTAL IMPACTS

The California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq., and the CEQA Guidelines, 14 CCR 15000 et seq., require a government agency that undertakes or approves a discretionary project to prepare documentation addressing the potential impacts of that project on all environmental media. Certain types of agency actions are, however, exempt from CEQA requirements. The proposed fee amendments are exempt from the requirements of the CEQA under Section 15273 of the CEQA Guidelines, which state: "CEQA does not apply to the establishment, modification, structuring, restructuring, or approval of rates, tolls, fares, and other charges by public agencies...." (See also Public Resources Code Section 21080(b) (8)).

Section 40727.2 of the H&S Code imposes requirements on the adoption, amendment, or repeal of air district regulations. It requires an air district to identify existing federal and air district air pollution control requirements for the equipment or source type affected by the proposed change in air district rules. The air district must then note any differences

between these existing requirements and the requirements imposed by the proposed change. This fee proposal does not impose a new standard, make an existing standard more stringent, or impose new or more stringent administrative requirements. Therefore, section 40727.2 of the H&S Code does not apply.

6.4 STATUTORY FINDINGS

Pursuant to H&S Code section 40727, regulatory amendments must meet findings of necessity, authority, clarity, consistency, non-duplication, and reference. The proposed amendments to Regulation 3:

- Are necessary to fund the Air District's efforts to attain and maintain federal and state air quality standards, and to reduce public exposure to toxic air contaminants;
- Are authorized by H&S Code sections 42311, 42311.2, 41512.7, 42364, 44380 and 40 CFR Part 70.9;
- Are clear, in that the amendments are written so that the meaning can be understood by the affected parties;
- Are consistent with other Air District rules, and not in conflict with any state or federal law;
- Are not duplicative of other statutes, rules or regulations; and
- Reference H&S Code sections 42311, 42311.2, 41512.7, 42364, 44380 and 40 CFR Part 70.9.

7. RULE DEVELOPMENT PROCESS

On February 1, 2017, the Air District issued a notice for a public workshop to discuss with interested parties an initial proposal to amend Regulation 3, Fees. Distribution of this notice included all Air District-permitted and registered facilities, asbestos contractors, and a number of other potentially interested stakeholders. The notice was also posted on the Air District website. On February 14, 2017, the Air District issued a revised notice and posted it on the Air District website. A public workshop and simultaneous webcast was held on February 22, 2017 to discuss the initial Regulation 3 fee proposal.

On March 22, 2017 Air District staff is scheduled to provide a briefing on the proposed fee amendments to the Air District Board of Directors' Budget and Finance Committee.

Under H&S Code section 41512.5, the adoption or revision of fees for non-permitted sources requires two public hearings that are held at least 30 days apart from one another. This provision applies to Schedule L: Asbestos Operations, Schedule Q: Excavation of Contaminated Soil and Removal of Underground Storage Tanks, Schedule R: Equipment Registration Fees, Schedule S: Naturally Occurring Asbestos Operations, Schedule U: Indirect Source Fees, and Schedule V: Open Burning. A Public Hearing Notice for the proposed Regulation 3 will be published on March 17, 2017. An initial public hearing to consider testimony on the proposed amendments has been scheduled for April 19, 2017. A second public hearing, to consider adoption of the proposed fee amendments, has been scheduled for June 7, 2017, or as soon thereafter as the matter may be heard. If adopted, the amendments would be made effective on July 1, 2017.

8. PUBLIC COMMENTS

8.1 Public Workshop Comments – Regulation 3, Fees

The District held a public workshop on February 22, 2017 to discuss draft amendments to Regulation 3: Fees. There was one attendee plus the webcast audience. Written comments were received on the Regulation 3, Fees proposal as follows: (1) Janet Whittick of the California Council for Environmental and Economic Balance (CCEEB), (2) Sue Gustafson of Valero Refining Company – California (Valero), (3) Manraj Natt and Kweal Krishan of the American Petroleum and Convenience Store Association (APCA), and Bob Brown of the Western States Petroleum Association (WSPA).

Workshop Comment 1: CCEEB and Valero

- Requested for more information on cost and fee estimates for proposed Rule 11-18.

Air District Response to Workshop Comment 1:

- Prepared, posted, and distributed to the commenters a Supplementary Supporting Information document that provides the requested information.

Workshop Comment 2: CCEEB and Valero

- Requested for more information on cost assessment and cost containment efforts.

Air District Response to Workshop Comment 2:

- Prepared, posted, and distributed to the commenters a Supplementary Supporting Information document that provides the requested information.

Workshop Comment 3: CCEEB

- Asked whether the 15% limit on annual permit fee increases found in California Health and Safety Code section 41512.7 applies to the proposed Rule 11-18 fees.

Air District Response to Workshop Comment 3:

- Air District responded at the public workshop that the 15% limit on permit fee increase applies only to existing permit fees, and therefore does not apply to the proposed Rule 11-18 fees.

Workshop Comment 4: APCA

- Requested for justification for increase in Fee Schedule D, Gasoline Transfer at Gasoline Dispensing Facilities, Bulk Plants and Terminals.

Air District Response to Workshop Comment 4:

- The proposed amendments to Fee Schedule D would increase fee revenue to help the District recover a greater share of the costs the District incurs in implementing and enforcing its regulatory programs. Last year, the Air District only recovered about 79% of the costs for regulating Schedule D facilities. For a typical gasoline dispensing facility, we estimate that the fee increase would be \$263 per year.

Workshop Comment 5: WSPA

- **WSPA expresses general concern with the District fees, including the level of refining industry fee increases, which WSPA characterizes as higher than that for other sectors and the Consumer Price Index, and with the transparency around fee development and cost containment.**

Air District Response to Workshop Comment 5: The Air District's fee increases over the past decade have been part of the District's effort to address a very large deficit between the District's fee revenue and its program costs. The Air District's goal has been to decrease the cost recovery gap in existing fees and programs and to adequately fund new programs as the Air District undertakes them. Significant Air District expenditures stem from the regulation of sources at large industrial facilities, such as at the Bay Area refineries. The District produces reports each year that are available for public review that provide revenue and expense information to the public. The annual District Budget, annual Cost Recovery Study, and annual Amendments to Regulation 3 (Fees) Staff Report contain the key information on the District's budget, cost containment, and fee assessment.

Workshop Comment 6: WSPA

- **WSPA expressed concern with the District assessing a fee for proposed Regulation 11-18, which has yet to be adopted. WSPA commented that fees should be proposed only after a rule has been adopted and program and implementation costs have been accurately and transparently assessed.**

Air District Response to Workshop Comment 6: These proposed fees are intended to recover the District's costs associated with implementation of proposed Regulation 11, Rule 18, which is scheduled for Board of Directors adoption consideration in July 2017. Based on the proposed Regulation 11, Rule 18 Draft Staff Report (Table 5, page 34), the District anticipates that HRAs may be required starting in 2017. Therefore, the District needs these fees included in these proposed fee amendments for FYE 2018.

The District believes that the HRAs are needed and that the program proposal has been adequately developed. Also, the District has completed the Request for Qualifications process, which has identified many consultants qualified and capable of conducting these important HRAs.

Workshop Comment 7: WSPA

- **WSPA expressed concern regarding the District's progress in cost recovery closure and asks that this issue be addressed more comprehensively.**

Air District Response to Workshop Comment 7: The Air District will be working on an update to its comprehensive cost recovery and containment study this year. A Request for Proposals was distributed recently. The Air District plans to invite WSPA to participate on the Steering Committee for the study.

Workshop Comment 8: WSPA

- **WSPA appreciates the District's inclusion of Supplemental Supporting Information provided on March 14, 2017 to address general cost containment efforts and cost assessment analysis for the proposed rules. WSPA requests that a Workshop Report or Staff Report document accompany future annual Regulation 3 rule amendments at the same time the proposed rule amendments are published or during the Workshop at the latest.**

Air District Response to Workshop Comment 8: We are glad to hear that the Supplemental Supporting Information document was helpful to you. The Air District staff will make every effort to release supporting information for future proposed amendments to Regulation 3: Fees once it is ready for public review.

Workshop Comment 9: WSPA

- **WSPA asks whether proposed Regulation 3-341 Fee/or Risk Reduction Plan is for the number of sources associated with the entire facility, or only for sources for which a Risk Reduction Plan is proposed. WSPA also expressed concern regarding the basis for some of the District's cost estimates related to the review of HRAs.**

Air District Response to Workshop Comment 9: The fee is based on the number of sources subject to risk reduction per Regulation 11-18-301. That includes sources subject to Section 11-18-301.1 and 11-18-301.2. District staff estimated the initial review costs for the Risk Reduction Plan based on District engineering staffs experience with similar processes. The District also encourages WSPA to submit any recommendations it may have on ways to streamline this review process.

Workshop Comment 10: WSPA

- **WSPA requests that the District complete a cost assessment and document cost-containment details to support the proposed fees.**

Air District Response to Workshop Comment 10: The 2017 Cost Recovery Study has been completed and posted on the District website for the 4/19/2017 Board Hearing date at: <http://www.baaqmd.gov/rules-and-compliance/rule-development/public-hearings>.

Workshop Comment 11: WSPA

- **WSPA comments that for transparency, budget, cost containment and fee assessment should be addressed together in one comprehensive document. WSPA comments that specifically, the proposed historical fee percentage increases and cost containment for certain categories should be available for side-by-side comparison in both the Regulation 3 Fees document, as well as the Budget and Finance Committee document. WSPA asserts that fees for the refining sector have increased between 7% and 9% annually and that cost containment is only being addressed for the whole District, not for the refining sector. WSPA asks that cost containment be more detailed and by sector.**

Air District Response to Workshop Comment 11: The District produces reports each year that are available for public review that provide revenue and expense information to the public. The annual District Budget, annual Cost Recovery Study, and annual Amendments to Regulation 3 (Fees) Staff Report contain the key information on the District's budget, cost containment, and fee assessment.

Workshop Comment 12: WSPA

- **WSPA requests that the Risk Assessment Fee should be refundable per Regulation 3-305 Cancellation or Withdrawal: Fees if the BAAQMD has not conducted that Risk Assessment prior to an application being cancelled or withdrawn.**

Air District Response to Workshop Comment 12: The District agrees with this proposal and will propose this amendment to Section 3-305.

Workshop Comment 13: WSPA

- **WSPA comments that full cost recovery assessment has not been conducted since 2011 (for 2010 data). WSPA understands that the District expects to release a Request for Proposal for an Air District Cost Recovery Study in the next few months. WSPA appreciates this effort. WSPA asks that this Cost Recovery Study include a clear analysis and justification of the District's cost containment efforts for the heavy industry subset of the overall budget, and explanation for fees assessments. Further, WSPA asks that the analysis include explanation why the 5% cost recovery closure has not been attained and what new measures the District is planning to implement to contain costs going forward.**

Air District Response to Workshop Comment 13: In response to your specific comments on the District's cost recovery status and schedule fee increases, the Cost Recovery Study we will be undertaking will identify the drivers of fee-related costs as well as the appropriate methods and consequent results. It will also point to any possible cost-saving measures. However, with the exceptions of Schedules T, W, and X, schedules are not specific to refineries or to the heavy industry sector, so a vertical analysis for those sectors or industries would not be possible.

Workshop Comment 14: CCEEB

- **CCEEB comments that fees, cost recovery, and amendments to Regulation 3 be done within the broader context of the District's annual budget. CCEEB also comments that they appreciated staff's 3/22/17 presentation to the Budget and Finance Committee on the proposed FYE 2018 budget and found it very helpful that the District extended the Regulation 3 comment deadline to allow time for public review of the budget documents. CCEEB further notes that the staff report for Regulation 3 has not yet been released.**

Air District Response to Workshop Comment 14: The Air District staff follow a consistent practice of determining fee increases in the context of cost recovery and budgeting on an annual basis. The Air District staff anticipate costs and propose the budget and necessary fee increases accordingly. We thank CCEEB for its acknowledgement of our efforts to make our rule development process transparent and to solicit input from interested parties. The Supplementation Supporting Information Report was released on March 14, 2017. On March 23, 2017, both the Draft Staff Report for Regulation 3 and the 2017 Cost Recovery Study were released and posted on the Air District's website at: <http://www.baaqmd.gov/rules-and-compliance/ruledevelopment/public-hearings>.

Workshop Comment 15: CCEEB

- **CCEEB comments that they look forward to working with staff next year on an update to the District's cost recovery and cost containment study, and recommend that program evaluations be included as part of this effort.**

Air District Response to Workshop Comment 15: The Air District staff will be working on an update to its cost recovery and containment study this year. A request for proposals was sent out recently to potential contractors. We plan to invite CCEEB to participate on the Steering Committee for this study.

Workshop Comment 16: CCEEB

- **CCEEB comments that between the proposed budget document and draft amendments to Regulation 3, it is currently unclear what activities or costs are driving increases to program expenditures. CCEEB requests information on how Schedule T fees are being allocated across District climate change activities, what additional expenditures are planned in the near future, and how many facilities are assessed fees under Schedule T.**

Air District Response to Workshop Comment 16: Schedule T fees, alongside the District's non-fee-related revenue, are used to support all District climate change activities, which are continuing to expand. These include activities taking place through Joint Policy Committee, Advisory Council, our Climate Protection program, and technical efforts to produce the Regional Climate Action Plan and the 2017 Clean Air Plan which will be presented to the Board this year. The 855 facilities with Air District GHG emissions in the inventory are assessed fees under Schedule T.

Workshop Comment 17: CCEEB

- **CCEEB comments that similar increases have been made to other fees schedules, for example, to Title V fees. Citing certain figures for District expenditures, CCEEB expresses concern about increases in District expenses and suggests that understanding what factors are contributing to increases could help identify options for cost containment.**

Air District Response to Workshop Comment 17: Fee schedule rate increases have been set in the attempt to achieve the cost recovery goal set in 2011. Fee schedule

revenue increases are a combination of the annual rate increases and year-to-year changes in the sources and emissions at regulated facilities. In the case of the Title V revenue, it appears a higher level of permitting activity at facilities in FYE2013 and FYE2015- FYE2016 was the major contributing factor. The expenditure figures CCEEB cites are from consolidated statements. Consolidated expenditure includes General Fund as well as all grant-related activity. General Fund expenditure is expected to increase 30% over the period from FYE2010-FYE2018. In cost allocation, indirect expenditures come from some General Fund programs and are allocated to all District activities, including the grant programs.

Workshop Comment 18: CCEEB

- **CCEEB requests information on Schedule W: Petroleum Refining Emissions Tracking Fees on the actual costs for Reg. 12-15 implementation, the rate of cost recovery, or estimated costs for 2017-2018. CCEEB commented that this issue is of concern given that Reg. 12-15 inventories are not being used to assess state non-vehicular source fees; rather, refineries are being asked to submit a separate and additional inventory based on the District's general reporting requirements. CCEEB asks for an explanation why Reg. 12-15 inventories are not being used for these purposes, or the current status of Reg. 12-15 engineering reviews.**

Air District Response to Workshop Comment 18: This fiscal year, District staff have been working on the detailed Refinery Emissions Inventory Guidelines, participating in working meetings, and other work activities associated with Regulation 12, Rule 15. The District staff will be better able to evaluate the rate of cost recovery for Schedule W after we have more data to evaluate. The issue about which emissions inventory is used by the state to assess non-vehicular source fees is outside the scope of these proposed amendments to Regulation 3 and should be addressed with the California Air Resources Board.

Workshop Comment 19: CCEEB

- **CCEEB expresses concern that Regulation 3 proposes new fees related to implementation of proposed Regulation 11, Rule 18 although Reg. 11-18 rule development is ongoing.**

Air District Response to Workshop Comment 19: These proposed fees are intended to recover the District's costs associated with implementation of proposed Regulation 11, Rule 18, which is scheduled for Board of Directors adoption consideration in July 2017. The fees relate to health risk assessments that would be required under proposed Regulation 11, Rule 18, and would only be implemented if the Air District Board of Directors adopts Regulation 11, Rule 18.

Workshop Comment 20: CCEEB

- **CCEEB is grateful to the Air District staff for the March 14, 2017, Supplemental Supporting Information (SSI) report on proposed Reg. 11-18 fees.**

CCEEB asks the following questions regarding the SSI report:

- Which consultants have been contracted, and what information did consultants use to estimate HRA costs?
- What constitutes a "medium" facility versus a "small" facility?
- How many, if any, HRAs will be completed by District staff in FY2018?
- How would costs differ if District staff conducted HRAs?
- What staff resources are needed to review the work of third-party consultants, and at what cost?
- Would it be more efficient-and provide more accurate information-if the District instead approved HRA consultants and allowed facilities to directly contract with them?
- How will costs for HRAs and review of risk reduction plans be assessed in cases where a facility disagrees with District analysis or determinations?
- How is staff calculating Regulation 3 increases for businesses subject to Reg. 11-18 but not part of Phase 1 (FY2018)? Would staff calculate the fee increase in the year the schedule was approved, or the year it was applied to a facility? If calculated for the year approved but not assessed, does this unintentionally circumvent Health and Safety Code requirements that limit total fee increases to 15 percent per year?

Air District Response to Workshop Comment 20:

There have been no consultants contracted for the HRAs. The Request for Qualification (RFQ) and RFQ Questions and Answers are available at: <http://www.baaqmd.gov/about-the-air-district/request-for-proposals-rfp-rfq/closed-rfp-rfq> (RFQ No. 2016-006, Health Risk Assessments for Toxic Risk Reduction Regulations).

The RFQ documents are also available by following the below links:

- [RFO for Health Risk Assessments for Toxic Risk Reduction Regulations](#) (357 Kb PDF, 8 pgs., posted 11/23/16)
- [RFO 2016-006 Questions and Answers](#) (354 Kb PDF, 2 pgs., posted 11/29/16)

Medium facilities typically have more complex sources to model and more sources than small facilities. Per Board of Directors instructions, all the Regulation 11-18 HRAs are expected to be conducted by third-party consultants and/or the Air District staff. The proposed Regulation 11-18 fees should be sufficient to cover the District staff resources needed for this work. The HRAs must reflect the independent judgement of the District. In cases where the facility disagrees with the District analysis or determinations, the proposed Regulation 11-18 fees assessed would be the same as where the facility agrees. We expect the usual back-and-forth with the facilities to resolve issues and disagreements.

For the years after FY2018, the calculation method is the same. It is calculated based on the Fee Schedules in place at the time the Regulation 11-18 HRA is required and is based on the Risk Assessment Fee contained in each fee schedule and whether the source is designated a TAC source or not.

Workshop Comment 21: CCEEB

- **CCEEB strongly recommends removing related fees from this year's Regulation 3 amendments. CCEEB notes that fee schedules approved next spring and effective July 1, 2018 would still be timely for the first phase of Regulation 11- 18 HRAs. CCEEB asserts that approving Reg. 3 amendments ahead of Reg. 11-18 raises legal questions related to CEQA and the prejudging of Reg. 11-18 before any environmental review has been completed.**

Air District Response to Workshop Comment 21: Air District staff believes that the proposal for Regulation 11-18 is sufficiently developed, so we know what fee structure makes sense for the rule and what our costs will be. If Regulation 11-18 as adopted differs substantially from what is now contemplated, we can amend the fee. Air District staff do not believe that the proposed Regulation 3 fees for Regulation 11-18 raise legal questions related to CEQA. Enacting and collecting fees to recover program costs is exempt under CEQA. Thus, while a new regulatory program may be a project subject to review under CEQA, the creation of a fee structure to recover the cost of a new regulatory program is not. Similarly, setting in place a cost recovery fee structure to support a new regulatory program does not constitute an approval of the project, especially in a case like the proposed fees for Regulation 11-18, which will only come into effect if the proposed program is enacted.

Workshop Comment 22: CCEEB

- **CCEEB requests to meet with staff on draft Regulation 11, Rule 18 to better understand the proposed requirements and implementation plan, which may improve our understanding of the BAAQMD Draft Staff Report: Draft Regulation 12, Rule 16: Petroleum Refining Facility-Wide Emissions Limits and Draft Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities, October 2016,page 32.**

Air District Response to Workshop Comment 22: Air District staff would be happy to meet with CCEEB concerning the proposed requirements of draft Regulation 11, Rule 18, and draft Regulation 12, Rule 16. To set up these requested meetings, contact Gregory H. Nudd, Rule Development Manager, at gnudd@baaqmd.gov or (415) 749-4786.

8.2 Public Hearing Comments – Regulation 3, Fees

None received.

9. CONCLUSIONS

Air District staff finds that the proposed fee amendments meet the findings of necessity, authority, clarity, consistency, non-duplication and reference specified in H&S Code section 40727. The proposed amendments:

- Are necessary to fund the Air District's efforts to attain and maintain federal and state air quality standards, and to reduce public exposure to toxic air contaminants;
- Are authorized by H&S Code sections 42311, 42311.2, 41512.7, 42364, 44380 and 40 CFR Part 70.9;
- Are clear, in that the amendments are written so that the meaning can be understood by the affected parties;
- Are consistent with other Air District rules, and not in conflict with any state or federal law;
- Are not duplicative of other statutes, rules or regulations; and
- Reference H&S Code sections 42311, 42311.2, 41512.7, 42364, 44380 and 40 CFR Part 70.9.

The proposed fee amendments will be used by the Air District to recover the costs of issuing permits, performing inspections, and other associated regulatory activities. The Air District fees subject to this rulemaking are in amounts no more than necessary to cover the reasonable costs of the Air District's regulatory activities, and the manner in which the Air District fees allocate those costs to a payer bear a fair and reasonable relationship to the payer's burdens on the Air District regulatory activities and benefits received from those activities. After adoption of the proposed amendments, permit fee revenue would still be below the Air District's regulatory program activity costs associated with permitted sources. Similarly, fee revenue for non-permitted sources would be below the Air District's costs of regulatory programs related to these sources. Fee increases for authorities to construct and permits to operate would not exceed 15 percent per year as required under H&S Code section 41512.7. The proposed amendments to Regulation 3 are exempt from the requirements of the CEQA under Section 15273 of the CEQA Guidelines.



BAY AREA
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DRAFT STAFF REPORT

**PROPOSED AMENDMENTS TO
BAAQMD REGULATION 3: FEES**

APPENDIX A

COST RECOVERY POLICY
(Adopted March 7, 2012)

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

PURPOSE

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

WHEREAS, the District's regulatory programs involve issuing permits, performing inspections, and other associated activities.

WHEREAS, the 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 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 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 District analyzes whether assessed fees result in the collection of sufficient revenue to recover the costs of related program activities; these analyses have included contractor-conducted fee studies completed in 1999, 2005, and 2011, and annual District staff-conducted cost recovery updates completed in 2006 through 2010. Each fee study and cost recovery update completed revealed that District fee revenue falls significantly short of recovering the costs of related program activities.

WHEREAS, the District's most recently completed fee study (*Cost Recovery and Containment Study, Bay Area Air Quality Management District*, Final Report, Matrix Consulting Group, March 9, 2011) concluded that in Fiscal Year Ending (FYE) 2010, the District recovered approximately 62 percent of its fee-related activity costs, resulting in an under-recovery of costs (i.e., a cost recovery gap), and a subsidy to fee payers, of approximately \$16.8 million, and that this cost recovery gap resulted despite the

implementation of a number of strategies to contain costs.

WHEREAS, cost recovery analyses have indicated that the District's Fee Schedule P: Major Facility Review Fees, which establishes fees for program activities associated with the Title V permit program, has under-recovered costs by an average of \$3.4 million per year over the period FYE 2004 through FYE 2010.

WHEREAS, the District's Board of Directors has recognized since 1999 that the 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, in addition to fee revenue, the 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 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 District expenses necessitating, in certain years, the use of reserve funds.

WHEREAS, tax revenue that the 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 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 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 District should continue to implement feasible cost containment measures, including the use of appropriate best management practices, without compromising the District's effective implementation and enforcement of applicable regulatory requirements. The District's annual budget documents should include a summary of cost containment measures that are being implemented.

(2) Analysis of Cost Recovery – The 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. These cost recovery analyses should be periodically completed by a qualified District contractor, and should be updated on an annual basis by District staff using a consistent methodology.

(3) Cost Recovery Goals – It is the general policy of the District, except as otherwise noted below, that the costs of regulatory program activities be fully recovered by assessing fees to regulated entities. In order to move towards this goal, the District should amend its fee regulation over the next four years, in conjunction with the adoption of budgets for Fiscal Year Ending (FYE) 2013 through FYE 2016, in a manner sufficient to increase overall recovery of regulatory program activity costs to 85 percent. 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. This includes Fee Schedule P: Major Facility Review Fees, which has been determined to under-recover costs by a significant amount. Newly adopted regulatory measures should include fees that are designed to recover increased regulatory program activity costs associated with the measure, 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 subsidize existing fee discounts that the District provides (e.g., for small businesses, green businesses, and third-party permit appeals), and to cover the cost of the District’s wood smoke enforcement program.

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 District’s Board of Directors.



BAY AREA
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DISTRICT

STAFF REPORT

APPENDIX B PROPOSED REGULATORY LANGUAGE REGULATION 3: FEES

June 21, 2017

**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 effective March 1, 2000
- 3-215 Deleted effective March 1, 2000
- 3-216 Deleted effective March 1, 2000
- 3-217 Deleted effective March 1, 2000
- 3-218 Deleted effective March 1, 2000
- 3-219 Deleted effective March 1, 2000
- 3-220 Deleted effective March 1, 2000
- 3-321 Deleted effective March 1, 2000
- 3-222 Deleted effective 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~~ ~~Screening~~ 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

3-300 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 ~~Duplicate Permit~~ 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, Schools
- 3-319 Major Stationary Source Fees
- 3-320 Toxic Inventory Fees
- 3-321 Deleted December 2, 1998
- 3-322 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 ~~Risk Screening~~
- 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 Indirect Source Review Fees
- 3-336 Open Burning Operation Fees
- 3-337 Exemption Fees
- 3-338 Incident Response Fees
- 3-339 Petroleum 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

3-400 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

3-500 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 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 INDIRECT SOURCE REVIEW FEES
- SCHEDULE V OPEN BURNING
- SCHEDULE W PETROLEUM 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 June 7, 2000)

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 February 20, 1985)

3-203 Filing Fee: A fixed fee for each source in an authority to construct.

(Amended June 4, 1986)

3-204 Initial Fee: The fee required for each new or modified source based on the type and size of the source. The fee is applicable to new and modified sources seeking to obtain an authority to construct. Operation of a new or modified source is not allowed until the permit to operate fee is paid.

(Amended June 4, 1986)

- 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 June 4, 1986)
- 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 July 3, 1991)
- 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 June 7, 2000)

3-238 Risk Assessment Screening Fee: Fee for a new or modified source of toxic air contaminants for which a ~~health risk screening analysis~~ health risk assessment (HRSAHRA) is required under Regulation 2-5-401, for an HRA required under Regulation 11, Rule 18, or for an HRSAHRA 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 June 15, 2005; Amended: June 21, 2017)

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 June 15, 2005)

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 May 21, 2008)

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 June 16, 2010)

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 June 19, 2013)

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 June 19, 2013)

3-244 Permit to Operate Renewal Date: The first day of a Permit to Operate's Permit Renewal Period.

(Adopted June 19, 2013)

3-245 Permit Renewal Period: The length of time the source is authorized to operate pursuant to a Permit to Operate.

(Adopted June 19, 2013)

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 June 7, 2000)

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 ~~\$462474~~, the initial fee, the

risk screeningassessment fee, the permit to operate fee, and toxic surcharge (given in Schedules B, C, D, E, F, H, I or K). Applicants for authorities to construct and permits to operate modified sources shall pay for each modified source, a filing fee of \$462474, the initial fee, the risk screeningassessment 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 APCO may reduce the fees for new and modified sources by an amount deemed appropriate if the owner or operator of the source attends an Industry Compliance School sponsored by the District.

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 screeningassessment fee shall be reduced by 50%. All other applicable fees shall be paid in full.

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 \$462474 filing fee and initial and risk screeningassessment fees that are equivalent to 50% of the initial and risk screeningassessment fees for the source being abated, not to exceed a total of \$10,27040,000. 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 screeningassessment, 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 screeningassessment fee shall be reduced by 10%. All other applicable fees shall be paid in full.

(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)

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 for gasoline dispensing facilities subject to Schedule D, 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.

(Amended 6/4/86; 11/15/00; 6/2/04; 6/3/15, 6/15/16)

3-305 Cancellation or Withdrawal: There will be no refund of the initial fee, risk screening, and filing fees 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.~~ However, if an application for identical equipment 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)

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 Condition Changes: Applicant shall pay the filing, initial, and risk ~~screening~~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)

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.

(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)

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 Duplicate Permit or Registration:** An applicant for a duplicate permit to operate or registration shall pay a fee of \$78 per permit or registration. Deleted June 21, 2017~~

(Amended 5/19/99; 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; 6/19/13; 6/4/14; 6/3/15, 6/15/16, 6/21/17)

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 Banking:** Any applicant who wishes to bank emissions for future use, or convert an ERC into an IERC, shall pay a filing fee of \$~~462474~~ 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. Any applicant for the withdrawal of banked emissions shall pay a fee of \$~~462474~~.
(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)
- 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 \$~~1,2014,169~~ for each source included in the alternative compliance plan, not to exceed \$12,00844,692.
(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)
- 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, Schools:** Pursuant to Section 42301.6(b) of the Health and Safety Code, 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 \$~~2,2042,446~~ per application, and
318.2 The District's cost exceeding \$~~2,2042,446~~ 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)
- 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 \$~~9,3889,144~~ 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)

- 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.
(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 June 7, 1995)
- 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. 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 fee is applicable to all sources required to obtain permits to operate in accordance with District regulations. The permit renewal invoice shall also specify 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, and greenhouse gas fees based on Schedule T. Where applicable, renewal fees shall be based on actual usage or emission levels that have been reported to or calculated by the District. In addition to these renewal fees for the sources at a facility, the facility shall also pay a processing fee at the time of renewal that covers each Permit Renewal Period as follows:
- 327.1 ~~\$9394~~ for facilities with one permitted source, including gasoline dispensing facilities,
 - 327.2 ~~\$185480~~ for facilities with 2 to 5 permitted sources,
 - 327.3 ~~\$369359~~ for facilities with 6 to 10 permitted sources,
 - 327.4 ~~\$554539~~ for facilities with 11 to 15 permitted sources,
 - 327.5 ~~\$734745~~ for facilities with 16 to 20 permitted sources,
 - 327.6 ~~\$919895~~ for facilities with more than 20 permitted sources.
- (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)*
- 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 June 7, 2000)
- 3-329 Fees for New Source Review Health Risk Assessment~~Risk Screening~~:** Any person required to submit a health risk screening analysis~~health risk assessment~~ (HRSAHRA) pursuant to Regulation 2-5-401~~required pursuant to Regulation 2, Rule 5~~ shall ~~pay~~be subject to an appropriate Risk ~~Screening~~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 HRSAHRA (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 ~~Screening~~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 2-45-1 trigger levels, a Risk Assessment Fee shall be assessed for the source in the project with the highest TAC emissions.
(Adopted June 15, 2005; 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.

(Adopted June 15, 2005)

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. The APCO may reduce registration fees by an amount deemed appropriate if the owner or operator of the equipment attends an Industry Compliance School sponsored by the District.

(Adopted June 6, 2007; Amended 6/16/10)

3-332 Naturally Occurring Asbestos Fees: After July 1, 2007, any person required to submit 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 June 6, 2007)

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 May 21, 2008)

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 May 21, 2008)

3-335 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 May 20, 2009)

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 fire or Marsh Management fire shall pay the fee given in Schedule V.

(Adopted June 19, 2013)

3-337 Exemption Fee: An applicant who wishes to receive a certificate of exemption shall pay a filing fee of \$462474 per exempt source.

(Adopted June 19, 2013; Amended 6/4/14; 6/3/15, 6/21/17)

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 June 19, 2013)

3-339 Petroleum 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)

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 \$1,500 for facilities with one source subject to risk reduction pursuant to Regulation 11, Rule 18, including gasoline dispensing facilities;
- 341.2 \$3,000 for facilities with 2 to 5 sources subject to risk reduction pursuant to Regulation 11, Rule 18;
- 341.3 \$6,000 for facilities with 6 to 10 sources subject to risk reduction pursuant to Regulation 11, Rule 18;
- 341.4 \$12,000 for facilities with 11 to 15 sources subject to risk reduction pursuant to Regulation 11, Rule 18;
- 341.5 \$24,000 for facilities with 16 to 20 sources subject to risk reduction pursuant to Regulation 11, Rule 18;
- 341.6 \$32,000 for facilities with more than 20 sources subject to risk reduction pursuant to Regulation 11, Rule 18.

(Adopted 6/21/17)

3-342 **Fee for Facility-Wide Health Risk Assessment:** Any person required to submit a health risk assessment (HRA) pursuant to Regulation 11, Rule 18 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 \$150,000.

(Adopted 6/21/17)

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 50 percent of all fees specified on the invoice.
- 405.3 Renewal of Permit to Operate: The owner or 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 or 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 50 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 50 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)

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.

(Amended 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: No later than 120 days after the adoption of this regulation, 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 October 21, 1992)

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 October 8, 1997)

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 June 16, 2010)

**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	\$4,6024 ,222 \$2,3042 ,114	\$6886 34 \$2322 13	
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	\$2,7632 ,535 \$1,3794 ,265	\$6886 34 \$2322 13	
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.....	\$1,8334 ,682 \$1,3794 ,265	\$2322 13 \$2322 13	
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.....	\$1,8334 ,682 \$1,3794 ,265	\$2132 32 \$2132 32	
5.	For each application to revoke a variance	\$2,7632 ,535	\$2132 32	
6.	For each application for approval of a Schedule of Increments of Progress in accordance with §41703.....	\$1,8334 ,682	\$2132 32	
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	\$4,6024 ,222 \$2,3042 ,114	\$6886 34 \$2132 32	
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	\$2,7632 ,535 \$1,3794 ,265	\$6886 34 \$2132 32	

		Large Companies	Small Business	Third Party
9.	For each Appeal (Permit, Banking, Title V).....	\$4,6024,22 per hearing day	\$2,3042,114 per hearing day	\$2,3042,114 for entire appeal period
10.	For each application for intervention in accordance with Hearing Board Rules §§2.3, 3.6 & 4.6.....	\$2,3042,114	\$4634,25	
11.	For each application to Modify or Terminate an abatement order	\$4,6024,22 per hearing day	\$2,3042,114 per hearing day	
12.	For each application for an interim variance in accordance with §42351	\$2,3042,114	\$4634,25	
13.	For each application for an emergency variance in accordance with §42359.5	\$1,1494,054	\$2132,32	
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	\$2,3042,114	\$6886,31	\$6886,31
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)

**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 \$~~4.414~~⁰⁵ 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 \$~~21.9320~~¹² per pound

Asbestos
Benzene
Cadmium
Carbon tetrachloride
Chlorinated dioxins and dibenzofurans (15 species)
Diesel exhaust particulate matter
Ethylene dibromide
Ethylene dichloride
Ethylene oxide
Formaldehyde
Hexavalent chromium
Methylene chloride
Nickel
Perchloroethylene
1,3-Butadiene
Inorganic arsenic
Beryllium
Polynuclear aromatic hydrocarbons (PAH)
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:

$$\text{Fee} = (\text{Opacity}^* \text{ equivalent} - 20) \times \text{number of days allowed in variance} \times \$4.50$$

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:

$$\text{Fee} = (\text{Opacity}^* \text{ equivalent} - 40) \times \text{number of days allowed by variance} \times \$4.50$$

- * 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)

**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: \$63.11 per MM BTU/HOUR
 - a. The minimum fee per source is: \$337
 - b. The maximum fee per source is: \$117,733

2. RISK ~~SCREENING~~ASSESSMENT FEE (~~RSFRAF~~), ~~if required pursuant to Regulation 3-329 or 3-342 is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk screening analysis is required under Regulation 2-5-401.~~
 - a. ~~RSFRAF~~ for first (toxic air contaminant) (TAC) source in application: \$462474
plus \$63.11 per MM BTU/hr
 - b. Minimum ~~RSFRAF~~ for first TAC source: \$811799
 - c. ~~RSFRAF~~ for each additional TAC source: \$63.11 per MM
BTU/hr *
 - d. Minimum ~~RSFRAF~~ per additional TAC source: \$337
*
 - e. Maximum ~~RSFRAF~~ per source is: \$117,733
* ~~RSFRAF~~ 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: \$31.54 per MM BTU/HOUR
 - a. The minimum fee per source is: \$239
 - b. The maximum fee per source is: \$58,866

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. ROUNDING: Fees for each source will be rounded to the nearest dollar. The fee for sources will be rounded up to the nearest dollar for 51 cents and above, and amounts 50 cents and lower will be rounded down to the nearest dollar.

6. 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.

7. 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)

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 ~~SCREENING~~ASSESSMENT FEE (~~RSFRAF~~), if required pursuant to Regulation ~~3-329 or 3-342 is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk screening analysis is required under Regulation 2-5-401.~~
 - a. ~~RSFRAF~~ for first ~~(toxic air contaminant)~~ (TAC) source in application: ~~\$462474~~
plus 0.185 cents per gallon
 - b. Minimum ~~RSFRAF~~ for first TAC source: ~~\$678666~~
 - c. ~~RSFRAF~~ for each additional TAC source: 0.185 cents per gallon *
 - d. Minimum ~~RSFRAF~~ per additional TAC source: \$204 *
 - e. Maximum ~~RSFRAF~~ per source is: \$27,858

* ~~RSFRAF~~ 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.

5. ROUNDING: Fees for each source will be rounded to the nearest dollar. The fee for sources will be rounded up to the nearest dollar for 51 cents and above, and amounts 50 cents and lower will be rounded down to the nearest dollar.

(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)

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: \$~~306.42283.72~~ per single product nozzle (spn)
\$~~306.42283.72~~ per product for each multi-product nozzle (mpn)
2. PERMIT TO OPERATE FEE: \$~~117.36408.67~~ per single product nozzle (spn)
\$~~117.36408.67~~ 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:

$$\$423.78392.37 \times \left\{ \left[(mpn_{\text{proposed}})(\text{products per nozzle}) + spn_{\text{proposed}} \right] - \left[(mpn_{\text{existing}})(\text{products per nozzle}) + spn_{\text{existing}} \right] \right\}$$

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 ~~SCREENINGASSESSMENT~~ FEE (~~RSFRAF~~) of ~~\$462474~~ per application, ~~if required pursuant to Regulation 3-329 or 3-342 is only applicable to projects for which a health risk screening analysis is required under Regulation 2-5-401~~ [including increases in permitted throughput for which a ~~health risk screening analysis~~ health risk assessment is required.]
 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: \$~~4,024.853,726.74~~ per single product loading arm
\$~~4,024.853,726.74~~ per product for multi-product arms
2. RISK ~~SCREENINGASSESSMENT~~ FEE (~~RSFRAF~~), ~~if required pursuant to Regulation 3-329 or 3-342 is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk screening analysis is required under Regulation 2-5-401.~~
 - a. ~~RSFRAF~~ for first toxic air contaminant (TAC) source in application: ~~\$4,5574,249~~
 - b. ~~RSFRAF~~ for each additional TAC source: ~~\$4,0253,727~~ *

* ~~RSFRAF~~ 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: \$~~1,1214,038~~ per single product loading arm
\$~~1,1214,038~~ 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.
- D. Fees for each source will be rounded to the nearest dollar. The fee for sources will be rounded up to the nearest dollar for 51 cents and above, and amounts 50 cents and lower will be rounded down to the nearest dollar.

*(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)*

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 minimum fee per source is: \$734673
 - b. If usage is not more than 1,000 gallons/year: \$734673
 - c. If usage is more than 1,000 gallons/year: \$1,4741,352 per 1,000 gallons
 - d. The maximum fee per source is: \$58,59053,752

2. RISK ~~SCREENING~~ASSESSMENT FEE (~~RSFRAF~~), ~~if required pursuant to Regulation 3-329 or 3-342 is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk screening analysis is required under Regulation 2-5-401.~~
 - a. ~~RSFRAF~~ for first ~~(toxic air contaminant)~~(TAC) source in application: \$462474
plus initial fee
 - b. Minimum ~~RSFRAF~~ for first TAC source: \$1,2081,165
 - c. ~~RSFRAF~~ for each additional TAC source: equal to initial fee *
 - d. Minimum ~~RSFRAF~~ per additional TAC source: \$734673 *
 - e. Maximum ~~RSFRAF~~ per source is: \$58,59053,752
* ~~RSFRAF~~ 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: \$529485
 - b. If usage is not more than 1,000 gallons/year: \$529485
 - c. If usage is more than 1,000 gallons/year: \$734673 per 1,000 gallons
 - d. The maximum fee per source is: \$29,29326,874

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. Fees for each source will be rounded to the nearest dollar. The fee for sources will be rounded up to the nearest dollar for 51 cents and above, and amounts 50 cents and lower will be rounded down to the nearest dollar.

(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)

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: \$594,555
2. RISK ~~SCREENING~~ASSESSMENT FEE (~~RSFRAF~~), ~~if required pursuant to Regulation 3-329 or 3-342 is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk screening analysis is required under Regulation 2-5-401.~~
 - a. ~~RSFRAF~~ for first (toxic air contaminant) TAC source in application: \$1,116,043
 - b. ~~RSFRAF~~ for each additional TAC source: \$594,555
 - *
 - * ~~RSFRAF~~ 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: \$432,404
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: \$3,983,654
2. RISK ~~SCREENING~~ASSESSMENT FEE (~~RSFRAF~~), ~~if required pursuant to Regulation 3-329 or 3-342 is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk screening analysis is required under Regulation 2-5-401.~~
 - a. ~~RSFRAF~~ for first (toxic air contaminant) (TAC) source in application: \$4,519,146
 - b. ~~RSFRAF~~ for each additional TAC source: \$3,983,654
 - *
 - * ~~RSFRAF~~ 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: \$1,988,824
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: \$5,257,823
2. RISK ~~SCREENING~~ASSESSMENT FEE (~~RSFRAF~~), ~~if required pursuant to Regulation 3-329 or 3-342 is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk screening analysis is required under Regulation 2-5-401.~~
 - a. ~~RSFRAF~~ for first (toxic air contaminant) (TAC) source in application: \$5,794,316
 - b. ~~RSFRAF~~ for each additional TAC

source: \$5,2574,823

*

* ~~RSFRAF~~ 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: \$2,6272,410

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: \$32,04829,954

2. RISK ~~SCREENINGASSESSMENT~~ FEE (~~RSFRAF~~), ~~if required pursuant to Regulation 3-329 or 3-342 is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk screening analysis is required under Regulation 2-5-401.~~

a. ~~RSFRAF~~ for first ~~(toxic air contaminant)~~(TAC) source in application: \$32,57030,439

b. ~~RSFRAF~~ for each additional TAC source: \$32,04829,954 *

* ~~RSFRAF~~ 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: \$16,02144,973

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: \$69,51563,775

2. RISK ~~SCREENINGASSESSMENT~~ FEE (~~RSFRAF~~), ~~if required pursuant to Regulation 3-329 or 3-342 is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk screening analysis is required under Regulation 2-5-401.~~

a. ~~RSFRAF~~ for first ~~(toxic air contaminant)~~(TAC) source in application: \$70,05164,267

b. ~~RSFRAF~~ for each additional TAC source: \$69,51563,775

*

* ~~RSFRAF~~ 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: \$34,75631,886

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: \$51,731

2. RISK ~~SCREENINGASSESSMENT~~ FEE (~~RSFRAF~~) is only applicable for new and

modified sources of toxic air contaminants (TACs) for which a ~~health risk screening analysis~~ health risk assessment is required under Regulation 2-5-401.

- a. RSFRAF for first TAC source in application: \$52,193
- b. RSFRAF for each additional TAC source: \$51,731

* RSFRAF 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: \$25,865
- 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)

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

Equipment or Process Description	Materials Processed or Produced
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
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
Petroleum Refining – Alkylation Units	Any Hydrocarbons
Petroleum Refining – Asphalt Oxidizers	Any Hydrocarbons
Petroleum Refining – Benzene Saturation Units/Plants	Any Hydrocarbons
Petroleum Refining – Catalytic Reforming Units	Any Hydrocarbons
Petroleum Refining – Chemical Treating Units including alkane, naphthenic acid, and naphtha merox treating, or similar processes	Any Hydrocarbons
Petroleum Refining – Converting Units including Dimersol Plants, Hydrocarbon Splitters, or similar processes	Any Hydrocarbons
Petroleum Refining – Distillation Units, excluding crude oil units with capacity > 1000 barrels/hour (see G-3 for > 1000 barrels/hour crude distillation units)	Any Hydrocarbons
Petroleum Refining – Hydrogen Manufacturing	Hydrogen or Any Hydrocarbons

Equipment or Process Description	Materials Processed or Produced
Petroleum Refining – Hydrotreating or Hydrofining	Any Hydrocarbons
Petroleum Refining – Isomerization	Any Hydrocarbons
Petroleum Refining – MTBE Process Units/Plants	Any Hydrocarbons
Petroleum Refining – Sludge Converter	Any Petroleum Waste Materials
Petroleum Refining – Solvent Extraction	Any Hydrocarbons
Petroleum Refining – Sour Water Stripping	Any Petroleum Process or Waste Water
Petroleum Refining – Storage (enclosed)	Petroleum Coke or Coke Products
Petroleum Refining – Waste Gas Flares (not subject to Regulation 12, Rule 11)	Any Petroleum Refining Gases
Petroleum Refining – Miscellaneous Other Process Units	Any Hydrocarbons
Remediation Operations, Groundwater – Strippers	Contaminated Groundwater
Remediation Operations, Soil – Any Equipment	Contaminated Soil
Spray Dryers	Any Materials
Sterilization Equipment	Ethylene Oxide
Wastewater Treatment, Industrial – Oil-Water Separators, excluding oil-water separators at petroleum refineries (see G-2 for Petroleum Refining - Oil-Water Separators)	Wastewater from any industrial facilities except petroleum refineries
Wastewater Treatment, Industrial – Strippers including air strippers, nitrogen strippers, dissolved air flotation units, or similar equipment and excluding strippers at petroleum refineries (see G-2 for Petroleum Refining – Strippers)	Wastewater from any industrial facilities except petroleum refineries
Wastewater Treatment, Industrial - Storage Ponds, excluding storage ponds at petroleum refineries (see G-2 for Petroleum Refining – Storage Ponds)	Wastewater from any industrial facilities except petroleum 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)

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
Petroleum Refining – Stockpiles (open)	Petroleum Coke or coke products only
Petroleum Refining, Wastewater Treatment – Oil-Water Separators	Wastewater from petroleum refineries only
Petroleum Refining, Wastewater Treatment – Strippers including air strippers, nitrogen strippers, dissolved air flotation units, or similar equipment	Wastewater from petroleum refineries only
Petroleum Refining, Wastewater Treatment – Storage Ponds	Wastewater from petroleum refineries only
Pickling Lines or Tanks	Any Metals or Alloys
Sulfate Pulping Operations – All Units	Any
Sulfite Pulping Operations – All Units	Any

(Amended June 7, 2000)

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
Petroleum Refining – Cracking Units including hydrocrackers and excluding thermal or fluid catalytic crackers (see G-4 for Thermal Crackers and Catalytic Crackers)	Any Hydrocarbons
Petroleum Refining – Distillation Units (crude oils) including any unit with a capacity greater than 1000 barrels/hour (see G-1 for other distillation units)	Any Petroleum 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)

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
Petroleum Refining - Coking Units including fluid cokers, delayed cokers, flexicokers, and coke kilns	Petroleum Coke and Coke Products
Petroleum Refining - Cracking Units including fluid catalytic crackers and thermal crackers and excluding hydrocrackers (see G-3 for Hydrocracking Units)	Any Hydrocarbons
Petroleum Refining - Sulfur Removal including any Claus process or any other process requiring caustic reactants	Any Petroleum Refining Gas
Sulfuric Acid Manufacturing – Any Chamber or Contact Process	Any Solid, Liquid or Gaseous Fuels Containing Sulfur

(Amended June 7, 2000)

SCHEDULE G-5

Equipment or Process Description	Materials Processed or Produced
Petroleum Refinery Flares (subject to Regulation 12, Rule 11)	Any Petroleum Vent Gas (as defined in section 12-11-210 and section 12-12-213)

(Adopted May 2, 2007)

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: \$639586
- b. The maximum fee per source is: \$51,18946,962

The initial fee shall include the fees for each type of operation listed below, which is performed at the fabrication area:

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):

- i. ~~If gross throughput is not more than 3,000 gallons/year: \$586~~
- ii. ~~If gross throughput is more than 3,000 gallons/year: \$433397~~ 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):

- i. ~~If gross throughput is not more than 1,000 gallons/year: \$586~~
- ii. ~~If gross throughput is more than 1,000 gallons/year: \$1,2851,179~~ per 1,000 gallon

2. RISK ~~SCREENING~~ASSESSMENT FEE (RSFRAF) , if required pursuant to Regulation 3-329 or 3-342 is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk screening analysis is required under Regulation 2-5-401.

- a. RSFRAF for first ~~(toxic air contaminant)~~ (TAC) source in application: \$462474 plus initial fee
 - b. Minimum RSFRAF for first TAC source: \$1,1134,079
 - c. RSFRAF for each additional TAC source: equal to initial fee
 - d. Minimum RSFRAF per additional TAC source: \$639586 *
 - e. Maximum RSFRAF per source is: \$51,18946,962
- * RSFRAF 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: \$463425
- b. The maximum fee per source is: \$25,59123,478

The permit to operate fee shall include the fees for each type of operation listed below, which is performed at the fabrication area:

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):

- i. ~~If gross throughput is not more than 3,000 gal/year: \$425~~
- ii. ~~If gross throughput is more than 3,000 gallons/year: \$217499~~ 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):

- i. ~~If gross throughput is not more than 1,000 gal/year: \$425~~
- ii. ~~If gross throughput is more than 1,000 gallons/year: \$639586~~ 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.

5. The fee for each source will be rounded to the whole dollar. Fees for sources will be rounded up to the nearest dollar for 51 cents and above, and amounts 50 cents and lower will be rounded down to the nearest dollar.

(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)

**SCHEDULE I
DRY CLEANERS**
(Adopted July 6, 1983)

For 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: \$~~609559~~
 - b. If the washing or drying capacity exceeds 100 pounds: \$~~609559~~ plus
 For that portion of the capacity exceeding 100 pounds: \$~~18,2246.72~~ per pound

2. RISK ~~SCREENING~~ASSESSMENT FEE (~~RSFRAF~~), if required pursuant to Regulation 3-329 or 3-342 is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk screening analysis is required under Regulation 2-5-404.
 - a. ~~RSFRAF~~ for first ~~(toxic air contaminant)~~ (TAC) source in application: \$~~462474~~ plus initial fee
 - b. Minimum ~~RSFRAF~~ for first TAC source: \$~~1,0834,052~~
 - c. ~~RSFRAF~~ for each additional TAC source: equal to initial fee *
 - d. Minimum ~~RSFRAF~~ per additional TAC source: \$~~609559~~
*

* ~~RSFRAF~~ 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: \$~~444407~~
 - b. If the washing or drying capacity exceeds 100 pounds: \$~~444407~~ plus
 For that portion of the capacity exceeding 100 pounds: \$~~9,158.39~~ 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.

5. Fees for each source will be rounded to the nearest dollar. The fee for sources will be rounded up to the nearest dollar for 51 cents and above, and amounts 50 cents and lower will be rounded down to the nearest dollar.

(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)

SCHEDULE K
SOLID WASTE DISPOSAL SITES
(Adopted July 15, 1987)

1. INITIAL FEE:
 - a. Landfill (Decomposition Process) ~~\$4,3914,028~~
 - b. Active Landfill (Waste and Cover Material Dumping Process) ~~\$2,1952,014~~
 - c. Active Landfill (Excavating, Bulldozing, and Compacting Processes) ~~\$2,1952,014~~

2. RISK ~~SCREENING~~ASSESSMENT FEE (~~RSFRAF~~), if required pursuant to Regulation 3-329 or 3-342 is only applicable for new and modified sources of toxic air contaminants (TACs) for which a health risk screening analysis is required under Regulation 2-5-401.
 - a. ~~RSFRAF~~ for first ~~(toxic air contaminant)~~ (TAC) source in application: ~~\$462474~~ plus initial fee
 - b. ~~RSFRAF~~ for each additional TAC source: equal to initial fee *

* ~~RSFRAF~~ 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) ~~\$2,1952,014~~
 - b. Active Landfill (Waste and Cover Material Dumping Process) ~~\$1,0974,006~~
 - c. Active Landfill (Excavating, Bulldozing, and Compacting Processes) ~~\$1,0974,006~~

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) ~~\$2,4202,220~~
 - b. Evaluation of Inactive Site Questionnaire as required by Health & Safety Code Section 41805.5(b) ~~\$1,2134,113~~
 - 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) ~~\$1,2134,113~~
 - d. Evaluation of Initial or Amended Design Capacity Reports as required by Regulation 8, Rule 34, Section 405 ~~\$892818~~
 - e. Evaluation of Initial or Periodic NMOC Emission Rate Reports as required by Regulation 8, Rule 34, Sections 406 or 407 ~~\$2,5522,341~~
 - f. Evaluation of Closure Report as required by Regulation 8, Rule 34, Section 409 ~~\$892818~~
 - g. Evaluation of Annual Report as required by Regulation 8, Rule 34, Section 411 ~~\$2,2332,049~~

6. Fees for each source will be rounded off to the nearest dollar. The fee for sources will be rounded up or down to the nearest dollar.

7. 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)

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.
7. Floor mastic removal using mechanical buffers and solvent is subject to the following fee:
 - a. OPERATION FEE: \$372
 - b. Cancellation: \$248 of above amount non-refundable for notification processing.

(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)

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	\$ 116.24113.18 per ton
	2.	Sulfur Oxides	\$ 116.24113.18 per ton
	3.	Nitrogen Oxides	\$ 116.24113.18 per ton
	4.	PM ₁₀	\$ 116.24113.18 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)*

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 \$5 for each gasoline product dispensing nozzle in the facility, if the facility is a Gasoline Dispensing Facility; or
2. A fee of \$88 if the facility has emissions in the current Toxic Emissions Inventory which are greater than or equal to 50 weighted pounds per year and less than 1000 weighted pounds per year; or
3. A fee of \$88 + $S_L \times (w_i - 1000)$ if the facility has emissions in the current Toxic Emissions Inventory which are greater than or equal to 1000 weighted pounds per year;

where the following relationships hold:

w_i = facility weighted emissions for facility j; where the weighted emission for the facility shall be calculated as a sum of the individual emissions of the facility multiplied by either the inhalation cancer potency factor (CPF, in kilogram-day/milligram) for the substance times 28.6 if the emission is a carcinogen, or by the reciprocal of the inhalation chronic reference exposure level (REL_c) for the substance (in cubic meters/microgram) if the emission is not a carcinogen [use CPF and REL as listed in Table 2-5-1]:

w_j = Facility Weighted Emission = $\sum_{i=1}^n E_i * Q_i$ where

n = number of toxic substances emitted by facility
 E_i = amount of substance i emitted by facility in lbs/year
 Q_i = 28.6 * CPF, if i is a carcinogen; or
 Q_i = [REL]⁻¹, if i is not a carcinogen

F_T = Total amount of fees to be collected by the District to cover District and State of California AB 2588 costs as most recently adopted by the Board of Directors of the California Environmental Protection Agency, Air Resources Board, and set out in the most recently published "Amendments to the Air Toxics "Hot Spots" Fee Regulation," published by that agency.

N_L = Number of facilities with emissions in current District Toxic Emissions Inventory greater than 1000 weighted pounds per year.

N_S = Number of facilities with emissions in current District Toxic Emissions Inventory greater than 50 weighted pounds per year and less than 1000 weighted pounds per year.

N_{NOZ} = Number of gasoline-product-dispensing nozzles in currently permitted Gasoline Dispensing Facilities.

S_L = Surcharge per pound of weighted emissions for each pound in excess of 1000 weighted pounds per year, where S_L is given by the following formula:

$$S_L = \frac{F_T - (88 \times N_S) - (88 \times N_L) - (5 \times N_{NOZ})}{\sum_{j=1}^{N_L} (w_j - 1000)}$$

(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)

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~~\$752696~~ per source
- b. MFR EMISSIONS FEE..... ~~\$29.602741~~ 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~~\$7,5186,964~~ 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 ~~\$1,047969~~ per application
- b. SYNTHETIC MINOR INITIAL PERMIT FEE ~~\$734680~~ per source
- c. SYNTHETIC MINOR REVISION FEE..... ~~\$734680~~ 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 and 3g apply to each source in the initial or renewal permit, while the fees in 3d-f apply to each source affected by the revision or reopening.

- a. MFR FILING FEE ~~\$1,047969~~ per application
- b. MFR INITIAL PERMIT FEE..... ~~\$1,047939~~ per source
- c. MFR ADMINISTRATIVE AMENDMENT FEE ~~\$296274~~ per application
- d. MFR MINOR REVISION FEE ~~\$1,4871,377~~ per source modified
- e. MFR SIGNIFICANT REVISION FEE ~~\$2,7722,567~~ per source modified
- f. MFR REOPENING FEE ~~\$908844~~ per source modified
- g. MFR RENEWAL FEE..... ~~\$441408~~ 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..... ~~\$1,5651,449~~ 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 \$~~12,793,414,845~~

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 \$~~179,466~~ per source, not to exceed \$~~17,587,46,284~~

(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)

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: \$~~647594~~ per facility
 - b. Conveyorized Charbroiler ANNUAL RENEWAL FEE: \$~~182467~~ per facility
 - c. Under-fired Charbroiler REGISTRATION FEE: \$~~647594~~ per facility
 - d. Under-fired Charbroiler ANNUAL RENEWAL FEE: \$~~182467~~ 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: \$~~323296~~
 - b. Dry Cleaning Machine ANNUAL RENEWAL FEE: \$~~225206~~

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: \$~~217499~~
 - b. Diesel Engine ANNUAL RENEWAL FEE: \$~~144432~~
 - c. Diesel Engine ALTERNATIVE COMPLIANCE PLAN FEE (for each plan submitted under District Regulation 11-17-402): \$~~217499~~

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 \$~~119409~~ per device
 - b. ANNUAL RENEWAL FEE: \$~~10092~~ 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: \$~~388356~~
 - b. ANNUAL RENEWAL FEE: \$~~242222~~

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 \$~~182467~~
 - b. ANNUAL RENEWAL FEE \$~~10798~~

(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)

SCHEDULE S
NATURALLY OCCURRING ASBESTOS OPERATIONS

1. ASBESTOS DUST MITIGATION PLAN PROCESSING FEE:

Any person submitting an Asbestos Dust Mitigation Plan (ADMP) for review of a Naturally Occurring Asbestos (NOA) project shall pay the following fee (including NOA Discovery Notifications which would trigger an ADMP review): \$535494

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: \$4,7534,364

3. INSPECTION FEE:

The owner of any property for which an ADMP is required shall pay fees to cover the costs incurred by the District after July 1, 2012 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: \$140428 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)

**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 \$~~0.10300~~~~0.0963~~ 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)

**SCHEDULE U
INDIRECT SOURCE REVIEW FEES**

The applicant for any project deemed an indirect source pursuant to District rules shall be subject to the following fees:

1. APPLICATION FILING FEE

When an applicant files an Air Quality Impact Assessment as required by District rules, the applicant shall pay a non-refundable Application Filing Fee as follows:

- a. Residential project: ~~\$615599~~
- b. Non-residential or mixed use project: ~~\$918894~~

2. APPLICATION EVALUATION FEE

Every applicant who files an Air Quality Impact Assessment as required by District rules shall pay an evaluation fee for the review of an air quality analysis and the determination of Offsite Emission Reduction Fees necessary for off-site emission reductions. The Application Evaluation fee will be calculated using the actual staff hours expended and the prevailing weighted labor rate. The Application Filing fee, which assumes eight hours of staff time for residential projects and twelve hours of staff time for non-residential and mixed use projects, shall be credited towards the actual Application Evaluation Fee.

3. OFFSITE EMISSION REDUCTION FEE

(To be determined)

(Adopted 5/20/09; Amended 6/16/10; 6/4/14; 6/3/15, 6/15/16, 6/21/17)

**SCHEDULE V
OPEN BURNING**

1. Any prior notification required by Regulation 5, Section 406 is subject to the following fee:

a. OPERATION FEE: ~~\$129448~~

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: ~~\$462424~~ for 50 acres or less
~~\$629577~~ for more than 50 acres but less than or equal to 150 acres
~~\$792727~~ 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.

SCHEDULE W
PETROLEUM REFINING EMISSIONS TRACKING FEES

1. ANNUAL EMISSIONS INVENTORIES:

Any Petroleum 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: | \$54,000 |
| b. Each subsequent annual submittal: | \$27,000 |

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: | \$3,300 |
| b. Each subsequent annual submittal: | \$1,650 |

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 \$7,500.

(Adopted 6/15/16)

**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)

California Environmental Quality Act

NOTICE OF EXEMPTION

TO: «Company»
«Address1»
«Address2»
«City», «State» «PostalCode»

FROM: Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

Lead Agency: Bay Area Air Quality Management District
Contact: Barry G Young Phone: (415) 749-4721

SUBJECT: FILING OF NOTICE OF EXEMPTION PURSUANT TO SECTION 21152 OF THE PUBLIC RESOURCES CODE AND CEQA GUIDELINES SECTION 15061(b)(3)

Project Title: Amendments to Regulation 3: Fees

Project Location: The regulation applies within the Bay Area Air Quality Management District ("District"), which includes all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties, and the southern portions of Solano and Sonoma counties.

Project Description: The project consists of amendments to an existing BAAQMD regulation that establishes fees for source operations and other activities. The amendments become effective on July 1, 2017. The amendments increase fee revenue in order to allow the District to meet budgetary needs for the upcoming fiscal year ending (FYE) 2018, and to continue to effectively implement and enforce regulatory programs for stationary sources of air pollution.

The fee rates in the following Fee Schedules would be amended as follows: (1) 2.7% increase: Schedule M: Major Stationary Sources, Schedule U: Indirect Sources; (2) 7% increase: Schedule F: Miscellaneous Sources, Schedule G3: Miscellaneous Sources, Schedule T: Greenhouse Gas Fees; (3) 8% increase: Schedule D: Gasoline Transfer at Gasoline Dispensing Facilities, Bulk Plants and Terminals, Schedule P: Major Facility Review Fees; and (4) 9% increase: Schedule A: Hearing Board Fees, Schedule E: Solvent Evaporating Sources, Schedule G1: Miscellaneous Sources, Schedule G2: Miscellaneous Sources, Schedule G4: Miscellaneous Sources, Schedule H: Semiconductor and Related Operations, Schedule I: Dry Cleaners, Schedule K: Solid Waste Disposal Sites, Schedule R: Equipment Registration Fees, Schedule S: Naturally Occurring Asbestos Operations, and Schedule V: Open Burning.

The following specific fees in Regulation 3 would be increased by 2.7%: permit application filing fees, alternative compliance plan fees, permit to operate renewal processing fees, transfer fees, emissions banking filing and withdrawal fees, school public notice fees, toxic inventory maximum fees, and exemption fees. The annual Consumer Price Index for Bay Area Urban Wage Earners and Clerical Workers (CPI-W) increased 2.7% from 2016 to 2017.

In addition, the following additional amendments are proposed: (1) New fees to help recover the costs for facility-wide Health Risk Assessments (HRAs) and Risk Reduction Plans required pursuant to proposed Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities; (2) A new fee equal to the risk screening fee to help recover the costs for each HRA scenario above three HRA scenarios in any permit application pursuant to Regulation 2, Rule 5; (3) Revise Fee Schedule A: Hearing Board Fees (Table I) to include diesel exhaust particulate matter in the schedule of toxic air contaminants subject to excess emissions fees; (4) Revise Fee Schedule H: Semiconductor and Related Operations, to directly calculate the fee based on the gross throughput of organic solvent processed; (5) Update the SL factor in Fee Schedule N: Toxic Inventory Fees, to recover current costs and higher California Air Resources Board AB2588 annual fees for FYE 2017; (6) Change all Regulation 3 references of "health risk screening analysis" to "health risk assessment"; (7) Delete fees for Duplicate Permits and Duplicate Registrations in Section 3-309; and (8) Correct a few minor typographical errors.

On June 21, 2017, the Board of Directors of the Bay Area Air Quality Management District conducted a public hearing in accordance with California Health and Safety Code Section 41512.5 and approved the project described above and determined that the project was exempt from CEQA.

Finding of Exemption: This project is found to be exempt pursuant to Public Resources Code Section 21080, subd. (b)(8) and CEQA Guidelines Section 15273.

Basis for Exemption: The regulatory amendments which constitute this project modify charges by the BAAQMD for sources of air pollution. The fees and modifications are for the purpose of meeting District operating expenses associated with the regulation of these sources. The amendments are administrative in nature, do not affect air emissions from any sources, and have no possibility of causing significant environmental effects. As such, they fall within the statutory and Guidelines exemptions cited above.

Date Received for Filing

Jaime Williams

Date

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Liz Kniss and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: June 6, 2017

Re: Public Hearing to Consider Adoption of the Air District's Proposed Budget for Fiscal Year Ending (FYE) 2018

RECOMMENDED ACTION

Recommend Board of Directors conduct its second and final public hearing and consider adoption of a resolution to approve the Budget for the Fiscal Year Ending 2018 (FYE 2017-2018) and various budget related actions.

SUMMARY

Pursuant to Health and Safety Code Section 40131, the Executive Officer/APCO will present the FYE 2018 proposed budget to the Board of Directors for adoption.

BUDGET CONSIDERATION/FINANCIAL IMPACT:

The proposed consolidated budget for FYE 2018 is \$154,712,448 which includes \$43,926,252 in program distributions.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Stephanie Osaze
Reviewed by: Rex Sanders and Jeff McKay

Attachment 12A: Resolution to Approve the Budget for the Fiscal Year Ending June 30, 2018 (FYE 2017-2018) and Various Budget Related Actions

Attachment 12B: Bay Area Air Quality Management District Salary Schedule for Management and Confidential Classes

Attachment 12C: Proposed FYE 2018 budget available at:

<http://www.baaqmd.gov/~media/files/finance/fye-2018-proposed-budget-pdf.pdf?la=en>

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Resolution No. -

**A Resolution to Approve the Budget for the Fiscal Year Ending June 30, 2018
(FY 2017-2018) and Various Budget Related Actions**

WHEREAS, the Board of Directors of the Bay Area Air Quality Management District (Air District) has the statutory authority and direction to set the Air District's financial budget pursuant to Health & Safety Code Sections 40130-40131 and 40270-40276;

WHEREAS, by Resolution No. 2016-05, the Board of Directors adopted the Air District Budget for Fiscal Year (FY) 2016-2017 on June 15, 2016, pursuant to the above-mentioned statutory authority;

WHEREAS, the Board of Directors, in connection with that action, approved the following budget related actions:

- A. Transfer Funds from Encumbered Balance of Appropriations to the Next Fiscal Year for Continuation of Projects/Programs
- B. Transfer Funds from Unencumbered Balance of Appropriations to the General Reserve;
- C. Fund the General Reserve from Year to Year;
- D. Approved Economic Contingency Reserve Policy of 20% of General Fund Budget;
- E. Authorize Modification to Name and Purpose of certain Designated Reserve Funds;
- F. Authorize Disposal of Surplus Government Property;
- G. Approve Salary Ranges for District Employees; and
- H. Approve Proposed District Budget for FY 2016-2017;

WHEREAS, Air District staff has determined through its annual budget review and analysis that similar actions are necessary in connection with the adoption of a budget for FY 2017-2018 and that all of these actions be incorporated into a single resolution;

WHEREAS, the Budget and Finance Committee of the Board of Directors reviewed the proposed FY 2017-2018 District Budget at public meetings held on March 22, 2017, and April 26, 2017, and recommended that the Board of Directors approve as submitted.

WHEREAS, an initial public hearing was duly noticed and held on May 17, 2017, at a Special Meeting of the Board of Directors held pursuant to Health & Safety Code Section 40131, for the purpose of reviewing the Air District's proposed FY 2017-2018 Budget and of providing the public with an opportunity to comment upon the proposed District Budget;

WHEREAS, at the May 17, 2017 Special Meeting of the Board of Directors, the Proposed FY 2017-2018 Air District Budget was set for a further hearing and proposed adoption at the Regular Meeting of the Board of Directors to be held on June 21, 2017;

WHEREAS, in connection with the public hearing and consideration of the Proposed FY 2017-2018 District Budget on June 21, 2017, the Board of Directors decided to take the following actions related to the FY 2016-2017 District Budget:

A. CARRYFORWARD ENCUMBERED BALANCE OF APPROPRIATIONS TO THE NEXT FISCAL YEAR FOR CONTINUATION OF PROJECTS/PROGRAMS NOT COMPLETED IN THE CURRENT FISCAL YEAR

WHEREAS, the Air District Budget FY2016-2017 has appropriated funds committed for projects/programs not completed in the current fiscal year that will carry over to the next fiscal year;

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors hereby directs Air District staff, that in the event there is encumbered balance of appropriations from FY 2016-2017 for continuation of projects, to transfer such appropriations to the 2017-2018 fiscal year budget as needed for completion of projects/programs;

B. TRANSFER FUNDS FROM UNENCUMBERED BALANCE OF APPROPRIATIONS TO THE GENERAL RESERVE

WHEREAS, the Proposed Air District Budget provides sufficient funds for the operation of the Air District for FY 2017-2018;

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors hereby directs Air District staff, that in the event there is an unencumbered balance of appropriations from FY 2016-2017, to transfer such excess balance to the General Reserve.

C. FUND THE GENERAL RESERVE FROM YEAR TO YEAR

WHEREAS, the Board of Directors on June 12, 1958, created a General Reserve in the Air District's budget and transferred certain funds into it;

WHEREAS, the Air District has operated for much of its existence with a General Reserve in its fiscal year budget;

WHEREAS, the Air District retained the consulting firm of KPMG LLP in 1998-99 to conduct a permit fee cost recovery study of the Air District;

WHEREAS, KPMG LLP determined through their study of Air District finances that the General Reserve was inadequately funded and therefore recommended that the General Reserve be funded to a level consistent with generally accepted governmental practices;

WHEREAS, Air District staff concurred with this finding and recommendation from KPMG LLP;

WHEREAS, the Board of Directors concurs with the recommendation of KPMG LLP, Air District staff and its Budget and Finance Committee that maintaining a healthy and properly funded General Reserve in the Air District's budget is a prudent and financially sound decision;

WHEREAS, as a part of the adoption of the 2015-16 Budget, the Board of Director approved an Economic Contingency Reserve Policy of 20% of the General Fund Budget;

NOW THEREFORE, BE IT FURTHER RESOLVED that the General Reserve be continued for FY 2017-2018, and thereafter until discontinued by resolution of the Board of Directors.

D. AUTHORIZE DISPOSAL OF SURPLUS GOVERNMENT PROPERTY

WHEREAS, the Air District Budget for FY 2017-2018 provides for the replacement of certain equipment and other property that has either become obsolete and surplus or will become obsolete and surplus;

WHEREAS, Air District staff has determined that certain equipment or other property will no longer be economically feasible to maintain or repair, and that some equipment will become obsolete and not useful for Air District purposes;

WHEREAS, from time to time during the course of the coming fiscal year it may be advantageous to the Air District to sell or dispose of such equipment or other property;

WHEREAS, the Board of Directors desires to authorize the Executive Officer/APCO, or his or her designee, to sell or dispose of such surplus or obsolete equipment or other property pursuant the requirements and guidelines of Government Code Sections 25363 and 25504;

NOW, THEREFORE, BE IT FURTHER RESOLVED, that the Board of Directors hereby authorizes the Executive Officer/APCO, or his or her designee, to sell or dispose of surplus or obsolete equipment or other property during FY 2017-2018.

E. SALARY RANGES FOR DISTRICT EMPLOYEES

WHEREAS, the Board of Directors established Salary Ranges and Classifications on June 10, 1962, pursuant to Resolution No. 270 and has from time to time amended those Salary Ranges and Classifications;

WHEREAS, the Air District Budget for FY 2017-2018 includes funds for Board of Director discretionary use in adjusting salaries and fringe benefits for Air District employees;

WHEREAS, the successor Memorandum of Understanding (the “MOU”) with the employees represented by the recognized employee organization Bay Area Air Quality Management District Employees Association (“EA”) is set to expire on June 30, 2017, and a successor MOU is being negotiated and completion is anticipated in the FY 2017-2018 period;

WHEREAS, management employees and confidential employees are not represented by a recognized employee organization;

WHEREAS, the FYE 2016-2017 salary schedule attached hereto remains unchanged for FY2017-2018 pending the completion of negotiations; whereby any proposed salary adjustments will be presented to the Board of Directors for approval at such time.

NOW, THEREFORE, BE IT FURTHER RESOLVED, that the Board of Directors approves the salary schedules attached hereto effective July 1, 2017 which, provides no salary increases.

F. APPROVE PROPOSED AIR DISTRICT BUDGET FOR FY 2017-2018

WHEREAS, on May 17, 2017, and June 21, 2018, public proceedings have been held in a manner and form required by Health & Safety Code Section 40131 for the adoption of the FY 2017-2018 Budget of the Bay Area Air Quality Management District;

WHEREAS, the Board of Directors has considered the Proposed Budget for the fiscal year ending June 30, 2018, as well as the report on this proposed budget from the Budget and Finance Committee of the Board of Directors which considered the Proposed FY2017-2018 Air District Budget at their meetings of March 22, 2017 and April 26, 2017;

WHEREAS, at the May 17, 2017, Regular Meeting of the Board of Directors, in its report to the Board of Directors, the Budget and Finance Committee of the Board of Directors through consensus supported staff recommendations to forward the Proposed FY 2017-2018 Air District Budget to the Board of Directors;

NOW, THEREFORE, BE IT FURTHER RESOLVED that the Proposed Air District Budget for FY Ending 2017-2018 in the total consolidated amount of One Hundred Fifty

Four Million, Seven Hundred Twelve, Four Hundred and Forty Eight Dollars (\$154,712,448), specifying by appropriation classification – personnel, services and supplies, capital outlay, program distributions and transfers – is hereby adopted by the Board of Directors of the Bay Area Air Quality Management District to become effective as of July 1, 2017.

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 _____ 2017

by the following vote of the Board:

AYES:

NOES:

ABSENT:

ATTEST:

LIZ KNISS
Chairperson of the Board of Directors

KATIE RICE
Secretary of the Board of Directors

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
SALARY SCHEDULE FOR MANAGEMENT AND CONFIDENTIAL CLASSES
 Annually/Monthly/Bi-weekly/Hourly effective July 1, 2017

ID-JDE MANAGEMENT**Per Employment Agreement**

1B101 Executive Officer/Air Pollution Control Officer	287963.81 23996.98 11075.53 138.44
1B102 Counsel	270953.56 22579.46 10421.29 130.27

ID-JDE MANAGEMENT

	Range	Step A	Step B	Step C	Step D	Step E
3M101 Air Monitoring Manager	148M	125212.04 10434.34 4815.85 60.20	131472.65 10956.05 5056.64 63.21	138046.28 11503.86 5309.47 66.37	144948.59 12079.05 5574.95 69.69	152196.02 12683.00 5853.69 73.17
3M102 Air Quality Engineering Manager	148M	125212.04 10434.34 4815.85 60.20	131472.65 10956.05 5056.64 63.21	138046.28 11503.86 5309.47 66.37	144948.59 12079.05 5574.95 69.69	152196.02 12683.00 5853.69 73.17
3M103 Air Quality Planning Manager	148M	125212.04 10434.34 4815.85 60.20	131472.65 10956.05 5056.64 63.21	138046.28 11503.86 5309.47 66.37	144948.59 12079.05 5574.95 69.69	152196.02 12683.00 5853.69 73.17
3M104 Air Quality Program Manager	148M	125212.04 10434.34 4815.85 60.20	131472.65 10956.05 5056.64 63.21	138046.28 11503.86 5309.47 66.37	144948.59 12079.05 5574.95 69.69	152196.02 12683.00 5853.69 73.17
8M101 Assistant Counsel I	149M	126111.78 10509.32 4850.45 60.63	132417.37 11034.78 5092.98 63.66	139038.24 11586.52 5347.62 66.85	145990.15 12165.85 5615.01 70.19	153289.66 12774.14 5895.76 73.70
7M101 Assistant Counsel II	153M	141455.34 11787.95 5440.59 68.01	148528.11 12377.34 5712.62 71.41	155954.51 12996.21 5998.25 74.98	163752.24 13646.02 6298.16 78.73	171939.85 14328.32 6613.07 82.66
3M121 Assistant Manager	147M	122194.44 10182.87 4699.79 58.75	128304.16 10692.01 4934.78 61.68	134719.37 11226.61 5181.51 64.77	141455.34 11787.95 5440.59 68.01	148528.11 12377.34 5712.62 71.41
3M117 Audit & Special Projects Manager	148M	125212.04 10434.34 4815.85 60.20	131472.65 10956.05 5056.64 63.21	138046.28 11503.86 5309.47 66.37	144948.59 12079.05 5574.95 69.69	152196.02 12683.00 5853.69 73.17

ID-JDE MANAGEMENT(CONTINUED)	Range	Step A	Step B	Step C	Step D	Step E
3M105 Business Manager	148M	125212.04 10434.34 4815.85 60.20	131472.65 10956.05 5056.64 63.21	138046.28 11503.86 5309.47 66.37	144948.59 12079.05 5574.95 69.69	152196.02 12683.00 5853.69 73.17
2M111 Communications Officer	156M	151191.23 12599.27 5815.05 72.69	158750.79 13229.23 6105.80 76.32	166688.33 13890.69 6411.09 80.14	175022.75 14585.23 6731.64 84.15	183773.89 15314.49 7068.23 88.35
1M101 Deputy Air Pollution Control Officer	160M	167796.11 13983.01 6453.70 80.67	176185.92 14682.16 6776.38 84.70	184995.21 15416.27 7115.20 88.94	194244.98 16187.08 7470.96 93.39	203957.22 16996.44 7844.51 98.06
1M102 Deputy Executive Officer	169M	208993.96 17416.16 8038.23 100.48	219443.66 18286.97 8440.14 105.50	230415.84 19201.32 8862.15 110.78	241936.64 20161.39 9305.26 116.32	254033.47 21169.46 9770.52 122.13
2M110 Director/Officer	156M	151191.23 12599.27 5815.05 72.69	158750.79 13229.23 6105.80 76.32	166688.33 13890.69 6411.09 80.14	175022.75 14585.23 6731.64 84.15	183773.89 15314.49 7068.23 88.35
2M101 Director of Administration	156M	151191.23 12599.27 5815.05 72.69	158750.79 13229.23 6105.80 76.32	166688.33 13890.69 6411.09 80.14	175022.75 14585.23 6731.64 84.15	183773.89 15314.49 7068.23 88.35
2M102 Director of Enforcement	156M	151191.23 12599.27 5815.05 72.69	158750.79 13229.23 6105.80 76.32	166688.33 13890.69 6411.09 80.14	175022.75 14585.23 6731.64 84.15	183773.89 15314.49 7068.23 88.35
2M103 Director of Engineering	156M	151191.23 12599.27 5815.05 72.69	158750.79 13229.23 6105.80 76.32	166688.33 13890.69 6411.09 80.14	175022.75 14585.23 6731.64 84.15	183773.89 15314.49 7068.23 88.35
2M108 Director of Strategic Incentives	156M	151191.23 12599.27 5815.05 72.69	158750.79 13229.23 6105.80 76.32	166688.33 13890.69 6411.09 80.14	175022.75 14585.23 6731.64 84.15	183773.89 15314.49 7068.23 88.35
2M104 Director of Information Services	156M	151191.23 12599.27 5815.05 72.69	158750.79 13229.23 6105.80 76.32	166688.33 13890.69 6411.09 80.14	175022.75 14585.23 6731.64 84.15	183773.89 15314.49 7068.23 88.35
2M105 Director of Planning and Research	156M	151191.23 12599.27 5815.05 72.69	158750.79 13229.23 6105.80 76.32	166688.33 13890.69 6411.09 80.14	175022.75 14585.23 6731.64 84.15	183773.89 15314.49 7068.23 88.35
2M107 Director of Technical Services	156M	151191.23 12599.27 5815.05 72.69	158750.79 13229.23 6105.80 76.32	166688.33 13890.69 6411.09 80.14	175022.75 14585.23 6731.64 84.15	183773.89 15314.49 7068.23 88.35

ID-JDE	MANAGEMENT(CONTINUED)	Range	Step A	Step B	Step C	Step D	Step E
3M119	Engineering Project Processing Manager	148M	125212.04 10434.34 4815.85 60.20	131472.65 10956.05 5056.64 63.21	138046.28 11503.86 5309.47 66.37	144948.59 12079.05 5574.95 69.69	152196.02 12683.00 5853.69 73.17
3M113	Executive Operations Manager	148M	125212.04 10434.34 4815.85 60.20	131472.65 10956.05 5056.64 63.21	138046.28 11503.86 5309.47 66.37	144948.59 12079.05 5574.95 69.69	152196.02 12683.00 5853.69 73.17
3M107	Finance Manager	148M	125212.04 10434.34 4815.85 60.20	131472.65 10956.05 5056.64 63.21	138046.28 11503.86 5309.47 66.37	144948.59 12079.05 5574.95 69.69	152196.02 12683.00 5853.69 73.17
3M106	Fleet and Facilities Manager	134M	88985.86 7415.49 3422.53 42.78	93435.15 7786.26 3593.66 44.92	98106.91 8175.58 3773.34 47.17	103012.26 8584.35 3962.01 49.53	108162.87 9013.57 4160.11 52.00
6M104	Health and Science Officer	158M	158750.79 13229.23 6105.80 76.32	166688.33 13890.69 6411.09 80.14	175022.75 14585.23 6731.64 84.15	183773.89 15314.49 7068.23 88.35	192962.58 16080.22 7421.64 92.77
3M118	Human Resources Manager	148M	125212.04 10434.34 4815.85 60.20	131472.65 10956.05 5056.64 63.21	138046.28 11503.86 5309.47 66.37	144948.59 12079.05 5574.95 69.69	152196.02 12683.00 5853.69 73.17
3M108	Human Resources Officer	156M	151191.23 12599.27 5815.05 72.69	158750.79 13229.23 6105.80 76.32	166688.33 13890.69 6411.09 80.14	175022.75 14585.23 6731.64 84.15	183773.89 15314.49 7068.23 88.35
3M109	Information Systems Manager	148M	125212.04 10434.34 4815.85 60.20	131472.65 10956.05 5056.64 63.21	138046.28 11503.86 5309.47 66.37	144948.59 12079.05 5574.95 69.69	152196.02 12683.00 5853.69 73.17
2M109	Information Technology Officer	156M	151191.23 12599.27 5815.05 72.69	158750.79 13229.23 6105.80 76.32	166688.33 13890.69 6411.09 80.14	175022.75 14585.23 6731.64 84.15	183773.89 15314.49 7068.23 88.35
3M110	Manager (Laboratory)	148M	125212.04 10434.34 4815.85 60.20	131472.65 10956.05 5056.64 63.21	138046.28 11503.86 5309.47 66.37	144948.59 12079.05 5574.95 69.69	152196.02 12683.00 5853.69 73.17
3M120	Manager	148M	125212.04 10434.34 4815.85 60.20	131472.65 10956.05 5056.64 63.21	138046.28 11503.86 5309.47 66.37	144948.59 12079.05 5574.95 69.69	152196.02 12683.00 5853.69 73.17
3M115	Manager of Executive Operations	148M	125212.04 10434.34 4815.85 60.20	131472.65 10956.05 5056.64 63.21	138046.28 11503.86 5309.47 66.37	144948.59 12079.05 5574.95 69.69	152196.02 12683.00 5853.69 73.17

ID-JDE MANAGEMENT(CONTINUED)	Range	Step A	Step B	Step C	Step D	Step E
3M111 Meteorology and Data Analysis Manager	148M	125212.04 10434.34 4815.85 60.20	131472.65 10956.05 5056.64 63.21	138046.28 11503.86 5309.47 66.37	144948.59 12079.05 5574.95 69.69	152196.02 12683.00 5853.69 73.17
3M112 Research and Modeling Manager	148M	125212.04 10434.34 4815.85 60.20	131472.65 10956.05 5056.64 63.21	138046.28 11503.86 5309.47 66.37	144948.59 12079.05 5574.95 69.69	152196.02 12683.00 5853.69 73.17
6M101 Senior Assistant Counsel	157M	155954.51 12996.21 5998.25 74.98	163752.24 13646.02 6298.16 78.73	171939.85 14328.32 6613.07 82.66	180536.84 15044.74 6943.72 86.80	189563.69 15796.97 7290.91 91.14
6M102 Senior Policy Advisor	148M	125212.04 10434.34 4815.85 60.20	131472.65 10956.05 5056.64 63.21	138046.28 11503.86 5309.47 66.37	144948.59 12079.05 5574.95 69.69	152196.02 12683.00 5853.69 73.17
3M116 Strategic Facilities Planning Manager	148M	125212.04 10434.34 4815.85 60.20	131472.65 10956.05 5056.64 63.21	138046.28 11503.86 5309.47 66.37	144948.59 12079.05 5574.95 69.69	152196.02 12683.00 5853.69 73.17

ID-JDE CONFIDENTIAL

	Range	Step A	Step B	Step C	Step D	Step E
7C007 Administrative Secretary (Confidential)	118	58474.89 4872.91 2249.03 28.11	61398.63 5116.55 2361.49 29.52	64468.56 5372.38 2479.56 30.99	67691.99 5641.00 2603.54 32.54	71076.59 5923.05 2733.72 34.17
5C101 Clerk of the Boards	132	82280.04 6856.67 3164.62 39.56	86394.04 7199.50 3322.85 41.54	90713.74 7559.48 3488.99 43.61	95249.43 7937.45 3663.44 45.79	100011.90 8334.33 3846.61 48.08
8C004 Executive Secretary I	128	74630.42 6219.20 2870.40 35.88	78361.94 6530.16 3013.92 37.67	82280.04 6856.67 3164.62 39.56	86394.04 7199.50 3322.85 41.54	90713.74 7559.48 3488.99 43.61
7C001 Executive Secretary II	132	82280.04 6856.67 3164.62 39.56	86394.04 7199.50 3322.85 41.54	90713.74 7559.48 3488.99 43.61	95249.43 7937.45 3663.44 45.79	100011.90 8334.33 3846.61 48.08
8C101 Human Resources Analyst I	130	78361.94 6530.16 3013.92 37.67	82280.04 6856.67 3164.62 39.56	86394.04 7199.50 3322.85 41.54	90713.74 7559.48 3488.99 43.61	95249.43 7937.45 3663.44 45.79
7C103 Human Resources Analyst II	134	86394.04 7199.50 3322.85 41.54	90713.74 7559.48 3488.99 43.61	95249.43 7937.45 3663.44 45.79	100011.90 8334.33 3846.61 48.08	105012.50 8751.04 4038.94 50.49
8C001 Human Resources Technician I	116	55690.37 4640.86 2141.94 26.77	58474.89 4872.91 2249.03 28.11	61398.63 5116.55 2361.49 29.52	64468.56 5372.38 2479.56 30.99	67691.99 5641.00 2603.54 32.54
7C002 Human Resources Technician II	120	61398.63 5116.55 2361.49 29.52	64468.56 5372.38 2479.56 30.99	67691.99 5641.00 2603.54 32.54	71076.59 5923.05 2733.72 34.17	74630.42 6219.20 2870.40 35.88
7C003 Legal Office Services Specialist	124	67691.99 5641.00 2603.54 32.54	71076.59 5923.05 2733.72 34.17	74630.42 6219.20 2870.40 35.88	78361.94 6530.16 3013.92 37.67	82280.04 6856.67 3164.62 39.56
8C002 Legal Secretary I	116	55690.37 4640.86 2141.94 26.77	58474.89 4872.91 2249.03 28.11	61398.63 5116.55 2361.49 29.52	64468.56 5372.38 2479.56 30.99	67691.99 5641.00 2603.54 32.54
7C004 Legal Secretary II	120	61398.63 5116.55 2361.49 29.52	64468.56 5372.38 2479.56 30.99	67691.99 5641.00 2603.54 32.54	71076.59 5923.05 2733.72 34.17	74630.42 6219.20 2870.40 35.88
8C003 Office Assistant I (HR)	104	41557.01 3463.08 1598.35 19.98	43634.86 3636.24 1678.26 20.98	45816.60 3818.05 1762.18 22.03	48107.43 4008.95 1850.29 23.13	50512.81 4209.40 1942.80 24.29

ID-JDE CONFIDENTIAL(CONTINUED)

	Range	Step A	Step B	Step C	Step D	Step E
7C005 Office Assistant II (HR)	108	45816.60 3818.05 1762.18 22.03	48107.43 4008.95 1850.29 23.13	50512.81 4209.40 1942.80 24.29	53038.45 4419.87 2039.94 25.50	55690.37 4640.86 2141.94 26.77
7C102 Paralegal	124	67691.99 5641.00 2603.54 32.54	71076.59 5923.05 2733.72 34.17	74630.42 6219.20 2870.40 35.88	78361.94 6530.16 3013.92 37.67	82280.04 6856.67 3164.62 39.56
6C001 Senior Executive Secretary	134	86394.04 7199.50 3322.85 41.54	90713.74 7559.48 3488.99 43.61	95249.43 7937.45 3663.44 45.79	100011.90 8334.33 3846.61 48.08	105012.50 8751.04 4038.94 50.49
5C102 Supervising Human Resources Analyst	142	105012.50 8751.04 4038.94 50.49	110263.12 9188.59 4240.89 53.01	115776.28 9648.02 4452.93 55.66	121565.09 10130.42 4675.58 58.44	127643.34 10636.95 4909.36 61.37

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
SALARY SCHEDULE FOR TECHNICAL/GENERAL AND PROFESSIONAL EMPLOYEES
Effective July 1, 2017 per Memorandum of Understanding dated May 15, 2002

ID-JDE PROFESSIONAL	Range	Step A	Step B	Step C	Step D	Step E
7P001 Accountant I	123	66060.62	69363.65	72831.83	76473.42	80297.10
		5505.05	5780.30	6069.32	6372.79	6691.42
		2540.79	2667.83	2801.22	2941.29	3088.35
		31.76	33.35	35.02	36.77	38.60
7P014 Accountant II	127	72831.83	76473.42	80297.10	84311.95	88527.55
		6069.32	6372.79	6691.42	7026.00	7377.30
		2801.22	2941.29	3088.35	3242.77	3404.91
		35.02	36.77	38.60	40.53	42.56
7P002 Advanced Projects Advisor	144	110263.12	115776.28	121565.09	127643.34	134025.51
		9188.59	9648.02	10130.42	10636.95	11168.79
		4240.89	4452.93	4675.58	4909.36	5154.83
		53.01	55.66	58.44	61.37	64.44
8P001 Air Quality Chemist I	127	72831.83	76473.42	80297.10	84311.95	88527.55
		6069.32	6372.79	6691.42	7026.00	7377.30
		2801.22	2941.29	3088.35	3242.77	3404.91
		35.02	36.77	38.60	40.53	42.56
7P003 Air Quality Chemist II	131	80297.10	84311.95	88527.55	92953.92	97601.62
		6691.42	7026.00	7377.30	7746.16	8133.47
		3088.35	3242.77	3404.91	3575.15	3753.91
		38.60	40.53	42.56	44.69	46.92
8P002 Air Quality Engineer I	132	82280.04	86394.04	90713.74	95249.43	100011.90
		6856.67	7199.50	7559.48	7937.45	8334.33
		3164.62	3322.85	3488.99	3663.44	3846.61
		39.56	41.54	43.61	45.79	48.08
7P004 Air Quality Engineer II	136	90713.74	95249.43	100011.90	105012.50	110263.12
		7559.48	7937.45	8334.33	8751.04	9188.59
		3488.99	3663.44	3846.61	4038.94	4240.89
		43.61	45.79	48.08	50.49	53.01
8P003 Air Quality Meteorologist I	131	80297.10	84311.95	88527.55	92953.92	97601.62
		6691.42	7026.00	7377.30	7746.16	8133.47
		3088.35	3242.77	3404.91	3575.15	3753.91
		38.60	40.53	42.56	44.69	46.92
7P005 Air Quality Meteorologist II	135	88527.55	92953.92	97601.62	102481.70	107605.79
		7377.30	7746.16	8133.47	8540.14	8967.15
		3404.91	3575.15	3753.91	3941.60	4138.68
		42.56	44.69	46.92	49.27	51.73
7P006 Atmospheric Modeler	140	100011.90	105012.50	110263.12	115776.28	121565.09
		8334.33	8751.04	9188.59	9648.02	10130.42
		3846.61	4038.94	4240.89	4452.93	4675.58
		48.08	50.49	53.01	55.66	58.44
8P004 Environmental Planner I	130	78361.94	82280.04	86394.04	90713.74	95249.43
		6530.16	6856.67	7199.50	7559.48	7937.45
		3013.92	3164.62	3322.85	3488.99	3663.44
		37.67	39.56	41.54	43.61	45.79

ID-JDE PROFESSIONAL(continued)	Range	Step A	Step B	Step C	Step D	Step E
7P007 Environmental Planner II	134	86394.04 7199.50 3322.85 41.54	90713.74 7559.48 3488.99 43.61	95249.43 7937.45 3663.44 45.79	100011.90 8334.33 3846.61 48.08	105012.50 8751.04 4038.94 50.49
7P008 Legislative Analyst	138	95249.43 7937.45 3663.44 45.79	100011.90 8334.33 3846.61 48.08	105012.50 8751.04 4038.94 50.49	110263.12 9188.59 4240.89 53.01	115776.28 9648.02 4452.93 55.66
7P009 Librarian	128	74630.42 6219.20 2870.40 35.88	78361.94 6530.16 3013.92 37.67	82280.04 6856.67 3164.62 39.56	86394.04 7199.50 3322.85 41.54	90713.74 7559.48 3488.99 43.61
4P001 Principal Accountant	135	88527.55 7377.30 3404.91 42.56	92953.92 7746.16 3575.15 44.69	97601.62 8133.47 3753.91 46.92	102481.70 8540.14 3941.60 49.27	107605.79 8967.15 4138.68 51.73
4P002 Principal Air and Meteorological Monitoring Specialist	143	107605.79 8967.15 4138.68 51.73	112986.08 9415.51 4345.62 54.32	118635.38 9886.28 4562.90 57.04	124567.15 10380.60 4791.04 59.89	130795.51 10899.63 5030.60 62.88
4P005 Principal Air Quality Chemist	139	97601.62 8133.47 3753.91 46.92	102481.70 8540.14 3941.60 49.27	107605.79 8967.15 4138.68 51.73	112986.08 9415.51 4345.62 54.32	118635.38 9886.28 4562.90 57.04
4P003 Principal Air Quality Engineer	144	110263.12 9188.59 4240.89 53.01	115776.28 9648.02 4452.93 55.66	121565.09 10130.42 4675.58 58.44	127643.34 10636.95 4909.36 61.37	134025.51 11168.79 5154.83 64.44
4P004 Principal Environmental Planner	142	105012.50 8751.04 4038.94 50.49	110263.12 9188.59 4240.89 53.01	115776.28 9648.02 4452.93 55.66	121565.09 10130.42 4675.58 58.44	127643.34 10636.95 4909.36 61.37
7P010 Research Analyst	130	78361.94 6530.16 3013.92 37.67	82280.04 6856.67 3164.62 39.56	86394.04 7199.50 3322.85 41.54	90713.74 7559.48 3488.99 43.61	95249.43 7937.45 3663.44 45.79
6P001 Senior Advanced Projects Advisor	148	121565.09 10130.42 4675.58 58.44	127643.34 10636.95 4909.36 61.37	134025.51 11168.79 5154.83 64.44	140726.79 11727.23 5412.57 67.66	147763.13 12313.59 5683.20 71.04
6P002 Senior Air Quality Chemist	135	88527.55 7377.30 3404.91 42.56	92953.92 7746.16 3575.15 44.69	97601.62 8133.47 3753.91 46.92	102481.70 8540.14 3941.60 49.27	107605.79 8967.15 4138.68 51.73

ID-JDE PROFESSIONAL(continued)		Range	Step A	Step B	Step C	Step D	Step E
6P003	Senior Air Quality Engineer	140	100011.90 8334.33 3846.61 48.08	105012.50 8751.04 4038.94 50.49	110263.12 9188.59 4240.89 53.01	115776.28 9648.02 4452.93 55.66	121565.09 10130.42 4675.58 58.44
6P004	Senior Air Quality Meteorologist	139	97601.62 8133.47 3753.91 46.92	102481.70 8540.14 3941.60 49.27	107605.79 8967.15 4138.68 51.73	112986.08 9415.51 4345.62 54.32	118635.38 9886.28 4562.90 57.04
6P005	Senior Atmospheric Modeler	144	110263.12 9188.59 4240.89 53.01	115776.28 9648.02 4452.93 55.66	121565.09 10130.42 4675.58 58.44	127643.34 10636.95 4909.36 61.37	134025.51 11168.79 5154.83 64.44
6P006	Senior Environmental Planner	138	95249.43 7937.45 3663.44 45.79	100011.90 8334.33 3846.61 48.08	105012.50 8751.04 4038.94 50.49	110263.12 9188.59 4240.89 53.01	115776.28 9648.02 4452.93 55.66
7P011	Statistician	137	92953.92 7746.16 3575.15 44.69	97601.62 8133.47 3753.91 46.92	102481.70 8540.14 3941.60 49.27	107605.79 8967.15 4138.68 51.73	112986.08 9415.51 4345.62 54.32
5P001	Supervising Air Quality Engineer	144	110263.12 9188.59 4240.89 53.01	115776.28 9648.02 4452.93 55.66	121565.09 10130.42 4675.58 58.44	127643.34 10636.95 4909.36 61.37	134025.51 11168.79 5154.83 64.44
5P002	Supervising Air Quality Meteorologist	143	107605.79 8967.15 4138.68 51.73	112986.08 9415.51 4345.62 54.32	118635.38 9886.28 4562.90 57.04	124567.15 10380.60 4791.04 59.89	130795.51 10899.63 5030.60 62.88
5P003	Supervising Environmental Planner	142	105012.50 8751.04 4038.94 50.49	110263.12 9188.59 4240.89 53.01	115776.28 9648.02 4452.93 55.66	121565.09 10130.42 4675.58 58.44	127643.34 10636.95 4909.36 61.37
7P012	Toxicologist	144	110263.12 9188.59 4240.89 53.01	115776.28 9648.02 4452.93 55.66	121565.09 10130.42 4675.58 58.44	127643.34 10636.95 4909.36 61.37	134025.51 11168.79 5154.83 64.44
ID-JDE TECHNICAL/GENERAL		Range	Step A	Step B	Step C	Step D	Step E
8T001	Accounting Assistant I	106	43634.86 3636.24 1678.26 20.98	45816.60 3818.05 1762.18 22.03	48107.43 4008.95 1850.29 23.13	50512.81 4209.40 1942.80 24.29	53038.45 4419.87 2039.94 25.50
7T001	Accounting Assistant II	110	48107.43 4008.95 1850.29 23.13	50512.81 4209.40 1942.80 24.29	53038.45 4419.87 2039.94 25.50	55690.37 4640.86 2141.94 26.77	58474.89 4872.91 2249.03 28.11

ID-JDE TECHNICAL/GENERAL(cont'd)	Range	Step A	Step B	Step C	Step D	Step E
7T002 Administrative Analyst	131	80297.10 6691.42 3088.35 38.60	84311.95 7026.00 3242.77 40.53	88527.55 7377.30 3404.91 42.56	92953.92 7746.16 3575.15 44.69	97601.62 8133.47 3753.91 46.92
7T003 Administrative Secretary	118	58474.89 4872.91 2249.03 28.11	61398.63 5116.55 2361.49 29.52	64468.56 5372.38 2479.56 30.99	67691.99 5641.00 2603.54 32.54	71076.59 5923.05 2733.72 34.17
8T002 Air Quality Case Settlement Specialist I	126	71076.59 5923.05 2733.72 34.17	74630.42 6219.20 2870.40 35.88	78361.94 6530.16 3013.92 37.67	82280.04 6856.67 3164.62 39.56	86394.04 7199.50 3322.85 41.54
7T004 Air Quality Case Settlement Specialist II	130	78361.94 6530.16 3013.92 37.67	82280.04 6856.67 3164.62 39.56	86394.04 7199.50 3322.85 41.54	90713.74 7559.48 3488.99 43.61	95249.43 7937.45 3663.44 45.79
8T003 Air Quality Inspector I	124	67691.99 5641.00 2603.54 32.54	71076.59 5923.05 2733.72 34.17	74630.42 6219.20 2870.40 35.88	78361.94 6530.16 3013.92 37.67	82280.04 6856.67 3164.62 39.56
7T005 Air Quality Inspector II	128	74630.42 6219.20 2870.40 35.88	78361.94 6530.16 3013.92 37.67	82280.04 6856.67 3164.62 39.56	86394.04 7199.50 3322.85 41.54	90713.74 7559.48 3488.99 43.61
8T004 Air Quality Instrument Specialist I	124	67691.99 5641.00 2603.54 32.54	71076.59 5923.05 2733.72 34.17	74630.42 6219.20 2870.40 35.88	78361.94 6530.16 3013.92 37.67	82280.04 6856.67 3164.62 39.56
7T006 Air Quality Instrument Specialist II	128	74630.42 6219.20 2870.40 35.88	78361.94 6530.16 3013.92 37.67	82280.04 6856.67 3164.62 39.56	86394.04 7199.50 3322.85 41.54	90713.74 7559.48 3488.99 43.61
8T005 Air Quality Laboratory Technician I	122	64468.56 5372.38 2479.56 30.99	67691.99 5641.00 2603.54 32.54	71076.59 5923.05 2733.72 34.17	74630.42 6219.20 2870.40 35.88	78361.94 6530.16 3013.92 37.67
7T007 Air Quality Laboratory Technician II	126	71076.59 5923.05 2733.72 34.17	74630.42 6219.20 2870.40 35.88	78361.94 6530.16 3013.92 37.67	82280.04 6856.67 3164.62 39.56	86394.04 7199.50 3322.85 41.54
8T006 Air Quality Permit Technician I	122	64468.56 5372.38 2479.56 30.99	67691.99 5641.00 2603.54 32.54	71076.59 5923.05 2733.72 34.17	74630.42 6219.20 2870.40 35.88	78361.94 6530.16 3013.92 37.67

ID-JDE TECHNICAL/GENERAL(cont'd)	Range	Step A	Step B	Step C	Step D	Step E
7T008 Air Quality Permit Technician II	126	71076.59 5923.05 2733.72 34.17	74630.42 6219.20 2870.40 35.88	78361.94 6530.16 3013.92 37.67	82280.04 6856.67 3164.62 39.56	86394.04 7199.50 3322.85 41.54
8T007 Air Quality Specialist I	130	78361.94 6530.16 3013.92 37.67	82280.04 6856.67 3164.62 39.56	86394.04 7199.50 3322.85 41.54	90713.74 7559.48 3488.99 43.61	95249.43 7937.45 3663.44 45.79
7T009 Air Quality Specialist II	134	86394.04 7199.50 3322.85 41.54	90713.74 7559.48 3488.99 43.61	95249.43 7937.45 3663.44 45.79	100011.90 8334.33 3846.61 48.08	105012.50 8751.04 4038.94 50.49
7T010 Air Quality Technical Assistant	118	58474.89 4872.91 2249.03 28.11	61398.63 5116.55 2361.49 29.52	64468.56 5372.38 2479.56 30.99	67691.99 5641.00 2603.54 32.54	71076.59 5923.05 2733.72 34.17
8T008 Air Quality Technician I	122	64468.56 5372.38 2479.56 30.99	67691.99 5641.00 2603.54 32.54	71076.59 5923.05 2733.72 34.17	74630.42 6219.20 2870.40 35.88	78361.94 6530.16 3013.92 37.67
7T011 Air Quality Technician II	126	71076.59 5923.05 2733.72 34.17	74630.42 6219.20 2870.40 35.88	78361.94 6530.16 3013.92 37.67	82280.04 6856.67 3164.62 39.56	86394.04 7199.50 3322.85 41.54
7T012 Building Maintenance Mechanic	114	53038.45 4419.87 2039.94 25.50	55690.37 4640.86 2141.94 26.77	58474.89 4872.91 2249.03 28.11	61398.63 5116.55 2361.49 29.52	64468.56 5372.38 2479.56 30.99
7T013 Data Entry Operator	111	49295.45 4107.95 1895.98 23.70	51760.22 4313.35 1990.78 24.88	54348.23 4529.02 2090.32 26.13	57065.65 4755.47 2194.83 27.44	59918.93 4993.24 2304.57 28.81
5T010 Data Support Supervisor	142	105012.50 8751.04 4038.94 50.49	110263.12 9188.59 4240.89 53.01	115776.28 9648.02 4452.93 55.66	121565.09 10130.42 4675.58 58.44	127643.34 10636.95 4909.36 61.37
7T014 Database Specialist	135	88527.55 7377.30 3404.91 42.56	92953.92 7746.16 3575.15 44.69	97601.62 8133.47 3753.91 46.92	102481.70 8540.14 3941.60 49.27	107605.79 8967.15 4138.68 51.73
7T015 Deputy Clerk of the Boards	123	66060.62 5505.05 2540.79 31.76	69363.65 5780.30 2667.83 33.35	72831.83 6069.32 2801.22 35.02	76473.42 6372.79 2941.29 36.77	80297.10 6691.42 3088.35 38.60
7T028 Facilities Maintenance Worker	108	45816.60 3818.05 1762.18 22.03	48107.43 4008.95 1850.29 23.13	50512.81 4209.40 1942.80 24.29	53038.45 4419.87 2039.94 25.50	55690.37 4640.86 2141.94 26.77

ID-JDE TECHNICAL/GENERAL (cont'd)	Range	Step A	Step B	Step C	Step D	Step E
5T008 Facilities Services Supervisor	130	78361.94	82280.04	86394.04	90713.74	95249.43
		6530.16	6856.67	7199.50	7559.48	7937.45
		3013.92	3164.62	3322.85	3488.99	3663.44
		37.67	39.56	41.54	43.61	45.79
7T031 Fiscal Services Coordinator	139	97601.62	102481.70	107605.79	112986.08	118635.38
		8133.47	8540.14	8967.15	9415.51	9886.28
		3753.91	3941.60	4138.68	4345.62	4562.90
		46.92	49.27	51.73	54.32	57.04
8T009 Mechanic I	121	62914.88	66060.62	69363.65	72831.83	76473.42
		5242.91	5505.05	5780.30	6069.32	6372.79
		2419.80	2540.79	2667.83	2801.22	2941.29
		30.25	31.76	33.35	35.02	36.77
7T016 Mechanic II	125	69363.65	72831.83	76473.42	80297.10	84311.95
		5780.30	6069.32	6372.79	6691.42	7026.00
		2667.83	2801.22	2941.29	3088.35	3242.77
		33.35	35.02	36.77	38.60	40.53
8T010 Office Assistant I	104	41557.01	43634.86	45816.60	48107.43	50512.81
		3463.08	3636.24	3818.05	4008.95	4209.40
		1598.35	1678.26	1762.18	1850.29	1942.80
		19.98	20.98	22.03	23.13	24.29
7T017 Office Assistant II	108	45816.60	48107.43	50512.81	53038.45	55690.37
		3818.05	4008.95	4209.40	4419.87	4640.86
		1762.18	1850.29	1942.80	2039.94	2141.94
		22.03	23.13	24.29	25.50	26.77
5T001 Office Services Supervisor	116	55690.37	58474.89	61398.63	64468.56	67691.99
		4640.86	4872.91	5116.55	5372.38	5641.00
		2141.94	2249.03	2361.49	2479.56	2603.54
		26.77	28.11	29.52	30.99	32.54
7T029 Organizational Development and Training Specialist	134	86394.04	90713.74	95249.43	100011.90	105012.50
		7199.50	7559.48	7937.45	8334.33	8751.04
		3322.85	3488.99	3663.44	3846.61	4038.94
		41.54	43.61	45.79	48.08	50.49
7T018 Permit Coordinator	134	86394.04	90713.74	95249.43	100011.90	105012.50
		7199.50	7559.48	7937.45	8334.33	8751.04
		3322.85	3488.99	3663.44	3846.61	4038.94
		41.54	43.61	45.79	48.08	50.49
4T001 Principal Air Quality Specialist	142	105012.50	110263.12	115776.28	121565.09	127643.34
		8751.04	9188.59	9648.02	10130.42	10636.95
		4038.94	4240.89	4452.93	4675.58	4909.36
		50.49	53.01	55.66	58.44	61.37
8T011 Programmer Analyst I	127	72831.83	76473.42	80297.10	84311.95	88527.55
		6069.32	6372.79	6691.42	7026.00	7377.30
		2801.22	2941.29	3088.35	3242.77	3404.91
		35.02	36.77	38.60	40.53	42.56

ID-JDE TECHNICAL/GENERAL (cont'd)	Range	Step A	Step B	Step C	Step D	Step E
7T019 Programmer Analyst II	131	80297.10	84311.95	88527.55	92953.92	97601.62
		6691.42	7026.00	7377.30	7746.16	8133.47
		3088.35	3242.77	3404.91	3575.15	3753.91
		38.60	40.53	42.56	44.69	46.92
8T012 Public Information Officer I	127	72831.83	76473.42	80297.10	84311.95	88527.55
		6069.32	6372.79	6691.42	7026.00	7377.30
		2801.22	2941.29	3088.35	3242.77	3404.91
		35.02	36.77	38.60	40.53	42.56
7T020 Public Information Officer II	131	80297.10	84311.95	88527.55	92953.92	97601.62
		6691.42	7026.00	7377.30	7746.16	8133.47
		3088.35	3242.77	3404.91	3575.15	3753.91
		38.60	40.53	42.56	44.69	46.92
7T027 Purchasing Agent	122	64468.56	67691.99	71076.59	74630.42	78361.94
		5372.38	5641.00	5923.05	6219.20	6530.16
		2479.56	2603.54	2733.72	2870.40	3013.92
		30.99	32.54	34.17	35.88	37.67
7T021 Radio/Telephone Operator	113	51760.22	54348.23	57065.65	59918.93	62914.88
		4313.35	4529.02	4755.47	4993.24	5242.91
		1990.78	2090.32	2194.83	2304.57	2419.80
		24.88	26.13	27.44	28.81	30.25
5T002 Radio/Telephone Operator Supervisor	119	59918.93	62914.88	66060.62	69363.65	72831.83
		4993.24	5242.91	5505.05	5780.30	6069.32
		2304.57	2419.80	2540.79	2667.83	2801.22
		28.81	30.25	31.76	33.35	35.02
7T022 Receptionist	104	41557.01	43634.86	45816.60	48107.43	50512.81
		3463.08	3636.24	3818.05	4008.95	4209.40
		1598.35	1678.26	1762.18	1850.29	1942.80
		19.98	20.98	22.03	23.13	24.29
7T023 Secretary	112	50512.81	53038.45	55690.37	58474.89	61398.63
		4209.40	4419.87	4640.86	4872.91	5116.55
		1942.80	2039.94	2141.94	2249.03	2361.49
		24.29	25.50	26.77	28.11	29.52
6T001 Senior Accounting Assistant	114	53038.45	55690.37	58474.89	61398.63	64468.56
		4419.87	4640.86	4872.91	5116.55	5372.38
		2039.94	2141.94	2249.03	2361.49	2479.56
		25.50	26.77	28.11	29.52	30.99
6T002 Senior Air Quality Inspector	132	82280.04	86394.04	90713.74	95249.43	100011.90
		6856.67	7199.50	7559.48	7937.45	8334.33
		3164.62	3322.85	3488.99	3663.44	3846.61
		39.56	41.54	43.61	45.79	48.08
6T003 Senior Air Quality Instrument Specialist	132	82280.04	86394.04	90713.74	95249.43	100011.90
		6856.67	7199.50	7559.48	7937.45	8334.33
		3164.62	3322.85	3488.99	3663.44	3846.61
		39.56	41.54	43.61	45.79	48.08

ID-JDE TECHNICAL/GENERAL (cont'd)	Range	Step A	Step B	Step C	Step D	Step E
6T007 Senior Air Quality Permit Technician	130	78361.94 6530.16 3013.92 37.67	82280.04 6856.67 3164.62 39.56	86394.04 7199.50 3322.85 41.54	90713.74 7559.48 3488.99 43.61	95249.43 7937.45 3663.44 45.79
6T004 Senior Air Quality Specialist	138	95249.43 7937.45 3663.44 45.79	100011.90 8334.33 3846.61 48.08	105012.50 8751.04 4038.94 50.49	110263.12 9188.59 4240.89 53.01	115776.28 9648.02 4452.93 55.66
6T006 Senior Air Quality Technician	130	78361.94 6530.16 3013.92 37.67	82280.04 6856.67 3164.62 39.56	86394.04 7199.50 3322.85 41.54	90713.74 7559.48 3488.99 43.61	95249.43 7937.45 3663.44 45.79
6T005 Senior Public Information Officer	135	88527.55 7377.30 3404.91 42.56	92953.92 7746.16 3575.15 44.69	97601.62 8133.47 3753.91 46.92	102481.70 8540.14 3941.60 49.27	107605.79 8967.15 4138.68 51.73
6T008 Senior Staff Specialist	138	95249.43 7937.45 3663.44 45.79	100011.90 8334.33 3846.61 48.08	105012.50 8751.04 4038.94 50.49	110263.12 9188.59 4240.89 53.01	115776.28 9648.02 4452.93 55.66
8T013 Staff Specialist I	130	78361.94 6530.16 3013.92 37.67	82280.04 6856.67 3164.62 39.56	86394.04 7199.50 3322.85 41.54	90713.74 7559.48 3488.99 43.61	95249.43 7937.45 3663.44 45.79
7T032 Staff Specialist II	134	86394.04 7199.50 3322.85 41.54	90713.74 7559.48 3488.99 43.61	95249.43 7937.45 3663.44 45.79	100011.90 8334.33 3846.61 48.08	105012.50 8751.04 4038.94 50.49
5T003 Supervising Air Quality Inspector	136	90713.74 7559.48 3488.99 43.61	95249.43 7937.45 3663.44 45.79	100011.90 8334.33 3846.61 48.08	105012.50 8751.04 4038.94 50.49	110263.12 9188.59 4240.89 53.01
5T004 Supervising Air Quality Instrument Specialist	136	90713.74 7559.48 3488.99 43.61	95249.43 7937.45 3663.44 45.79	100011.90 8334.33 3846.61 48.08	105012.50 8751.04 4038.94 50.49	110263.12 9188.59 4240.89 53.01
5T005 Supervising Air Quality Specialist	142	105012.50 8751.04 4038.94 50.49	110263.12 9188.59 4240.89 53.01	115776.28 9648.02 4452.93 55.66	121565.09 10130.42 4675.58 58.44	127643.34 10636.95 4909.36 61.37
5T006 Supervising Public Information Officer	139	97601.62 8133.47 3753.91 46.92	102481.70 8540.14 3941.60 49.27	107605.79 8967.15 4138.68 51.73	112986.08 9415.51 4345.62 54.32	118635.38 9886.28 4562.90 57.04
5T009 Supervising Staff Specialist	142	105012.50 8751.04 4038.94 50.49	110263.12 9188.59 4240.89 53.01	115776.28 9648.02 4452.93 55.66	121565.09 10130.42 4675.58 58.44	127643.34 10636.95 4909.36 61.37

ID-JDE TECHNICAL/GENERAL (cont'd)

	Range	Step A	Step B	Step C	Step D	Step E
5T007 Supervising Systems Analyst	139	97601.62	102481.70	107605.79	112986.08	118635.38
		8133.47	8540.14	8967.15	9415.51	9886.28
		3753.91	3941.60	4138.68	4345.62	4562.90
		46.92	49.27	51.73	54.32	57.04
7T024 Systems Analyst	135	88527.55	92953.92	97601.62	102481.70	107605.79
		7377.30	7746.16	8133.47	8540.14	8967.15
		3404.91	3575.15	3753.91	3941.60	4138.68
		42.56	44.69	46.92	49.27	51.73
7T025 Systems Quality Assurance Specialist	135	88527.55	92953.92	97601.62	102481.70	107605.79
		7377.30	7746.16	8133.47	8540.14	8967.15
		3404.91	3575.15	3753.91	3941.60	4138.68
		42.56	44.69	46.92	49.27	51.73
7T026 Web Master	135	88527.55	92953.92	97601.62	102481.70	107605.79
		7377.30	7746.16	8133.47	8540.14	8967.15
		3404.91	3575.15	3753.91	3941.60	4138.68
		42.56	44.69	46.92	49.27	51.73

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Liz Kniss and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: June 15, 2017

Re: Continuation of Board Consideration of New Regulation 12: Miscellaneous Standards of Performance, Rule 16: Petroleum Refining Facility-Wide Emissions Limits (Rule 12-16) for Adoption and Certification of an Environmental Impact Report (EIR) Section Dealing with Rule 12-16

RECOMMENDED ACTION

Adopt new Regulation 12: Miscellaneous Standards of Performance, Rule 16: Petroleum Refining Facility-Wide Emissions Limits and certify appropriate portions of the EIR dealing with Rule 12-16.

BACKGROUND

In 2012, staff began the rule development process to address concerns from the community regarding air pollution from refineries and the potential for changes in crude oil inputs to increase these emissions. The Refinery Emission Reduction Strategy is well on its way to achieving the goal of 20% reductions of refinery emissions by 2020 through Board of Directors adoption of source specific regulations. Board of Directors adoption of Rule 12-15 requires fence-line monitoring, expanded emissions inventory and information on crude oil characteristics.

At the July 20, 2016 meeting, the Board of Directors directed staff to develop regulatory language that represents a proposal by Communities for a Better Environment and associated organizations (CBE) to limit specific emissions from petroleum refining facilities and three support facilities using numeric limits on GHG, particulate matter (PM), oxides of nitrogen (NO_x) and sulfur dioxide (SO₂) at defined historic levels. Staff raised concerns about the proposal regarding the legality of certain aspects of the proposal, particularly those associated with specifying criteria pollutant caps on refineries. Staff also investigated alternative methods to address GHG emissions and began developing a draft new rule, Regulation 13, Rule 1, concurrently to Rule 12-16 development, that will be the first step in addressing combustion related emissions, including GHGs, throughout the Bay Area.

At the same Board meeting in July, the Board of Directors directed staff to prepare an Environmental Impact Report (EIR) to analyze the environmental impacts of two rules: the proposal by CBE (draft Regulation 12, Rule 16 or "Rule 12-16") and a proposal by staff to significantly reduce toxic risk from refineries and hundreds of other sources throughout the Bay

Area (draft Regulation 11, Rule 18 or “Rule 11-18”) that would address localized impacts to nearby communities.

At the Board meeting on May 31, 2017, staff presented a recommended approach that would address concerns about changing crude slates and the possible impact on refinery emissions. The Board of Directors directed staff to:

- Bring revised Rule 12-16 to the Board of Directors for adoption at the June 21, 2017 meeting
- Prepare a revised staff report and Final EIR that addresses the changes to make Rule 12-16 a GHG backstop and ensure refineries do not increase emissions due to changes in crude slate or other actions
- Provide a revised staff report and Final EIR with responses to comments that describe the health benefits of a GHG cap, especially to fence line communities and relationship to the revised AB32 Scoping Plan
- Prioritize development of additional rules to meet the goal of reducing criteria pollutants, including PM emissions
- Collaborate with CARB and CAPCOA on measures to protect the health of fence line communities and to meet GHG emissions reductions goals
- Bring Rule 11-18 to the Board for consideration as expeditiously as practicable
- Bring Rule 13-1 or other measures to the Board for consideration as expeditiously as practicable

As a result, staff removed references to caps on criteria pollutants and made changes to address legal concerns from the previous version.

DISCUSSION

Staff released the new version of Rule 12-16, provided a comment period, and revised Rule 12-16 in response to comments. Staff has also made changes to the staff report, socio-economic report and EIR response to comments to explain and incorporate the changes made from the last version. Staff also responded to comments from stakeholders throughout the rule development process.

In order, to consider and address input from government agencies and small businesses, Rule 11-18 will be brought to the Board in the third quarter of 2017. As a result, if the Board of Directors decides to adopt Rule 12-16 at a different meeting than Rule 11-18, they must certify the portion of the EIR that addresses potential impacts of Rule 12-16 at the same meeting that Rule 12-16 is adopted.

In addition to working with stakeholders during the rule development process, staff conducted public outreach at four Open House Workshops conducted at Cupertino on March 27, 2017, Benicia on March 28, 2017, Hayward on March 29, 2017, and Richmond on March 30, 2017. Public workshop notices, the draft 12-16 rule language, the staff report, the socioeconomic report and the EIR are available on the Air District website at <http://www.baaqmd.gov/rules-and-compliance/rule-development/rules-under-development>.

BUDGET CONSIDERATIONS/FINANCIAL IMPACTS

Rule 12-16 will require that emissions be appropriately tracked, and compliance determined annually. Increased workloads are expected to result in the need for additional staff in the Engineering Division to conduct these activities. Cost recovery percentages are expected to decrease until fees to refineries can be adjusted to incorporate increased staff costs.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Eric Stevenson
Reviewed by: Jean Roggenkamp

Attachment 13A: Final proposed Regulation 12, Rule 16

Attachment 13B: Final Staff Report for Regulation 12, Rule 16

Attachment 13C: Appendix to Staff Report: Response to Comments (to be published on Monday, June 19, 2017)

Attachment 13D: Final Socioeconomic Analysis for Regulation 12, Rule 16

Attachment 13E: Final Environmental Impact Report for Regulation 12, Rule 16 (to be published on Monday, June 19, 2017)

Attachment 13F: Appendix to Environmental Impact Report: Public Comments (to be published on Monday, June 19, 2017)

Attachment 13G: Appendix to Environmental Impact Report: Response to Comments (to be published on Monday, June 19, 2017)

June 15, 2017

**REGULATION 12
MISCELLANEOUS STANDARDS OF PERFORMANCE
RULE 16
PETROLEUM REFINING GREENHOUSE GAS EMISSIONS LIMITS
INDEX**

12-16-100 GENERAL

- 12-16-101 Description
- 12-16-102 Exemption, Small Refineries

12-16-200 DEFINITIONS

- 12-16-201 Affected Facility
- 12-16-202 Annual Emissions Inventory
- 12-16-203 Adjusted GHG Emissions
- 12-16-204 Baseline Period
- ~~12-16-205 Baseline Carbon Intensity~~
- ~~12-16-206 Carbon Intensity~~
- 12-16-207⁵ Emissions Inventory
- ~~12-16-208 Determination of Carbon Intensity Neutrality~~
- 12-16-209⁶ Greenhouse Gases (GHGs)
- 12-16-210⁷ Permit to Operate
- 12-16-211⁰⁸ Permitted Under-utilized ~~Future-Operational~~ Source
- 12-16-212⁰⁹ Petroleum Refinery
- 12-16-213⁰ Reported GHG Emissions
- 12-16-214¹ Source

12-16-300 STANDARDS

- 12-16-301 Green House Gas Emissions Limits
- 12-16-302 Adjustment of Reported GHG Emissions
- 12-16-303 Exceedance of Emissions Limits
- ~~12-16-304 Determination of Carbon Intensity Neutrality~~

12-16-400 ADMINISTRATIVE REQUIREMENTS

- 12-16-401 Determination and Reporting of Cause of Exceedance of Emissions Limits
- 12-16-402 Quarterly Reporting
- 12-16-403 Designation of Confidential Information

REGULATION 12
MISCELLANEOUS STANDARDS OF PERFORMANCE
RULE 16
PETROLEUM REFINING GREENHOUSE GAS EMISSIONS LIMITS

(Adopted June XX, 2017)

12-16-100 GENERAL

12-16-101 Description: The purpose of this rule is to limit GHG emissions from petroleum refineries and associated support facilities.

12-16-102 Exemption, Small Refineries: This rule shall not apply to any refinery that is limited by an Air District Permit to Operate to a total crude oil throughput or total crude oil processing capacity of 5,000 barrels per day or less.

12-16-200 DEFINITIONS

12-16-201 Affected Facility: A facility subject to the requirements of this Rule. Affected Facilities are identified in Table 12-16-301.

12-16-202 Annual Emissions Inventory: An Emissions Inventory as defined in Section 12-16-207 at a Petroleum Refinery covering a calendar year period.

12-16-203 Adjusted GHG Emissions: The Reported GHG Emissions Level as modified by the APCO in accordance with Section 12-16-302 for purposes of determining whether an Emissions Limit has been exceeded.

12-16-204 Baseline Period: Five-year period of calendar years 2011, 2012, 2013, 2014, and 2015, based on GHG emissions data available at the time of rule adoption.

~~**12-16-205 Baseline Carbon Intensity:** The carbon intensity of a refinery during the Baseline Period.~~

~~**12-16-206 Carbon Intensity:** Carbon Intensity of refinery processing equals the refinery GHG Emissions adjusted to account for imported electricity, hydrogen and steam, divided by the sum (in thousands of barrels) of annual volume of crude processed plus annual volume of other non-crude oil feedstocks processed.~~

12-16-207⁵ Emissions Inventory: As defined in Regulation 12, Rule 15, Section 206.

~~**12-16-208 Determination of Carbon Intensity Neutrality:** A determination made by the APCO pursuant to Section 12-16-304 that there has been no significant increase in carbon intensity considering the operations of the Affected Facility as a whole relative to the baseline carbon intensity.~~

12-16-209⁶ Greenhouse Gases (GHGs): The air pollutant that is defined in 40 CFR § 86.1818-12(a), which is a single air pollutant made up of a combination of the following six constituents: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For the purposes of this rule, GHG emissions should be calculated in manner consistent with California Air Resources Board requirements as contained in §95113 of the Mandatory Greenhouse Gas Emissions Reporting Rule.

12-16-210⁷ Permit to Operate: A written authorization obtained pursuant to Regulation 2, Rule 1, Section 301.

~~**12-16-211⁸ Permitted Under-utilized Future-Operational Source:** A source at an Affected Facility that is authorized to operate through a District Authority to Construct issued prior to January 1, 2017, and that had not achieved full capacity, commercial operation by that date.~~

12-16-212⁹ Petroleum Refinery: An establishment that is located on one or more contiguous or adjacent properties that processes crude oil to produce more usable products such as gasoline, diesel fuel, aviation fuel, lubricating oils, asphalt or petrochemical feedstocks. Petroleum Refinery processes include separation processes (e.g., atmospheric or vacuum distillation, and light ends recovery), petroleum conversion processes (e.g., cracking, reforming, alkylation, polymerization, isomerization, coking, and visbreaking), petroleum treating processes (e.g., hydrodesulfurization, hydrotreating, chemical sweetening, acid gas removal, and deasphalting), feedstock and product handling (e.g., storage, crude oil blending, non-crude oil feedstock blending, product blending, loading, and unloading), and auxiliary facilities (e.g., boilers, waste water treatment, hydrogen production, sulfur recovery plant, cooling towers, blowdown systems, compressor engines, and power plants).

12-16-2130 Reported GHG Emissions: The amount of annual GHG emissions reported pursuant to Regulation 12, Rule 15, Section 401.

12-16-2141 Source: As defined in Regulation 2, Rule 1, Section 221.

12-16-300 STANDARDS

12-16-301 Greenhouse Gas Emissions Limit: Beginning January 1, 2018, the Emissions Limits described in Table 12-16-301 below for each Affected Facility shall not be exceeded during any calendar year:

Table 12-16-301: GHG Emission Limits

Facility	2011–2015 Baseline Average (metric tons/year)	Operating Variability + 3% (metric tons/year)	Increase for Permitted, Under-utilized Sources (metric tons/year)	Emissions Limit (metric tons/year)
Chevron Refinery A-0010	4.33 M	599 K	494 K	4.93 5.43 M
Shell Refinery A-0011	4.12 M	440 K	None	4.56 M
Phillips 66 Refinery A-0016	1.36 M	281 K	270 K	1.64 1.91 M
Tesoro Refinery B-2758/2759	2.27 M	566 K	98.6 K	2.83 2.93 M
Valero Refinery, B- 2626 & Asphalt Plant, B-3193	2.77 M	409 K	932 K	3.18 4.11 M
Martinez Cogen LP A-1820	407 K	49.4 K	None	456 K
Air Liquide H2 Plant B7419	787 K	270 K	276 K	1.06 1.33 M
Air Products H2 Plant B-0295	240 K	93.6 K	None	333 K

M = Millions, K = Thousands

12-16-302 Adjustment of Reported GHG Emissions: The APCO shall determine Adjusted GHG Emissions as follows:

302.1 The APCO shall subtract from Reported GHG Emissions the amount of emissions attributable to sources that operate solely to comply with District, State, or federal air pollution control regulations and that operate pursuant to a District Authority to Construct issued after the date of adoption of this Rule.

~~**302.2** If the APCO makes a Determination of Carbon Intensity Neutrality pursuant to Section 12-16-304, the APCO shall subtract from Reported GHG Emissions the amount of emissions within permitted limits attributable to increases in utilization of any Permitted Future Operational Source.~~

302.23 Within 30 days of receipt of Reported GHG Emissions, the APCO shall make available for review a proposed Adjusted GHG Emissions determination and an accompanying explanation. If the APCO determines that no adjustments are appropriate, then the APCO will so indicate in the proposed determination. The APCO shall send electronic notification of this determination to each Affected Facility and to persons who have requested notification. Affected Facilities and members of the public shall have 14 days from the date of notification to submit comments on the proposed determination. The APCO may finalize the Adjusted GHG Emissions determination 21 days after the notification described in the preceding sentence and after considering any comments received. The APCO shall publish the Adjusted GHG Emissions determination on the District website and provide electronic notification to each Affected Facility and persons who received notice of the proposed determination.

12-16-303 Exceedance of Emissions Limit: If the Adjusted GHG Emissions for an Affected Facility exceed the Emissions Limit, the owner/operator of the Affected Facility shall investigate to determine the primary cause and contributing factors for the exceedance in accordance with Section 12-16-401. An exceedance shall be a violation of this Rule for each day of the calendar year for the Reported GHG Emissions period, unless reviewed by the APCO and determined to be due to conditions:

303.1 For which the required corrective action would result in adverse air quality impacts, locally or otherwise, that would exceed the air quality benefit of compliance with the emissions limit; or

303.2 That could not be feasibly be addressed prior to the next scheduled major maintenance shutdown; ~~or-~~

303.3 That result from a significant California transportation fuel supply disruption, where an unplanned outage at any California refinery extends longer than 1 month and reduces transportation fuel supply by more than ~10%, causing a shortage of more than 4 million barrels of transportation fuels. Transportation fuels include: California Reformulated Gasoline Blendstock for Oxygenate Blending (CARBOB) = finished gasoline less the ethanol portion; finished diesel (California Energy Commission analysis of Board of Equalization taxable and dyed diesel fuel) less biodiesel; and commercial jet fuel (Jet A) plus military jet fuel (JP-5 and JP-8) plus aviation gasoline.

~~**12-16-304 Determination of Carbon Intensity Neutrality:** The owner/operator of an Affected Facility that has experienced increases in GHG emissions due to Permitted Future Operational Sources that may affect compliance with this Rule may request that the APCO make a Determination of Carbon Intensity Neutrality for purposes of Section 12-16-302.2. Such a request must include all data required to make the determination. Upon receiving such a request, the APCO shall make a determination as follows:~~

~~**304.1** Calculate Baseline Carbon Intensity for the refinery that is representative of the refinery's operation during the Baseline Period.~~

~~**304.2** Determine normal variation in carbon intensity during the baseline period.~~

~~**304.3** The calculation of Baseline Carbon Intensity and normal variation of carbon intensity shall exclude years during the baseline period where the refinery crude input was less than 70% of capacity.~~

~~**304.4** Calculate the overall carbon intensity of the refinery during the year in question and determine if the carbon intensity of the year in question is within the normal variation of carbon intensity during the Baseline Period.~~

~~**304.5** The proposed Adjusted GHG Emissions Determination made available pursuant to Section 12-16-302.3 shall include an explanation of any analysis conducted by the APCO pursuant to this Section.~~

12-16-400 ADMINISTRATIVE REQUIREMENTS

12-16-401 Determination and Reporting of Cause of Exceedance of Emissions Limits: Within 60 days of notification by the District that an Emissions Limit has been exceeded, the owner or operator of a facility subject to this Rule shall submit a report to the District that includes the following:

401.1 A description of the primary cause and contributing factors for the exceedance.

401.2 Prevention measures that will be implemented to prevent recurrence of an exceedance and a justification for rejecting any measures that were considered but will not be implemented.

401.3 If appropriate, an explanation of why the exceedance meets the criteria of Section 12-16-303.1 or 303.2.

12-16-402 Quarterly Reporting: Beginning May 1, 2018, and every three months thereafter, each Affected Facility shall ~~submit~~ make available to the APCO a quarterly report summarizing GHG emissions from the Affected Facility for the previous quarter. For example, the May 1, 2018 report shall summarize GHG emissions for the period from January 1 to March 31, 2018.

12-16-403 Designation of Confidential Information: When submitting any documents or records required by this rule, the Affected Facility shall designate as confidential any information claimed to be exempt from public disclosure under the California Public Records Act, Government Code Section 6250 et seq. If a document is submitted that contains information designated confidential in accordance with this section, the owner/operator shall provide a justification for this designation and shall submit a separate copy of the document with the information designated confidential redacted.



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

Regulation 12, Rule 16: Petroleum Refining Greenhouse Gas Emissions Limits



REVISED FINAL STAFF REPORT

JUNE 16, 2017

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Table of Contents

I. EXECUTIVE SUMMARY	4
II. BACKGROUND	4
A. Petroleum Refinery.....	5
1. Petroleum Refinery Process Description	5
2. Petroleum Crude Oil	8
3. Air Pollutants Emitted from Petroleum Refineries	10
B. Regulation of Air Pollutants from Petroleum Refineries.....	14
1. Criteria Pollutants.....	14
2. Toxic Pollutants	15
3. Accidental Release Regulation	15
4. Air District Rules Affecting Refineries	16
III. REQUIREMENTS	17
A. Applicability and Exemptions.....	17
B. Definitions.....	17
C. Standards	18
IV. ECONOMIC IMPACTS	21
A. Socioeconomic Impact Analysis of Rule 12-16.....	25
V. REGULATORY IMPACTS	28
VI. THE RULE DEVELOPMENT / PUBLIC PARTICIPATION PROCESS	29
IV. CONCLUSION / RECOMMENDATION	30
APPENDIX A: SUPPLEMENT TO REGULATORY FINDINGS	2

I. EXECUTIVE SUMMARY

Petroleum refineries are significant sources of harmful pollutants on both the global (greenhouse gases - GHG) and regional/local scale (toxic air contaminants and criteria pollutants). Many Bay Area residents have expressed concern about the impact of this pollution on the environment and public health. Though refinery emissions have declined over time, it is possible that, as refinery operations change in the future, emissions of these pollutants could increase.

Refineries are the dominant stationary source of GHG emissions, accounting for 16 percent of emissions in the region. They are by far the most significant source within the Air District's jurisdiction. In spite of years of GHG regulations at the state level, emissions from refineries have not significantly decreased. And, in absence of any additional regulation, they may increase.

California refineries' traditional sources of crude oil, California and the Alaska North Slope, are in decline. Replacement feedstocks may require more energy and hydrogen to process, which could lead to significantly increased GHG emissions. These increased GHG emissions would be accompanied by increased emissions of other combustion pollutants (such as fine particulate matter) which have localized and regional public health impacts.

The purpose of Regulation 12, Rule 16: Petroleum Refining Greenhouse Gas Emissions Limits (Rule 12-16) is to limit refining sector GHG emissions to a level consistent with the refineries' current production capacity. This should prevent a switch to more polluting feedstocks. This rule is intended as a backstop to prevent increases while the State of California and the Air District develop a strategy to significantly reduce refinery emissions to meet emission reduction goals set by the Legislature.

II. BACKGROUND

Oil Refineries are the largest source of industrial GHG emissions in the Bay Area. Collectively, the refining industry accounts for 16 percent of total GHG emissions in the region. Despite several years of the statewide Cap-and-Trade program, refinery emissions have remained steady and not decreased. As the refineries' traditional sources of crude oil decline, they must find new sources of feedstocks. Some of the replacement feedstocks will require more energy to process into transportation fuels than current sources of crude oil. The purpose of proposed Rule 12-16 is to ensure that GHG emissions from oil refining do not increase as the refining industry transitions to these new sources of feedstock. The Rule will be a backstop to prevent GHG increases while the Air District and California Air Resources Board develop strategies expected to significantly reduce refinery GHG emissions.

Rule 12-16 would cap GHG emissions from oil refineries and closely associated support facilities at a level consistent with current operations with a 3 percent additional buffer to provide additional operational flexibility considering projected growth in demand for

transportation fuels for the next few years and an additional buffer to account for permitted facilities that were not operating at full capacity during the baseline period.

A. Petroleum Refinery

Currently, the five petroleum refineries located in the Bay Area within the jurisdiction of the Air District that would be affected by the rule are:

1. Chevron Products Company, Richmond (BAAQMD Plant #10)
2. Phillips 66 Company—San Francisco Refinery, Rodeo (BAAQMD Plant #21359)
3. Shell Martinez Refinery, Martinez (BAAQMD Plant #11)
4. Tesoro Refining and Marketing Company, Martinez (BAAQMD Plant #14628)
5. Valero Refining Company—California, Benicia (BAAQMD Plant #12626) and associated Asphalt Plant (BAAQMD Plant #13193)

The three affected, refinery-related facilities are:

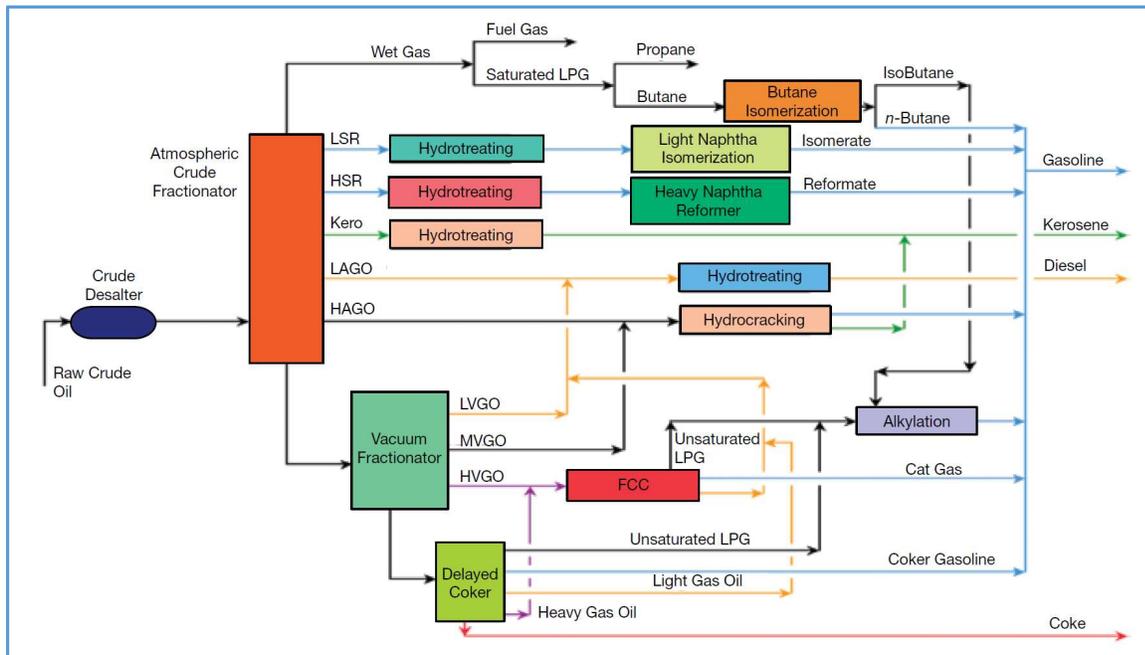
1. Air Products and Chemicals hydrogen plant, Martinez (BAAQMD Plant #10295)
2. Air Liquide hydrogen plant, Rodeo (BAAQMD Plant #17419)
3. Martinez Cogen, L.P. (BAAQMD Plant #1820)

These three support facilities are subject to provisions of the rule because each is closely linked to the operations of a refinery.

1. PETROLEUM REFINERY PROCESS DESCRIPTION

These facilities process crude oil into a variety of products such as gasoline, aviation fuel, diesel and other fuel oils, lubricating oils, and feedstocks for the petrochemical industry. The diagram in Figure 1 illustrates how various process units at petroleum refineries convert raw crude oil (petroleum) into fuels and other products.

Figure 1: Refinery Flow Diagram



Legend: LSR = light straight-run naphtha; HSR = heavy straight-run naphtha; Kero = kerosene; LAGO = light atmospheric gas oil; HAGO = heavy atmospheric gas oil; LVGO = light vacuum gas oil; MVGO = medium vacuum gas oil; HVGO = heavy vacuum gas oil.

The processing of crude oil occurs in various process units or plants; some of the primary process units include:

- **Crude Desalter:** Crude oil is mixed with water to separate the salt and sediments from the crude.
- **Crude Unit:** The incoming desalted crude oil is heated and distilled into various fractions for further processing in other units.
- **Gas Concentration Unit:** Light hydrocarbons from the top of the crude unit are separated and distributed in the refinery fuel gas (RFG) system for use as fuel for heaters and boilers.
- **Vacuum Distillation Unit:** The residue oil from the bottom of the crude oil distillation unit is further distilled under heavy vacuum.
- **Hydrotreater:** Naphtha, kerosene, and gas oil are desulfurized from the crude unit by using hydrogen and converting the organically bound sulfur into hydrogen sulfide (a toxic compound).
- **Fluidized Catalytic Cracker Unit:** Longer chain, higher boiling hydrocarbons such as heavy oils are broken (or “cracked”) into lighter, shorter molecules at high temperatures and moderate pressure in the presence of a catalyst. This process is so named because the catalyst is so fine that it behaves like a fluid.
- **Butane Isomerization Unit:** Polymers of butane are reformed into isobutane for use in the alkylation process. Alkylates are used in blending gasoline to boost the octane rating. Alkylates are considered one of the highest quality refinery products.

- Light Naphtha Isomerization Unit: Benzene is saturated and short, straight-chain hydrocarbons are isomerized into branched-chain hydrocarbons.
- Heavy Naphtha Reformer and Hydrotreater: Low-octane linear hydrocarbons (paraffins) are converted into aromatics using a catalyst. The process also forms hydrogen - used in the refinery's hydrocracking and hydrotreating units - and benzene, toluene, and xylene (BTX) feedstocks, used in other process units.
- Hydrocracker Unit: Hydrogen is used to upgrade heavier fractions into lighter, more valuable products, such as diesel and jet fuel, in a high-pressure system.
- Alkylation Unit: Butene and propene are reacted with isobutane into alkylate, a high-octane gasoline component.
- Delayed Coker: Very heavy residual oils are converted into end-product petroleum coke as well as naphtha and diesel oil byproducts.
- Claus Sulfur Plant: A two-step (thermal and catalytic) process for recovering sulfur from gaseous hydrogen sulfide (H_2S) derived from refining crude oil. In the thermal step, H_2S laden gas is combusted to form elemental sulfur and sulfur dioxide (SO_2). In the catalytic step, a catalyst is used to boost the sulfur yield. In this step, H_2S reacts with SO_2 to form elemental sulfur.

a. Separation Processes

Crude oil consists of a complex mixture of hydrocarbon compounds with small amounts of impurities such as sulfur, nitrogen, and metals. The first phase in petroleum refining is the separation of crude oil into its major constituents using distillation and "light ends" recovery (i.e., gas processing) that splits crude oil constituents into component parts known as "boiling-point fractions."

b. Conversion Processes

Crude oil components such as residual oils, fuel oils, and other light fractions are converted to high-octane gasoline, jet fuel, and diesel fuel, gasoline by various processes. These processes, such as cracking, coking, and vis-breaking (a form of thermal cracking that breaks the viscosity), are used to break large petroleum molecules into smaller ones. Polymerization and alkylation processes are used to combine small petroleum molecules into larger ones. Isomerization and reforming processes are applied to rearrange the structure of petroleum molecules to produce higher-value molecules using the same atoms.

c. Treating Processes

Petroleum treating processes stabilize and upgrade petroleum products by separating them from less desirable products, and by removing other elements. Treating processes, employed primarily for the separation of petroleum products, include processes such as de-asphalting. Elements such as sulfur, nitrogen, and oxygen are removed by hydro-desulfurization, hydrotreating, chemical sweetening, and acid gas removal.

d. Feedstock and Product Handling

Refinery feedstock and product handling operations consist of unloading, storage, blending, and loading activities.

e. Auxiliary Facilities

A wide assortment of processes and equipment not directly involved in the processing of crude oil are used in functions vital to the operation of the refinery. Examples include steam boilers, wastewater treatment facilities, hydrogen plants, cooling towers, and sulfur recovery units. Products from auxiliary facilities (e.g., clean water, steam, and process heat) are required by most process units throughout a refinery.

f. Emissions from Refinery Processing

These primary process units, minor process units, auxiliary equipment (boilers, turbines, heat exchangers, etc.), and other refinery activities (such as truck and loader traffic) emit a variety of criteria pollutants, toxic pollutants (toxic air contaminants), and climate pollutants (greenhouse gases). Other sources of emissions include waste water treatment, tanks, leaking equipment, pressure release devices, flares, marine terminals, and product loading, which are collectively subject to at least ten different Air District regulations. (A more detailed discussion on refinery emissions is provided below in subsection 3.)

2. PETROLEUM CRUDE OIL

Petroleum crude oil consists of a complex mixture of hydrocarbon compounds with smaller amounts of impurities, including sulfur, nitrogen, oxygen, a variety of toxic compounds, organic acids, and metals (e.g., iron, copper, nickel, and vanadium). Crude oil is most often characterized by the oil's density (light to heavy) and sulfur content (sweet to sour). A more detailed explanation of these terms and others used to describe crude oil follows below.

Each of the properties described below is required to be included in the periodic monthly Crude Slate Report described in Regulation 12, Rule 15 (Rule 12-15) because each relates to emissions of air pollutants. The purpose of the crude slate reporting in Rule 12-15 is to establish a baseline crude slate for each of the refineries and then to track changes in that crude slate, along with improved emissions data, to monitor the relationship between crude slate and emissions from the refineries.

a. API Gravity

The industry standard measure for crude oil density is American Petroleum Institute (API) gravity, which is expressed in units of degrees, and which is inversely related to density (i.e., a lower API gravity indicates higher density; a higher API gravity indicates lower density). Refineries convert crude oils to gaseous products (propane gas for sale and "fuel gas" that is consumed at the refinery), high-value transportation fuels (gasoline, diesel and jet fuel) and lower-value heavy oils (such as "bunker fuel" that is used by ocean-going vessels). Crude oils with higher API gravity can theoretically be converted to higher-value light products with less processing than crude oils with lower API gravity. Refinery operators have asserted that, although this may suggest that a refinery operator would prefer to use high API gravity crudes exclusively, this is not the case because each refinery is designed and equipped to process crude oil with API gravity in a certain range. Processing crude oil outside of the design range—even if it is "light" crude—will result in processing bottlenecks that reduce the overall efficiency of the refinery.

b. Sulfur Content ("Sweet" and "Sour" Crude)

Sulfur is an impurity that occurs in crude oil and arrives in various forms including: elemental sulfur (S), hydrogen sulfide (H₂S), carbonyl sulfide (COS), inorganic forms, and most importantly, organic forms that include: mercaptans, sulfides, and polycyclic sulfides. "Sweet crude" is commonly defined as crude oil with sulfur content less than 0.5 percent, while "sour crude" has sulfur content greater than 0.5 percent. Sweet crude is more desirable because sulfur must be removed from the crude oil to produce more valuable refined products such as gasoline, diesel and aviation fuels.

c. Vapor Pressure

Vapor pressure is a measure of crude oil volatility. Higher vapor pressure crude oil contains greater amounts of light Volatile Organic Carbon (VOC) compounds.

d. BTEX (Benzene, Toluene, Ethylbenzene, Xylene) Content

BTEX content is a measure of the benzene, toluene, ethylbenzene, and xylene content in crude oil.

e. Metals (Iron, Nickel and Vanadium) Content

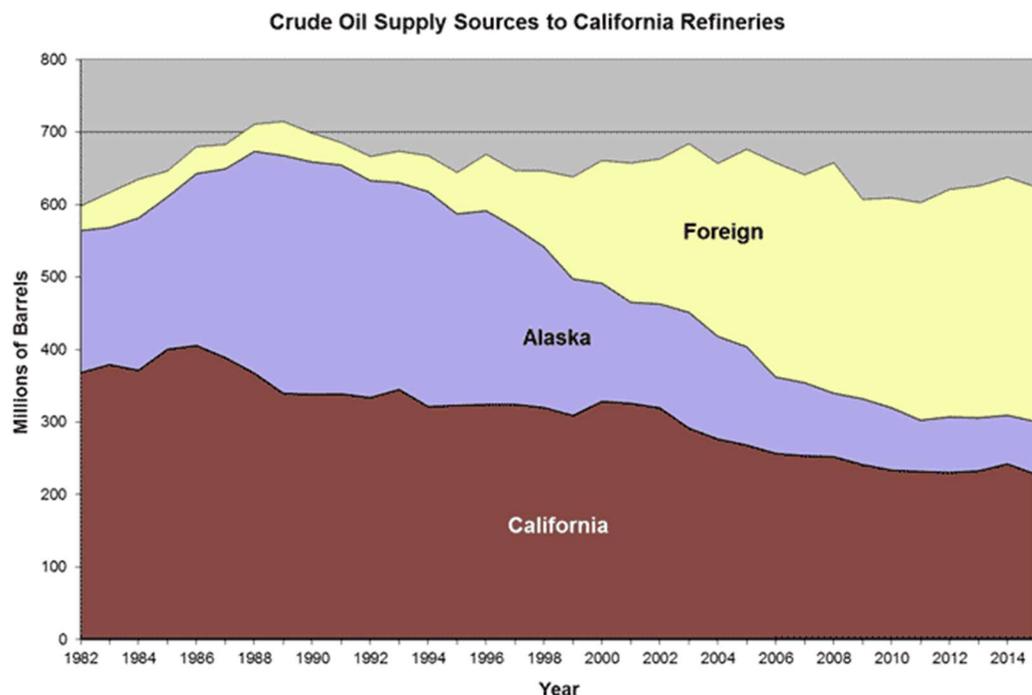
The metals content of crude oil indicates both the solids contamination of crude oil and the potential for organic metals compounds in the heavy gas oil component of crude oil.

f. Possible Changes in Emissions Due to Changes in Crude Oil

In the past several years, new sources of crude oil—including American shale oil and Canadian tar sands-derived oil—have become available to petroleum refineries in North America, including Bay Area refineries. The crude oil derived from shale, now accessible because of technological improvements in hydraulic fracturing ("fracking"), tends to be light and sweet. However, this crude oil has higher VOC and H₂S content than some other crude oils. Crude oil from tar sands, currently under development in the Canadian province of Alberta, tends to be heavy and sour.

To maximize production, refineries are designed to process crude oils within a certain range of compositions—often referred to as "crude window." For example, a refinery that is designed to process more sour crude must have the capacity to remove large amounts of sulfur from the crude oil, while a refinery designed to process sweet crude does not require as much sulfur processing capacity. Bay Area refineries traditionally process heavier and more sour crude oils because, for many years, much of the crude supply has been heavy sour crude from Kern County and medium sour crude from Alaska. The refineries would likely need to make changes to their facilities to accommodate different sources of crude oil with different compositions to maintain current production levels. Figure 2, shows the trends in crude sources for California refineries.

Figure 2: Crude Oil Supply Sources to California Refineries



Source: California Energy Commission

It is anticipated that refineries will update and/or modify their equipment to meet stricter regulatory fuel requirements and potentially to process crude oil from different sources. Rule 12-15 was adopted to monitor the key data so that staff can determine if emissions changes are potentially driven by changes in crude slate. The intent of Rule 12-16 is to discourage or prevent refineries in the Bay Area from making changes that would lead to increases in emissions of greenhouse gas pollutants.

3. AIR POLLUTANTS EMITTED FROM PETROLEUM REFINERIES

Air pollutants are categorized and regulated based on their properties and there are three primary categories of regulated air pollutants: (1) criteria pollutants; (2) toxic pollutants (toxic air contaminants, which in federal programs are referred to as "hazardous air pollutants"); and (3) climate pollutants (e.g., greenhouse gases). Additional categories of air pollutants include odorous compounds and visible emissions, although these are most often also components of one or more of the three primary categories of regulated air pollutants listed above.

a. Criteria Pollutants

Criteria pollutants have regional or basin-wide impacts and are emissions for which ambient air quality standards (AAQS) have been established, or are atmospheric precursors to such air pollutants (i.e., they participate in photochemical reactions to form a criteria pollutant, such as ozone). The AAQS are air concentration-based standards that are established to protect public health and welfare. The U.S. Environmental Protection Agency (EPA) sets AAQS on a national basis (National Ambient Air Quality Standards, or NAAQS), and CARB sets AAQS for the state of California (California

Ambient Air Quality Standards, or CAAQS). Although there is some variation in the specific pollutants for which NAAQS and CAAQS have been set, the term "criteria pollutants" generally refers to the following:

- Carbon monoxide (CO);
- Nitrogen dioxide (NO₂) and oxides of nitrogen (NO_x);
- Particulate matter (PM) in two size ranges—diameter of 10 micrometers or less (PM₁₀), and diameter of 2.5 micrometers or less (PM_{2.5});
- Precursor Organic Compounds (POCs) for the formation of ozone and PM_{2.5}; and
- Sulfur dioxide (SO₂).

Each of these criteria pollutants is emitted by petroleum refineries. Most of these criteria pollutants result from fossil fuel combustion. Typically, these emissions would increase when GHG emissions increase. However, most of the refinery equipment is subject to regulatory and permitting requirements that limit emissions of criteria pollutants. And, any significant equipment change that would lead to increased emissions is subject to the Air District's very strict permitting regulations. So, the extent to which criteria pollutant emissions would increase in tandem with GHG emissions would vary by project and refinery.

b. Toxic Pollutants

Toxic pollutants, also known as toxic air contaminants (TACs), have localized impacts and are emissions for which AAQS generally have not been established, but that nonetheless may result in human health risks. TACs generally are emitted in much lower quantities than criteria pollutants, and may vary markedly in their relative toxicity (i.e., some TACs cause health impacts at lower concentrations than other TACs). The state list of TACs currently includes approximately 190 separate chemical compounds and groups of compounds. TACs emitted from petroleum refineries include volatile organic TACs (e.g., acetaldehyde, benzene, 1,3-butadiene, formaldehyde, and xylenes); semi-volatile and non-volatile organic TACs (e.g., benzo(a)pyrene, chlorinated dioxin/furans, cresols, and naphthalene); metallic TACs (e.g., compounds containing arsenic, cadmium, chromium, mercury, and nickel); and inorganic TACs (e.g., chlorine, hydrogen sulfide, and hydrogen chloride). These pollutants are not addressed by Rule 12-16. The Air District is proposing to address TAC emissions from refineries and other sources through draft Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities. The TACs that drive health risk from refineries are usually associated with leaks from equipment and tanks, these high-risk pollutants, such as benzene, are not correlated to GHG emissions.

c. Climate Pollutants

Climate pollutants (greenhouse gases or GHGs) are emissions that contribute to global anthropogenic climate change. Carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and three groups of fluorinated compounds (hydrofluorocarbons, or HFCs; perfluorocarbons, or PFCs; and sulfur hexafluoride, or SF₆) are the major anthropogenic GHGs, and are regulated under the federal Clean Air Act and the California Global Warming Solutions Act (AB 32). The climate pollutants emitted from petroleum refineries include CO₂, CH₄, and N₂O.

d. Refinery Air Pollution in Context

Refineries are a significant source of air pollutants in general. In the counties where the refineries are located, their emissions can be more significant on a percentage basis, especially for SO₂ and PM_{2.5}.

The tables below are based on 2012 emissions data and do not account for the benefits of recent Air District rulemaking that are projected to reduce refinery criteria pollutant emissions by approximately 17 percent. They also do not include the benefits of rules under development to reduce SO₂ emissions from refineries. The tables compare refinery emissions of key criteria pollutants to other emissions both in the Bay Area and in Contra Costa and Solano counties where the refineries are located.

Table 1: Bay Area Emissions of Relevant Pollutants by Source Category

Source Category	Emissions							
	PM _{2.5}		Anthropogenic ROG		NO _x		SO ₂	
	(tons/yr.)	%	(tons/yr.)	%	(tons/yr.)	%	(tons/yr.)	%
Refineries	1,524	9	5,399	6	4,248	4	2,890	41
Coke Calcining	28	0.2	0.2	< 0.1	239	0.2	1,242	17
Cement Plant	23	0.1	40	< 0.1	2,170	2	912	13
Major Industrial	1,839	11	17,639	18	5,765	5	581	8
Residential/Commercial	5,519	34	27,862	28	5,531	5	326	5
Agricultural	471	3	2,049	2	0	0	0	0
Miscellaneous	986	6	116	0.1	10	< 0.1	0	0
Mobile Sources	5,945	36	44,659	46	91,473	83.6	1,168	16
Total Emissions	16,335	100%	97,763	100%	109,436	100%	7,119	100%

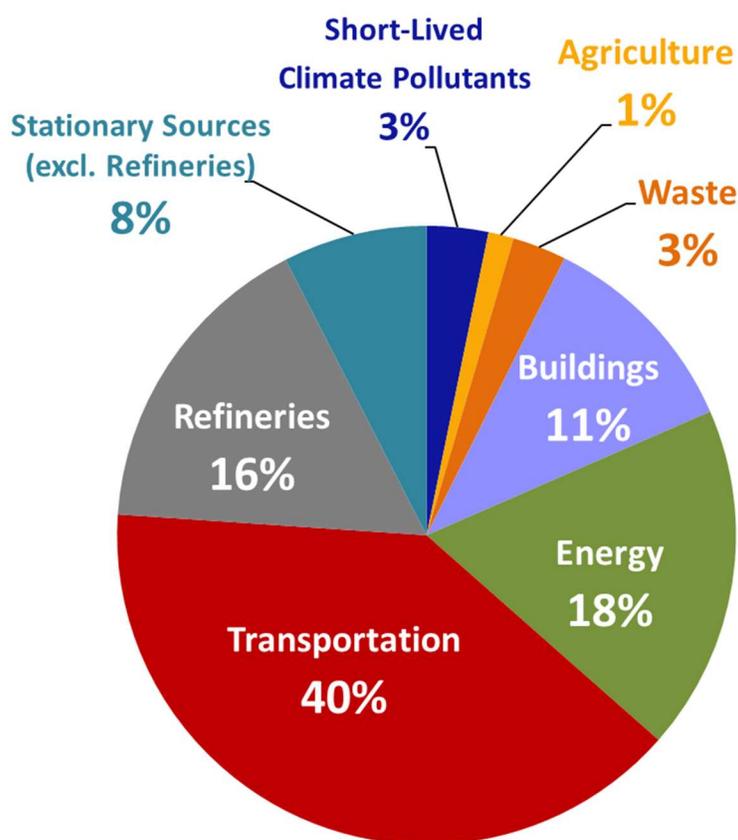
Table 2: Emissions of Relevant Pollutants by Source Category for Contra Costa and Solano Counties

Source Category	Emissions							
	PM _{2.5}		Anthropogenic ROG		NO _x		SO ₂	
	(tons/yr.)	%	(tons/yr.)	%	(tons/yr.)	%	(tons/yr.)	%
Refineries	1,524	29	5,399	23	4,248	17	2,890	63
Coke Calcining	28	1	0.2	0.001	239	1	1,242	27
Cement Plant	0	0	0	0	0	0	0	0
Major Industrial	569	11	3,383	14	2,131	8	85	2
Residential/Commercial	1,548	29	5,649	24	1,122	4	49	1
Agricultural	97	2	369	2	0	0	0	0
Miscellaneous	294	6	20	0.1	2	0	0	0
Mobile Sources	1,212	23	9,041	38	17,703	70	296	6
Total	5,272	100%	23,859	100%	25,445	100%	4,563	100%

1. Emissions from biogenic sources and accidental fires are not included in this inventory. Mobile emissions include shipping emissions within 3 nautical miles of the Bay Area coastline.
2. PM_{2.5} emissions for the Refineries category include condensable and filterable PM. Condensable PM data are not available for other source categories at this time.

Refineries are also a significant source of GHG emissions. They produce about two-thirds of the industrial GHG emissions in the Bay Area. Mobile sources are the largest source of GHG emissions overall. Refining and use of transportation fuels together account for 56 percent of GHG emissions in the Bay Area.

Figure 2: Bay Area GHG Emissions by Economic Sector for Year 2013



1. Emissions for the energy sector include electricity generation and co-generation for the Bay Area region, including imported electricity.
2. Emissions associated with fuel usage (solid, liquid and gas) are apportioned according to its use; residential and commercial fuel usage is attributed to the buildings sector while industrial fuel usage is accounted for in the stationary sources or refinery sectors.

B. Regulation of Air Pollutants from Petroleum Refineries

1. CRITERIA POLLUTANTS

Bay Area refineries are subject to various air quality regulations that have been adopted by the Air District, CARB, and the EPA. These regulations contain standards that ensure emissions are effectively controlled, including:

- Requiring the use of specific emission control strategies or equipment (e.g., the use of floating roofs on tanks for VOC emissions);
- Requiring that emissions generated by a source be controlled by at least a specified percentage (e.g., 95 percent control of VOC emissions from pressure relief devices);
- Requiring that emissions from a source not exceed specific concentration levels (e.g., 100 parts per million [ppm] by volume of VOC for equipment leaks unless those leaks are repaired within a specific timeframe; 250 ppm by volume SO₂ in exhaust gases from sulfur recovery units; 1,000 ppm by volume SO₂ in exhaust

- gases from catalytic cracking units);
- Requiring that emissions not exceed certain quantities for a given amount of material processed or fuel used at a source (e.g., 0.033 pounds NO_x per million BTU of heat input, on a refinery-wide basis, for boilers, process heaters, and steam generators);
- Requiring that emissions be controlled sufficiently so that concentrations beyond the facility's property are below specified levels (e.g., 0.03 ppm by volume of hydrogen sulfide [H₂S] in the ambient air);
- Requiring that emissions from a source not exceed specified opacity levels based on visible emissions observations (e.g., no more than 3 minutes in any hour in which emissions are as dark or darker than No. 1 on the Ringelmann Smoke Chart); and
- Requiring that emissions be minimized using all feasible prevention measures (e.g., flaring prohibited unless it is in accordance with an approved Flare Minimization Plan).

Air quality rules generally do not expressly limit mass emissions (e.g., pounds per year of any specific air pollutant) from affected equipment unless that equipment was constructed or modified after March 7, 1979, and was subject to the Air District's New Source Review (NSR) rule. All Bay Area refineries have "grandfathered" emission sources that were not subject to NSR but are generally regulated by equipment-specific Air District regulations or operational conditions contained in Air District permits. As a result, none of the Bay Area refineries have overall mass emission limits that apply to the entire refinery as they are defined in Rule 12-16. Nonetheless, mass emissions of regulated air pollutants from Bay Area refineries are tracked at the source level, and these mass emissions generally have been substantially reduced over the past several decades.

Air pollutant emissions from Bay Area petroleum refineries have been regulated for more than 50 years, with most of the rules and regulations adopted following enactment of the 1970 Clean Air Act amendments. The Air District has the primary responsibility to regulate "stationary sources" of air pollution in the Bay Area, and the Air District has adopted many rules and regulations that apply to petroleum refineries.

2. TOXIC POLLUTANTS

The Air District uses three approaches to reduce TAC emissions and to reduce the health impacts resulting from TAC emissions: (1) Specific rules and regulations, including federal, state, and Air District regulation; (2) Preconstruction review; and (3) the AB 2588 Air Toxics "Hot Spots" Program. Rule 12-16 would not impact existing regulations of these pollutants as it does not directly address them.

3. ACCIDENTAL RELEASE REGULATION

In addition to Air District regulations, petroleum refineries are also subject to regulatory programs that are intended to prevent accidental releases of regulated substances. Accidental release prevention programs in California are implemented and enforced by

local administering agencies, which, in the case of the Bay Area refineries, are Solano County (for the Valero Refining Company) and Contra Costa County (for Chevron Products Company, Phillips 66 Company, Shell Martinez Refinery, and Tesoro Refining and Marketing Company).

The primary regulatory programs of this type are based on requirements in the amendments to the 1990 Clean Air Act as follows: (1) the Process Safety Management (PSM) program, which focuses on protecting workers, and which is administered by the U.S. Occupational Safety & Health Administration (OSHA); and (2) the Accidental Release Prevention program (commonly referred to as the Risk Management Program, or RMP), which focuses on protecting the public and the environment, and which is administered by EPA. Bay Area refineries are subject to Cal/OSHA's PSM program, which is very similar to the federal OSHA program focusing on worker safety, but with certain more stringent state provisions. Bay Area refineries are subject to the California Accidental Release Prevention (CalARP) Program, which is very similar to EPA's RMP program to limit exposure of the public, but with certain more stringent State provisions. In addition, Contra Costa County and the City of Richmond have both adopted an Industrial Safety Ordinance (ISO). These ISOs are very similar to CalARP requirements, but with certain more stringent local provisions.

4. AIR DISTRICT RULES AFFECTING REFINERIES

The following is a partial list of the air pollution rules and regulations that the Air District implements and enforces at Bay Area refineries:

- Regulation 1: General Provisions and Definitions
- Regulation 2, Rule 1: Permits, General Requirements
- Regulation 2, Rule 2: New Source Review
- Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants
- Regulation 2, Rule 6: Major Facility Review (Title V)
- Regulation 6, Rule 1: Particulate Matter, General Requirements
- Regulation 6, Rule 5: Particulate Emissions from Refinery Fluidized Catalytic Cracking Units
- Regulation 8, Rule 1: Organic Compounds, General Provisions
- Regulation 8, Rule 2: Organic Compounds, Miscellaneous Operations
- Regulation 8, Rule 5: Storage of Organic Liquids
- Regulation 8, Rule 6: Terminals and Bulk Plants
- Regulation 8, Rule 8: Wastewater (Oil-Water) Separators
- Regulation 8, Rule 9: Vacuum Producing Systems
- Regulation 8, Rule 10: Process Vessel Depressurization
- Regulation 8, Rule 18: Equipment Leaks
- Regulation 8, Rule 28: Episodic Releases from Pressure Relief Devices at Petroleum Refineries and Chemical Plants
- Regulation 8, Rule 44: Marine Vessel Loading Terminals
- Regulation 9, Rule 1: Sulfur Dioxide

- Regulation 9, Rule 2: Hydrogen Sulfide
- Regulation 9, Rule 8: Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines
- Regulation 9, Rule 9: Nitrogen Oxides and Carbon Monoxide from Stationary Gas Turbines
- Regulation 9, Rule 10: Nitrogen Oxides and Carbon Monoxide from Boilers, Steam Generators and Process Heaters in Petroleum Refineries
- Regulation 9, Rule 14: Petroleum Coke Calcining Operations
- Regulation 11, Rule 10: Cooling Towers
- Regulation 12, Rule 11: Flare Monitoring at Petroleum Refineries
- Regulation 12, Rule 12: Flares at Petroleum Refineries
- Regulation 12, Rule 15: Petroleum Refinery Emissions Tracking
- 40 CFR Part 60, Subpart J: Standards of Performance for Petroleum Refineries (NSPS)
- 40 CFR Part 61, Subpart FF: Benzene Waste Operations (NESHAP)
- 40 CFR Part 63, Subpart CC: Petroleum Refineries (NESHAP)
- 40 CFR Part 63, Subpart UUU: Petroleum Refineries: Catalytic Cracking, Catalytic Reforming, and Sulfur Plant Units (NESHAP)
- State Airborne Toxic Control Measure for Stationary Compression Ignition (Diesel) Engines (ATCM).

III. REQUIREMENTS

Explanations of the various provisions of Rule 12-16 are provided below.

A. Applicability and Exemptions

Rule 12-16 would apply to the five large refineries in the Bay Area:

1. Chevron Products Company, Richmond (BAAQMD Plant #10)
2. Phillips 66 Company—San Francisco Refinery, Rodeo (BAAQMD Plant #21359)
3. Shell Martinez Refinery, Martinez (BAAQMD Plant #11)
4. Tesoro Refining and Marketing Company, Martinez (BAAQMD Plant #14628)
5. Valero Refining Company—California, Benicia (BAAQMD Plant #12626) and associated Asphalt Plant (BAAQMD Plant #13193)

The rule would also apply to three support facilities:

1. Air Products and Chemicals hydrogen plant, Martinez (BAAQMD Plant #10295)
2. Air Liquide hydrogen plant, Rodeo (BAAQMD Plant #17419)
3. Martinez Cogen, L.P. (BAAQMD Plant #1820)

Small oil refineries less than 5,000 bpd capacity would be exempt from the requirements of this rule.

B. Definitions

The definitions section defines key terms and phrases used in the proposed rule. Other relevant definition can be found in Rule 12-15.

C. Standards

Rule 12-16 sets GHG emission limits for each affected facility. These limits were established by analyzing emissions to establish a baseline five-year period. GHG emissions were analyzed for calendar years 2011, 2012, 2013, 2014, and 2015, as this was the most recent five-year period for which CARB has released GHG emissions data. CARB GHG data prior to 2011 used a different methodology to calculate emissions.

GREENHOUSE GAS EMISSION LIMITS

- Each facility must provide GHG emissions to CARB as part of CARB’s Mandatory Reporting of Greenhouse Gas Emissions Requirements (MRR). GHG Emissions Inventory information for each year was obtained from an Excel spreadsheet available on the CARB website,¹ using the entries under “Calculated Covered Emissions, metric tons CO₂e.”
- The intent of the rule is to set emissions limits at a level consistent with full production operation of the refineries, with an allowance to provide for additional operational flexibility and buffer for potential increases in demand for transportation fuels.
- The staff calculated the mean and standard deviation for the baseline emissions for each of the facilities. Years 2012 and 2013 were excluded for Chevron, because they were operating at significantly reduced capacity those years due to a fire that impacted their crude unit.
- Limits are calculated by adding three standard deviations to the mean emission rate for each refinery and support facility during the baseline period. This will be sufficient to allow for anticipated normal variation in operations. An additional 3 percent buffer was added to allow for possible near-term growth in demand for transportation fuels. The EIA projects that overall demand for transportation fuels in the Western United States will peak at a level 2.7 percent higher than the demand in 2015. After that projected peak, the improved mileage of the fleet overcomes increased vehicle miles traveled and overall demand is projected to decline over the long term.
- Limits are increased to account for permitted facilities that were not operating at full capacity during the baseline period:
 - Chevron refinery GHG limit is increased by 494K metric tons of CO₂e based on GHG emissions identified in the Chevron Modernization Project DEIR, citing maximum GHG emissions at 5.43M metric tons of CO₂e.
 - Note that Chevron committed to No Net Increase of GHG emissions above their base of 4.6M metric tons of CO₂e, however Chevron can achieve this No Net Increase by providing offsets from their actual emissions.
 - Phillips 66 refinery GHG limit is increased by 270K metric tons of CO₂e based on the following projects that are not yet fully utilized:
 - Clean Fuels Expansion Project 64,994 MT CO₂e
 - Increase Hydrogen Production project 205,076 MT CO₂e

¹ <https://www.arb.ca.gov/cc/reporting/ghg-rep/reported-data/ghg-reports.htm>

- Tesoro refinery GHG limit is increased by 98.6K metric tons of CO₂e based on the following projects that are not yet fully utilized:
 - No. 3 Reformer heater firing increase 51,600 MT CO₂e
 - 5 Back-up Boilers 47,000 MT CO₂e
- Valero refinery GHG limit is increased by 932K metric tons of CO₂e based on three projects that are not yet fully utilized:
 - VIP Project 783,116 MT CO₂e
 - Cogeneration Project 138,747 MT CO₂e
 - ULSD Project 9,743 MT CO₂e
 - Note: these adjustments are based on Valero crude run during the baseline period being 33% below permitted crude capacity of 165,000 bpcd.
- Air Liquide hydrogen plant (in support of the Phillips 66 refinery) GHG limit is increased by 276K metric tons of CO₂e based on their involvement in the Hydrogen Project that is not yet fully utilized.
- Annual emission limits for each facility are shown below.

Table 12-16-301: GHG Emission Limits

Facility	2011–2015 Baseline Average (metric tons/year)	Operating Variability + 3% (metric tons/year)	Increase for Permitted, Under-utilized Sources (metric tons/year)	Emissions Limit (metric tons/year)
Chevron Refinery A-0010	4.33 M	599 K	494 K	5.43 M
Shell Refinery A-0011	4.12 M	440 K	None	4.56 M
Phillips 66 Refinery A-0016	1.36 M	281 K	270 K	1.91 M
Tesoro Refinery B-2758/2759	2.27 M	566 K	98.8 K	2.93 M
Valero Refinery, B-2626 & Asphalt Plant, B-3193	2.77 M	409 K	932 K	4.11 M
Martinez Cogen LP A-1820	407 K	49.4 K	None	456 K
Air Liquide H2 Plant B7419	787 K	270 K	276 K	1.33 M
Air Products H2 Plant B-0295	240 K	93.6 K	None	333 K

M = Millions, K = Thousands

ADJUSTMENT OF REPORTED GHG EMISSIONS

Reported Greenhouse Gas Emissions may be adjusted for emissions from sources operated solely to comply with District, State or federal air pollution control regulation. These sources must be built and operated after the adoption of this Rule, as designated by an Authority to Construct dated after the date of adoption of this Rule. An example would be a thermal oxidizer installed to control criteria pollutants but that increases GHG emissions by virtue of its energy consumption.

The rule provides a process for making Reported GHG Emissions, and Adjusted GHG Emissions available for review by each Affected Facility and any members of the public who have requested notification. Each Affected Facility and members of the public have

14 days to comment, and the APCO may issue a final Adjusted GHG Emission determination as soon as 21 days from notification, including publication of the information on the District website, and notification to those interested.

EXCEEDANCE OF EMISSIONS LIMITS

If the Affected Facility's Adjusted GHG Emissions exceed the limit, the owner/operator must investigate to determine the primary cause and contributing factors for the exceedance. The exceedance will be a violation unless the APCO determines:

1. The necessary corrective action would result in adverse air quality impacts that exceed the air quality benefits of compliance, or
2. That conditions that caused the exceedance could not feasibly be addressed prior to the next major maintenance shutdown.
3. That conditions that result from a significant California transportation fuel supply disruption could cause economic distress, and result in adverse air quality impacts from shipment of transportation fuels into the California market. A significant transportation fuel supply disruption is defined as an unplanned outage at any California refinery that extends longer than 1 month and reduces transportation fuel supply by more than ~10%, causing a shortage of more than 4 million barrels of transportation fuels. Transportation fuels include: California Reformulated Gasoline Blendstock for Oxygenate Blending (CARBOB) = finished gasoline less the ethanol portion; finished diesel (California Energy Commission analysis of Board of Equalization taxable and dyed diesel fuel) less biodiesel; and commercial jet fuel (Jet A) plus military jet fuel (JP-5 and JP-8) plus aviation gasoline.

ADMINISTRATIVE REQUIREMENTS

If the Affected Facility's Adjusted GHG Emissions exceed the limit, Section 12-16-401 requires the owner/operator to investigate to determine the primary cause and contributing factors for the exceedance. When the APCO notifies the Affected Facility of a GHG Emissions Limit exceedance, the owner/operator has 60 days to submit a report describing the primary cause and contributing factors for the exceedance, and corrective measures that will be implemented to prevent recurrence as well as justification for any corrective measures that were rejected. The report may include an explanation of why corrective measures would result in adverse air quality impacts, or could not feasibly be addressed prior to a next scheduled major maintenance shutdown.

Quarterly reports from each refinery shall be made available, beginning May 1, 2018 to ensure each Affected Facility has a monitoring system in place to measure GHG emissions, and that each facility is on-track to achieve compliance at the end of the year.

Section 12-16-403 of proposed Rule 12-16 specifies that a refinery owner/operator may designate as confidential any information required to be submitted under the rule that is claimed to be exempt from public disclosure under the California Government Code. The owner/operator is required to provide a justification for this designation, and must submit a separate public copy of the document with the information that is designated "trade secret" redacted. These provisions are intended to facilitate processing of trade secret information by expediting release of related public information while helping

ensure that trade secret portions are not inadvertently released. The purpose of Section 407 is purely administrative. Actual trade secret protections derive from the Government Code. The Air District's Administrative Code sets forth procedures for how the Air District will handle trade secret information that is responsive to Public Records Act requests.

COMPLIANCE DETERMINATION

Each Affected Facility will report emissions based on the requirements in Rule 12-15, Section 401. The APCO will review and approve the annual emissions inventory per Rule 12-15, Section 402. Compliance with Rule 12-16 is determined by comparing each facility's GHG emissions as set forth in the facility's inventory with the emissions limits in Section 12-16-300. If the inventory emissions, as adjusted are less than the limit, the facility complies. If the inventory emissions exceed the limit, the facility is out of compliance for the entire year and would be liable for a violation of the pollutant limit for each day of the calendar year.

The emissions limits shown for GHG Emissions in Rule 12-16, Section 300 may need to be adjusted for a variety of reasons:

- as GHG emissions measurement methods improve, especially for methane,
- as GHG emissions estimates for various process operations, startups, shutdowns, and malfunctions improve,
- as new regulations establish more restrictive limits on specific emissions sources, any resulting GHG emission reductions (or increases) will be subtracted from (or added to) the GHG emissions limits,
- to account for any other improvements in emissions inventory methods and reporting that are not yet anticipated.

Staff considered building an emissions limit adjustment process into the Administrative Requirements section of Rule 12-16, but decided that beyond the adjustments proposed for new sources required for compliance with new air quality regulations, and Carbon Intensity Neutrality, all other adjustments should require Board of Director's approval. Rule 12-16 may need to be amended in the future to include a variety of adjustments in the emissions limits.

IV. ECONOMIC IMPACTS

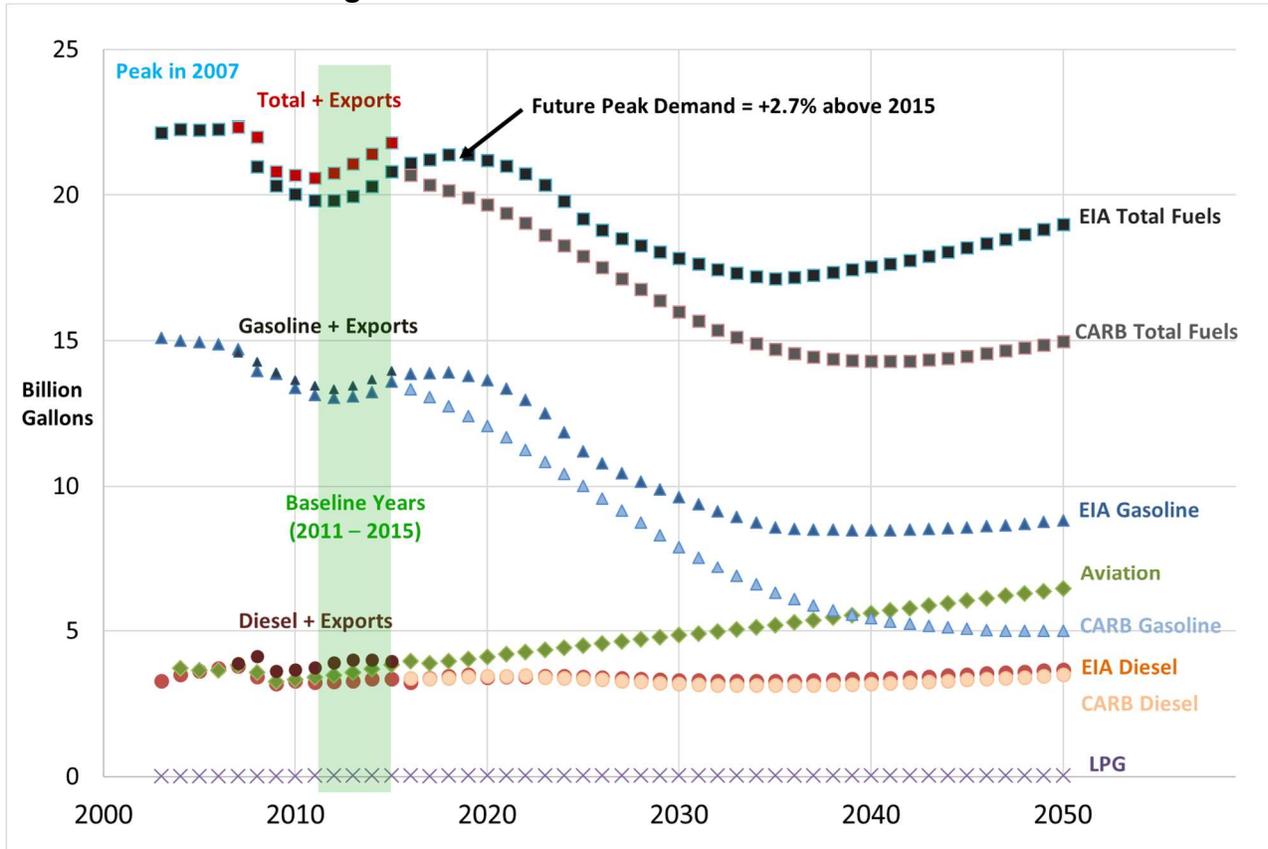
The California Health and Safety Code generally requires two different economic analyses for regulations planned and proposed by an air district. The first (H&S Code §40728.5) is a socioeconomic analysis of the adverse impacts of compliance with the proposed regulation on affected industries and business. The second analysis (H&S Code §40920.6) is an incremental cost effectiveness analysis when multiple compliance approaches have been identified by an Air District. Section 40920.6 applies only to rules requiring retrofit control technology. Since Rule 12-16 does not explicitly require installation of retrofit control technology, it is not possible to perform an incremental cost analysis.

Since the emissions limits in proposed Rule 12-16 are set at a level consistent with the full-capacity operation of the impacted facilities, they should be able to comply without incurring costs. Figure 3, below, provides the relevant information on California transportation fuel demand scenarios. In the case of increasing demand projections, the Energy Information Administration expects Pacific Region fuel demand to increase to a peak in 2018, then decline until ~ 2035. Gasoline demand is expected to reduce after 2020, aviation fuel demand shows a steady increase, and diesel demand is expected to be nearly flat. The California Air Resources Board also projects transportation fuel demand, and indicates a steady reduction in demand until ~2040.

Figure 3 also shows transportation fuel demand for the previous 10 years, including fuels exported to foreign markets. This data indicates demand for West Coast refineries peaked in 2007, including a relatively small volume of exported fuels. Total transportation fuel production was about 20.6 - 22 Billion gallons per year during the baseline period of 2011 – 2015. The highest projected demand scenario has total fuel demand at 21.4 Billion gallons in 2018. GHG emissions limits are set consistent with the Bay Area refining system's ability to meet future transportation fuel demands.

In the second scenario, where one refinery has an unplanned outage, other refineries must increase production to supply the shortfall. If the refinery unplanned outage is two weeks (14 days) or less, the remaining West Coast refineries can supply the market from existing inventories, and make up the production needed. If the unplanned shutdown lasts longer than 2 weeks, alternate supplies from beyond the West Coast are needed, incurring significant shipping costs to bring in gasoline – from the U.S. Gulf Coast and potentially from as far away as Europe and Asia.

Figure 3: California Refined Fuel Demand



Sources:

- http://www.energy.ca.gov/almanac/transportation_data/gasoline/
- http://www.energy.ca.gov/almanac/petroleum_data/
- <https://www.eia.gov/outlooks/aeo/data/browser/#/>
- <https://www.arb.ca.gov/planning/vision/vision.htm>

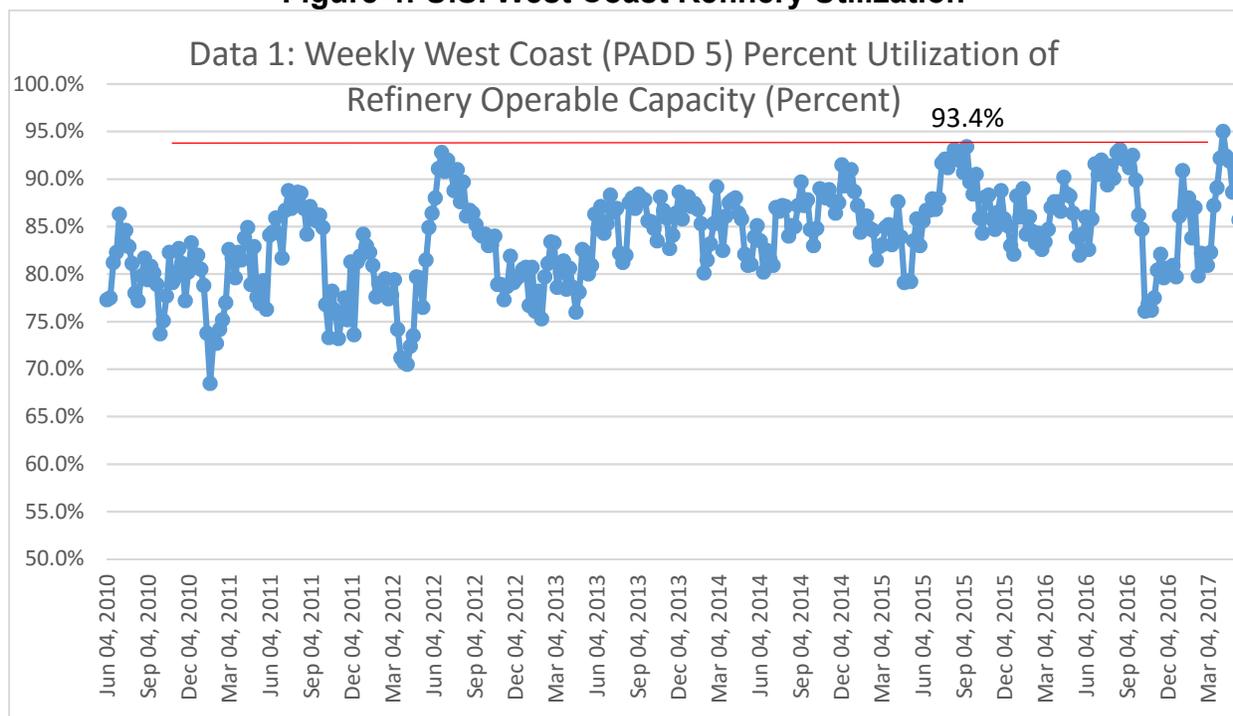
Staff also analyzed refinery operating utilization from the U.S. Energy Information Administration during the five-year baseline period from 2011 – 2015. This information is displayed on Figure 4, and is summarized in the Table 4 below:

Table 4: Average US West Coast Refinery Operating Utilization

Year	Average Utilization (%)	Peak Utilization (%)
2010	80.3	86.3
2011 – 2015	83.7	93.4
2011	80.7	88.8
2012	82.0	92.8
2013	83.4	88.6
2014	85.8	91.5
2015	86.5	93.4
2016	85.9	93.1

Note: Utilization data available for PADD 5 refineries, but not available for Bay Area refineries alone.

Figure 4: U.S. West Coast Refinery Utilization



Analysis of refinery utilization was performed to determine if the caps in Rule 12-16 would create a de facto production limitation for Bay Area refineries.

The data in Table 4 shows that the US West Coast refineries averaged 83.7 percent utilization during the 2011 – 2015 baseline period, ranging from an average utilization of 80.7 percent in 2011 to 86.5 percent in 2015. Refinery utilization increased in 2015, driven by higher gasoline and total fuel consumption, and by a significant refinery outage.² Refining utilization continued to be high in 2016. Peak refining utilization appears to be about 93.5 percent.

As described above, facility emissions limits were based on the average annual emissions during the baseline period. During this period, refinery utilization averaged 83.7 percent, and the highest annual utilization during the baseline period was 86.5 percent. The facility emissions limits have been established at the mean emission rate during the baseline period plus three times the standard deviation (normal variation in the data) to allow for normal year-to-year changes on an individual refinery basis, with an additional 3 percent added to ensure the refineries can meet the projected 3 percent increase in transportation fuel demand projected to peak in 2018. The resulting GHG Emissions limits are 7-15 percent above the peak GHG emissions from each refinery during the baseline period.

Given that the GHG emission limits are above peak refinery GHG emissions during the baseline period by more than 7 percent, they appear to be consistent with the current

² ExxonMobil's Torrance refinery was off-line from March 2015 – May 2016.

production capacity for the refineries as a group; Air District staff does not expect the cap in Rule 12-16 to have significant impacts on the market for refined fuels if fuel consumption is consistent with EIA projections or production capacity is not reduced by refinery closure or outage.

If one refinery on the West Coast experiences a significant, extended outage, a GHG emissions limit on Bay Area refineries may end up being a significant constraint on the market. When the supply for fuels is constrained, the impacts can be dramatic and felt statewide. In 2015, the ExxonMobil refinery in Torrance was offline for most of the year. This reduced refining production capacity in the state by roughly 10 percent. Because of this moderate reduction in supply, gasoline prices increased 27.6 cents over the typical cost of gasoline in California. The direct cost to the California economy was over \$2 billion.³ In addition, imports of refined products increased ten-fold, resulting in additional GHG emissions from shipping.

A. Socioeconomic Impact Analysis of Rule 12-16

The analysis of the socioeconomic impacts of proposed Rule 12-16 focus on whether the GHG Emission Limits create a production limit at each refinery that could impact supply-demand balance for transportation fuels.

Limiting Refinery Production

District staff analyzed a variety of data sources on refinery capacity and utilization, and observed that emissions limits contemplated in proposed Rule 12-16 do not appear to inhibit refining capacity, as the caps in the proposed rule appear to be consistent with the current maximum production capability of area refineries. Based on an analysis of US Energy Information Administration's (EIA) and the California Air Resources Board's year 2050 projections of demand in California for a variety of types of delivered energy (i.e. motor gasoline, jet fuel, liquid petroleum gases, kerosene, distillate fuel oils, etc.), BAAQMD projected the amount of fuel that the five Bay Area refineries would need to generate each year beyond 2015, to fulfill either EIA's or CARB's demand projections. BAAQMD then determined that GHG emissions generated by refineries' activity associated with either EIA's or CARB's projections would not exceed the proposed annual limit of 19 million metric tons contemplated in Rule 12-16. Thus, the proposed GHG limits should not inhibit the refining system in meeting future transportation fuel demand.

BAAQMD staff also reviewed whether the imposition of a GHG emissions limit would render the region at greater risk to supply disruptions that could result upward spikes in the price of fuel in the short-term or long-terms. In other words, staff sought to determine whether there is enough slack in the refining system to be able to weather an unplanned outage of a limited duration. BAAQMD determined that any lack of supply due to an unplanned outage of no more than two weeks at one refinery for could be made up from other refineries in PADD 5, as well as the four remaining refineries operating in the Bay

³ Gonzales, Dan, Timothy Gulden, Aaron Strong and William Hoyle. Cost-Benefit Analysis of Proposed California Oil and Gas Refinery Regulations. Santa Monica, CA: RAND Corporation, 2016.

Area.⁴ One caveat BAAQMD staff noted was that incidents on the order of the Chevron fire of 2012 or the Exxon-Mobil FCC explosion in Southern California in 2015 could result in significant disruptions to supply.

Another caveat expressed by District staff is that they do not expect the cap in Rule 12-16 to have significant impacts on the market for refined fuels so long as fuel consumption does not significantly increase above level projected by either EIA and CARB. Consumption for fuel can increase in absolute and relative terms for a variety of reasons, with a corresponding increase in price of fuel at the retail level. For example, population growth and an increase in the number of persons commuting into the area would result in greater demand for fuel whose supply could be limited by proposed Rule 12-16, resulting in a bidding-up of the price of fuel.

While the impact of a limited supply of refined product relative to demand on the retail price of fuel is observable in that prices tend to go up, how much prices increase can vary widely. Price spikes tend to be an inherent, if latent, feature of the oil refining-gasoline consuming activity, due to the combined facts that people tend to keep buying gas to drive their cars to work and other places even as the price of gas rises, and that California refineries tend to operate very close to capacity, meaning that refineries are unable to boost supply significantly when they need to. As Borenstein notes, “The market can easily become out of balance if there is an unexpected jump in demand, or more commonly, if a refinery experiences a supply disruption or outage and output is reduced.”⁵ Thus, in the case of the temporary shut-down of the southern Californian refinery in Torrance in 2015, BAAQMD staff quoted a California Energy Commission report that found that the 10 percent reduction in supply led to 27.6 cents increase in the cost of gasoline.⁶ ADE estimates that between February 12, 2015 and March 13, 2015 the average price of gasoline in the City of Los Angeles increased by 32 percent as a result of the Torrance shutdown, which occurred on February 18, going from \$2.65 a gallon to \$3.51 a gallon.⁷ The peculiarities of the California market also explain the magnitude of price increases in California when supply shocks occur. By way of example, Phoenix, Arizona in 2003 experienced a 30 percent drop in volume resulting from a pipeline failure, which then led to a 37 percent increase in price of gas in Phoenix.⁸ The FTC observed that prices in Phoenix in 2003 did not rise even faster largely because West Coast refineries were able to ship more gasoline into Arizona to hold down prices. The unique blend required in California makes it difficult (but not impossible) to ameliorate the effects of supply shocks along the lines of Phoenix in 2003, which perhaps explains why in one instance a ten percent drop in supply in southern California leads to almost 32 percent increase in price

⁴ PADD5 = “PADD 5” refers to a US EIA acronym for “Petroleum Administration for Defense Districts 5”, which consists of the states of Alaska, Washington, Oregon, California, Nevada, and Arizona.

⁵ Borenstein, Bushnell, and Lewis, “Market Power in California’s Gasoline Market” (May 2004), page 8

⁶ Bay Area Air Quality Management District, Draft 12-16 and Draft 11-18 (Draft Staff Report: October 2016) page 23 (citing California Energy Commission)

⁷ GasBuddy California <http://archive.is/tIKBy>

⁸ Federal Trade Commission, Gasoline Price Changes: The Dynamic of Supply, Demand, and Competition (2005), page 29

while a steeper 30 percent supply drop in Phoenix at another instance led to 37 percent price increase there.⁹

While the Torrance and the Phoenix examples demonstrate prices could rise by 32 to 37 percent in a short-time due to supply cuts, projecting changes to price following supply shocks is still not an exact science. One could apply the Torrance and Phoenix examples to roughly estimate price impacts. Thus, if production at refineries is capped per the limits contemplated in proposed Rule 12-16, then a percentage increase in population over some time period would be equivalent to a reduction in supply of gasoline by a similar percentage over the same period. Since ABAG projects the nine-county San Francisco Bay Area region to grow by 9.2 percent over the ten-year 2015-2025 period, when we apply the Torrance example, we arrive at an estimated 29.4 percent increase in price over the same ten-year period.¹⁰ This price increase would average less than three percent a year, which would have a cumulative effect but would be much less than a short-term price shock such as occurred in the Torrance incident, or other price fluctuations that occur due to market conditions. For example, in January 2015, regular gasoline in California cost \$2.68 per gallon, of which \$1.29 was attributable to the price of crude oil purchased by the refinery. Six months later, a gallon of regular gas was \$3.45, of which \$1.45 was attributable to crude oil, for a 12 percent increase over a six-month period in the cost of a gallon of gas attributable to crude oil.¹¹ The overall price of gas in this six month-period increased by 29 percent, from \$2.68 to \$3.45 a gallon.

In short, proposed Rule 12-16 would introduce a regime to limit the production of refined petroleum products, but for various reasons, the price of these refined products can go up and down, consequently lessening the effect in modelling the socioeconomic impacts of a limit on the production of refined petroleum products supply on the wider economy. In addition, after consideration of comments received on the socioeconomic report, a provision was added to the rule (Section 12-16-303.3) that addresses the fuel-supply restriction scenario. With the new provision, Rule 12-16 is not expected to contribute to price increases or increased fuel imports due to constrained supply resulting from extended, unplanned, refinery shutdowns.

Small Business Disproportionate Impacts

According to the State of California, among other things, small businesses generate annual sales of less than \$10 million.¹² Of the eight sources affected by the proposed rule, none are small businesses. As a result, small businesses are not disproportionately impacted by proposed Rule 12-16.

⁹ While it is true that California's market for refined product is almost a closed market due to the special blends generated only for Californians, there are some refiners outside of California who produce to California's standard, although delivery of their products takes 2 to 5 weeks and entails prohibitive transport costs. See Borenstein, Bushnell, and Lewis, "Market Power in California's Gasoline Market" (May 2004), page 20; see also US EIA, "California's gasoline imports increase 10-fold after major refinery outage" (October 2015) <http://archive.is/oRGoI>

¹⁰ See <http://archive.is/qGomH>: The nine-county San Francisco Bay Area region is projected to grow over the ten-year 2015-2025 period by 672,600 persons, from 7,461,400 to 8,134,000. Including estimated number of non-residents commuting daily into the Bay Area for jobs, the total number of persons in the Bay Area will go from 7,938,800 in 2015 to 8,668,700 in 2025, for a 9.2 percent increase over the ten-year 2015-2025 period.

¹¹ See <http://bit.ly/2mkDgLW>

¹² <http://www.leginfo.ca.gov/cgi-bin/displaycode?section=gov&group=14001-15000&file=14835-14843>

V. REGULATORY IMPACTS

The previous version of Rule 12-16 included a cap on criteria pollutant emissions. The criteria pollutant limits have been removed from this version of the rule which largely eliminates the Air District's Staff's significant concerns about the legal defensibility of the rule. The current rule focuses on GHG emissions. This would not conflict with Air District, state and federal requirements for new source review permitting.

The only potential regulatory conflict is with the statewide Cap-and-Trade program. However, CARB has expressed support for Rule 12-16 as an approach that "could help to ensure that these sources do not add to the state's overall emissions of greenhouse gases and criteria or toxic pollutants."¹³ Also, since the limits are set high enough to be consistent with the full-capacity operations of the refineries, the rule would not interfere with the refineries' ability to participate in Cap-and-Trade as they are currently configured. Moreover, the rule is consistent with the draft Scoping Plan that calls for significant decreases in refinery carbon intensity.

A fixed GHG cap that would prevent increases in refinery GHG emissions may also limit potential increases of refinery criteria pollutants emissions from associated sources. An initial report by the California Office of Environmental Health Hazard Assessment (OEHHA) on emissions from facilities in various industrial sectors, including petroleum refining, found moderate correlations between GHG and criteria pollutant emissions.¹⁴ GHG emissions at refineries are predominantly associated with combustion processes, which also generate emissions of criteria pollutants. Although Rule 12-16 would not reduce refinery GHG emissions, the rule would prevent increases in GHG emissions, which may also, to some extent, limit increases in criteria pollutant emissions and associated localized and regional exposures to these pollutants.

On a regional scale, constraints to increases in refinery criteria pollutant emissions may also limit increases in refinery contributions to regional levels of criteria pollutants, such as PM_{2.5}. The Air District estimates that refinery emissions contribute to approximately 5 percent of the annual-average total PM_{2.5} concentrations in the Bay Area.¹⁵ This estimate includes contributions to both primary and secondary PM_{2.5} from refinery emissions. On a localized scale, the relationship between facility-wide emissions levels and potential localized impacts is much more complex. Because PM_{2.5} from refineries is produced predominantly from combustion, the resulting PM_{2.5} is sent aloft, and therefore typically contributes to regional PM_{2.5} as opposed to producing localized impacts, such as those associated with wood smoke or diesel engines. It is possible that some combustion sources may have localized impacts depending on the stack height of the specific source, local meteorology, and topography of the surrounding area. While Rule 12-16 may limit the increase of regional impacts, any constraints on potential localized impacts would be

¹³ Letter from Richard W. Corey, Executive Officer, CARB to Jack Broadbent, Executive Officer, BAAQMD, April 5, 2017.

¹⁴ OEHHA, 2017. Tracking and Evaluation of Benefits and Impacts of Greenhouse Gas Limits in Disadvantaged Communities: Initial Report. February.

¹⁵ BAAQMD, 2017. Final 2017 Clean Air Plan. Adopted April 19, 2017.

highly dependent on the specific conditions of the individual source, facility, and surrounding area.

In conclusion, Rule 12-16 is compatible with statewide efforts to limit refinery pollution and will prevent significant increases in pollutants with global impact (GHG) and pollutants with localized and regional impact (criteria pollutants such as PM_{2.5}).

VI. THE RULE DEVELOPMENT / PUBLIC PARTICIPATION PROCESS

The publication of this document is intended to support the initial public comment portion of the development of these two rules. Key milestones dates for the rest of the process are as follows:

November 9, 2016	Open House in Richmond
November 10, 2016	Open House in Oakland
November 14, 2016	Open House/Scoping Meeting in San Francisco
November 15, 2016	Open House in San Jose
November 16, 2016	Open House/Scoping Meeting in Martinez
November 17, 2016	Open House in Fremont
December 2, 2016	Comment deadline for draft rules and NOP/IS
March 24, 2017	Final rules, staff report, draft EIR published for comment
March 27, 2017	Workshop in Cupertino
March 28, 2017	Workshop in Benicia
March 29, 2017	Workshop in Hayward
March 30, 2017	Workshop in Richmond
May 8, 2017	Comment deadline for final proposed rule
May 25, 2017	Board Package, including Final Staff Report, Responses to Comments, and final rule language published
May 31, 2017	Public Hearing - Board continuation of Public Hearing to revise proposed Rule 12-16 to establish GHG Emission Limits only.
June 6, 2017	Publication of revised rule, staff report and socioeconomic report.
June 12, 2017	Comment deadline for revised proposed rule
June 21, 2017	Continued Public Hearing on revised proposed rule

IV. CONCLUSION / RECOMMENDATION

Pursuant to the California Health and Safety Code Section 40727, before adopting, amending, or repealing a rule the Board of Directors must make findings of:

- Necessity,
- Authority,
- Clarity,
- Consistency,
- Non-duplication, and
- Reference.

The Air District staff believes Rule 12-16 as currently proposed meets the requirements of this statute for the reasons listed below.

Necessity:

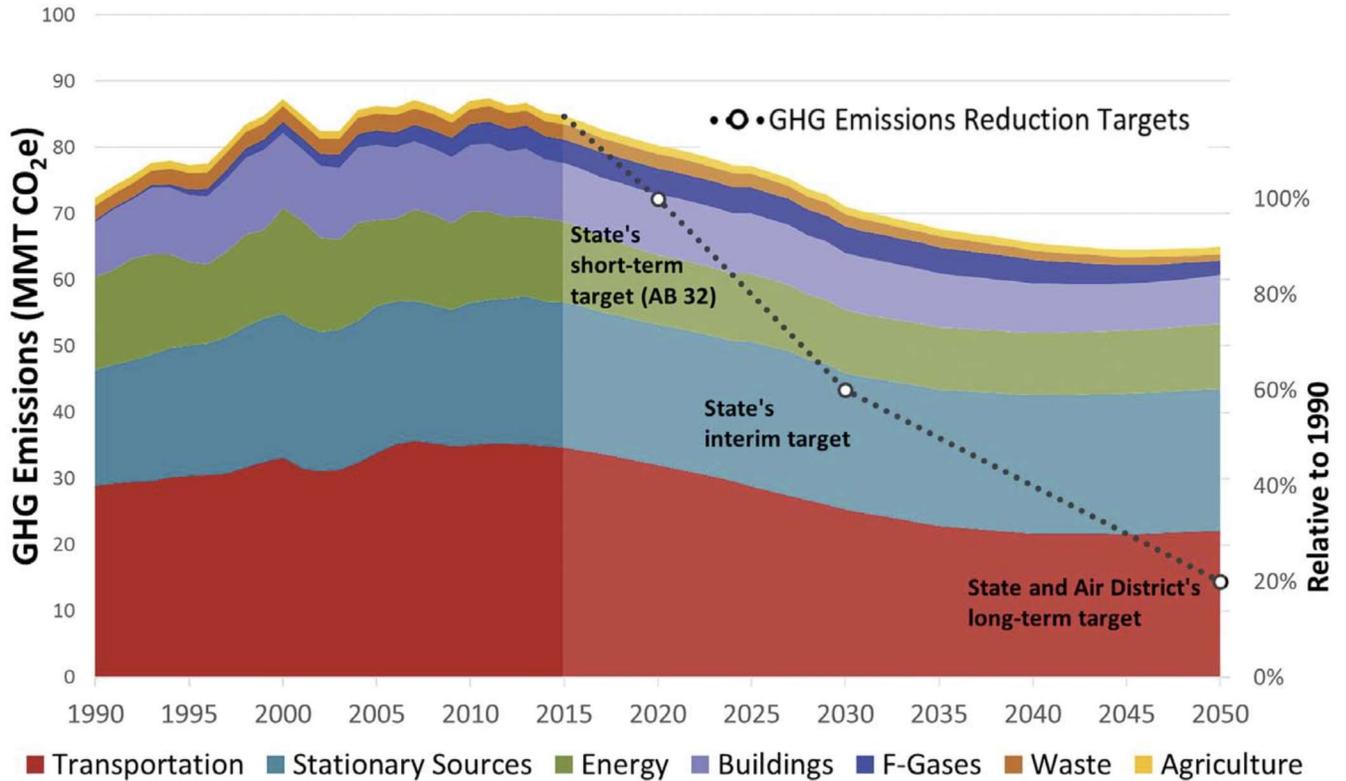
The proposal is necessary because neither the top-down nor the market-based approach to climate protection have proven effective in sufficiently reducing climate pollutants¹⁶ and there are no finalized plans to impose a carbon tax nor direct regulation of industrial sources of GHGs. Because there has been two decades of efforts without significant demonstrable progress on the state, federal or international levels, it is imperative / necessary for local governing agencies such as the Air District with the political will to do as much as legally possible to regulate GHG emissions. Because of this imperative, the Air District is compelled to act within its authority to limit and reduce GHG emissions from refineries and other significant sources to achieve short-term, interim, and long-term GHG reduction goals until such efforts are no longer necessary.

- International Treaties: Little to no progress has been made since the ratification of the 1997 Kyoto Protocol was adopted in Kyoto, Japan, on and became effective in 2005. Although the United States was a signatory to the Protocol, it has never been ratified. While, the U.S. also entered into the Paris Accord, on June 1, 2017, the current President announced that the United States will withdraw from the Paris climate agreement, rejecting the climate agreement significantly compromises the nearly 200-nation pact that brings the world's countries together in the fight against climate change.
- Market-Based Approach: The State's Cap-and-Trade approach to reducing GHGs from various industrial sectors have yet to produce significant reductions from the refineries in the Bay Area. Changes in GHG emissions from the petroleum refining industrial sector have not been the result of regulation—but primarily due to economic and market forces, relating more to the state of the economy, with decreases since the passing of AB 32 related to the downturn in the economy and more currently, trending to increase as the economy improves.

¹⁶ Air District GHG emissions projection indicate that stationary source GHG emissions will not achieve the short term 2020 goal of 1990 emissions.

- No Direct State Regulation of Refinery GHG Emissions: Since the passing of AB 32, in 2006, CARB has not adopted any regulation that directly limits or reduces the GHG emissions from refineries. Up to this point, the State has solely relied on market forces via Cap-and-Trade to address GHG emissions from this sector. It is imperative to ensure that GHG emissions are limited as soon as possible to curtail increases in GHG emissions from major sources such as refineries in our efforts to control the contributing pollutants to anthropogenic climate change.
- Global Pollutant, Locally Emitted: While it is accepted that GHGs collectively have a global impact, these pollutants are emitted locally from various sources, including mobile / fuel, stationary source / industrial, energy, agricultural, water, waste management, and natural lands sectors. Historically, the stationary sources are controlled most effectively at the local level by the agencies most familiar with them, that have a long history regulating their emissions – the local air districts.
- Necessary First Step to Limiting GHG Emissions: Limiting GHG emissions from refineries is a needed first step to ensure that as demand for transportation grows and crude and product slates change, GHG emissions from this significant source does not erase any progress made in the last few years while CARB and the Air District look for additional ways to limit or reduce GHG emissions.
- State and Air District Interim and Long-term GHG Reduction Targets: In 2013 the Air District adopted a long-term GHG emissions reduction goal of 80 percent of 1990 levels by 2050. Recently, in the 2017 Clean Air Plan, the Air District adopted the interim GHG reduction goal of 40 percent reduction by 2030. These goals are consistent with the State’s interim and long-term GHG reduction goals. AB 32 also established a short-term goal of reducing the State’s GHG emissions to 1990 levels by 2020. Figure 3-9 from the Air District Clean Air Plan shows that we are NOT on-track to meet the 2020 goal, and dramatic reductions are needed in less than 13 years to achieve the 2030 goal.

Projected Bay Area GHG Emissions by Sector Based on State Policies, (100-year GWP)



- Achieving Adopted Goals:** To achieve these goals, major sources of GHG emissions in the Air District would have to make significant reductions in their GHG emissions. Air District emissions inventory indicates that refineries were responsible for 68 percent of the stationary source GHG emissions in 2015. The following table illustrates the annual emissions and percent emission reduction needed if refineries were to proportionate reduce their GHG emissions to meet the short-term, interim and long-term goals.

Refinery GHG Emissions Projections Based on State and Air District GHG Goals

Calendar Year	State and/or Air District GHG Reduction Goals (relative to 1990)	Refinery GHG Emissions (MMT CO ₂ e)	Percent Reduction of 2015 GHG Emissions needed	Percent Reduction needed each year
2015	n/a	14.5	n/a	n/a
2020	100%	11.6	20%	5%
2030	40% Below	7.2	50%	3%
2050	80% Below	2.2	85%	1.75%

The Air District's best estimated projections show that the Air Basin would not achieve its goals for 2020, 2030, nor 2050 even considering state policies and regulations already adopted, as well as those that are likely to be adopted and implemented over the next ten to 15 years.¹⁷ To successfully implement many of the state policies and regulations, the State will need cooperation and assistance from the regional and local agencies.¹⁸ The finding of necessity is further discussed in Appendix A to the Staff Report.

Authority:

California law gives the Air District "primary responsibility" for control of "air pollution" from stationary sources within its jurisdiction (H&SC § 40000), with "air pollutant" defined to include, among other things, "carbon" and "gases" (H&SC § 39013). This designation of authority to the air districts is independent of the federal Clean Air Act's coverage of GHG emissions, and is fully independent of EPA's authority in this area. Similarly, it does not depend upon any aspect of CARB's authority over GHGs or other pollutants. AB 32 specifically included a provision preserving the Air Districts' preexisting authority over GHG emissions (H&SC § 38594). The Air District is also expressly allowed to set standards more stringent than those in State law (H&SC § 39002). Air districts therefore have authority to regulate GHGs from stationary sources which have been the subject of State legislation and CARB rules, and to impose stricter GHG emission standards on these sources. The authority under which this rule is proposed is further discussed in Appendix A.

Clarity:

Proposed new Regulation 12, Rule 16 has been written or displayed so that its meaning can be easily understood by the persons directly affected by them: the five Bay Area refineries:

1. Chevron Products Company, Richmond (BAAQMD Plant #10)
2. Phillips 66 Company—San Francisco Refinery, Rodeo (BAAQMD Plant #21359)
3. Shell Martinez Refinery, Martinez (BAAQMD Plant #11)
4. Tesoro Refining and Marketing Company, Martinez (BAAQMD Plant #14628)
5. Valero Refining Company—California, Benicia (BAAQMD Plant #12626) and associated Asphalt Plant (BAAQMD Plant #13193)

And the three affected, refinery-related facilities are:

1. Air Products and Chemicals hydrogen plant, Martinez (BAAQMD Plant #10295)
2. Air Liquide hydrogen plant, Rodeo (BAAQMD Plant #17419)
3. Martinez Cogen, L.P. (BAAQMD Plant #1820).

¹⁷ Potential emission reductions from additional stat actions that may be included in the 2017 Scoping Plan update are not reflected in this analysis.

¹⁸ Bay Area Air Quality Management District, 2017 Clean Air Plan, p. 3-19.

Consistency

The proposed rule is consistent with the California Global Warming Solution Act (H&SC Section 38500 et seq.) Cap-and-Trade Program, which is currently the only statewide regulation that addresses GHG emissions from refineries. Under Cap-and-Trade, each refinery is allowed a certain amount of GHG emissions—this is the refinery’s GHG “allowance.” If a refinery were to exceed its allowance, it must purchase GHG emission credits to cover the amount of GHG emission in excess of its allowance. If a refinery operates below its allowance, the difference between its GHG emissions and its allowance generates credits for that refinery that can be sold on the credits market. As written, proposed Rule 12-16 does not interfere with the Cap-and-Trade program. A refinery can operate both under the GHG emission limits and its allowance under Cap-and-Trade. In this sense, proposed Rule 12-16 is in harmony with the Cap-and-Trade program because Rule 12-16 encourages refiners to minimize the refineries’ GHG emissions, which can help to generate GHG credits, which can be used in the Cap-and-Trade program. However, if a facility were to exceed its GHG emissions limit under Rule 12-16, it could not utilize credits under Cap-and-Trade to meet its 12-16 obligation.

Non-Duplication

Proposed Rule 12-16 meets the non-duplication finding because there is no other federal or state rule or regulation that directly limits GHG emissions petroleum refineries and, therefore, do not impose duplicative requirements and the requirements of proposed Rule 12-16 are necessary to execute the powers and duties granted to the Air District.

Reference

Both the State of California and the Air District have established GHG emission reductions goals, pursuant to the California Health and Safety Code. Proposed Rule 12-16, which is one step toward the achievement of these goals, is authorized under H&SC Sections 38594, 39002, 39013, and 40000.

A socioeconomic analysis prepared by Applied Development Economics, Inc. has found that the proposed rule should not have a significant economic impact or cause regional job loss. A revised California Environmental Quality Act (CEQA) Environmental Impact Report prepared by Environmental Audit, Inc., concludes that the proposed rule would not result in adverse environmental impacts. Air District staff has reviewed and accepted this analysis as well. The CEQA document was made available for public comments and one comment was submitted. The comment and response are found at the end of Appendix C: CEQA Environmental Impact Report.

The proposed new Rule 12-16 has met all legal noticing requirements, has been discussed with the regulated community and other interested parties, and reflect the input and comments of many affected and interested stakeholders. Air District staff recommends adoption of proposed new Rule 12, Regulation 16: Petroleum Refining

Facility-Wide Greenhouse Gas Emission Limits; and adoption of the revised CEQA Environmental Impact Report.

APPENDIX A
SUPPLEMENT TO REGULATORY FINDINGS

APPENDIX A: SUPPLEMENT TO REGULATORY FINDINGS

The Air District derives its regulatory authority from the Health and Safety Code. Before adopting, amending or repealing a rule or regulation, the Air District Board must make findings of authority, necessity, clarity, consistency, non-duplication, and reference, as defined in the Health and Safety Code (H&SC § 40727. Required findings). The following sections describe support for these findings regarding Proposed Rule 12-16.

Authority and Reference

In 2007, the U.S. Supreme Court ruled that greenhouse gases (GHGs) qualified under the federal Clean Air Act's definition of an "air pollutant" (*Massachusetts v. Environmental Protection Agency*). The Clean Air Act originally named six known pollutants, including ground-level ozone, particulate matter, carbon monoxide, lead, sulfur dioxide and nitrogen dioxide, but also established a process called the "endangerment finding" for the Environmental Protection Agency (EPA) to decide whether additional pollutants should be regulated under the act. In 2009, EPA issued its "endangerment finding" on GHGs stating that current and projected levels of six GHGs threaten the health and human welfare of current and future generations. EPA began regulating GHG emissions under the Clean Air Act from mobile and stationary sources with its *Light-Duty Vehicle GHG Standards and Corporate Average Fuel Economy Standards Rule* (LDV Rule) in 2010, and its *Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule* (Tailoring Rule) in 2011. The Tailoring Rule required major new and modified pollution sources such as power plants and factories to use the best available technology to limit carbon emissions. In 2014, the U.S. Supreme Court upheld EPA's authority to issue regulations targeting GHG emissions from mobile and stationary sources, though it narrowed slightly the scope of its Tailoring Rule (*Utility Air Regulatory Group v. Environmental Protection Agency*).

Regulatory efforts aimed at curbing GHG emissions began earlier in the State of California. In 2005, Governor Schwarzenegger's Executive Order (EO) S-3-05 set the following GHG emissions reduction targets for the State of California:

- By 2010, reduce GHG emissions to 2000 levels
- By 2020, reduce GHG emissions to 1990 levels
- By 2050, reduce GHG emissions to 80 percent below 1990 levels

EO S-3-05 also laid out implementation and reporting responsibilities among the state agencies, including the California Air Resources Board (CARB). In 2006, Assembly Bill 32 (AB 32), the *California Global Warming Solutions Act of 2006* (Nuñez, Chapter 488, Statutes of 2006), codified into statute the short-term GHG reduction target outlined in EO S-3-05. AB 32 requires the State of California to address climate change by reducing its GHG emissions to 1990 levels by 2020. In 2016, the California legislature passed the Senate Bill (SB 32), the *California Global Warming Solutions Act of 2016: emissions limit* (Pavley, Chapter 249, Statutes of 2016), which codified into statute the GHG emissions reductions target of 40 percent below 1990 levels by the year 2030 contained in Governor Brown's EO B-30-15. Along with SB 32, the Legislature passed companion legislation

AB 197, which requires CARB to consider the social costs of GHG emissions and to prioritize direct emission reductions at large stationary sources, and from mobile and other sources. In addition, AB 197 requires annual posting of GHG, criteria and toxic emissions at the local and sub-county levels for stationary sources, and at least at the county level for mobile sources. These requirements are intended to protect the State's most impacted and disadvantaged communities and to ensure the transparency of the State's GHG reduction actions.

As discussed above, the authority to regulate GHG emissions from all sources is granted to federal agencies by the Clean Air Act, and to the State of California by the AB 32 and SB 32 statutes. However, the Air District has authority independent of that vested in both the State and federal agencies to regulate greenhouse gases.

California law gives the Air District "primary responsibility" for control of "air pollution" from stationary sources within its jurisdiction (H&SC § 40000), with "air pollutant" defined to include, among other things, "carbon" and "gases" (H&SC § 39013). This designation of authority to the air districts is independent of the federal Clean Air Act's coverage of GHG emissions, and is fully independent of EPA's authority in this area. Similarly, it does not depend upon any aspect of CARB's authority over GHGs or other pollutants. AB 32 specifically included a provision preserving the Air Districts' preexisting authority (H&SC § 38594). The Air District is also expressly allowed to set standards more stringent than those in State law (H&SC § 39002). Air districts therefore have authority to regulate GHGs from stationary sources which have been the subject of State legislation and CARB rules, and to impose stricter GHG emission standards on these sources.

Based on this authority, the Air District has already adopted GHG emission reduction goals, and passed a regulation related to GHG emissions from stationary sources. The Air District has, since 2008, implemented a fee program (Regulation 3, Schedule T) for GHG emissions that requires permitted facilities, including refineries, to quantify emissions of GHG emissions for inventory and fee purposes. In 2013, the Air District adopted a long-term GHG emissions reduction goal of 80 percent of 1990 levels by 2050. Recently, in the 2017 Clean Air Plan, the Air District adopted the interim GHG reduction goal of 40 percent reduction by 2030. These goals are consistent with the State's interim and long-term GHG reduction goals established by AB 32 and SB 32.

Necessity

There is a section in the H&SC that describes the criteria to establish a necessity finding for rules or regulations that apply to criteria air pollutants (H&SC § 40001(c). Rules and regulations). It reads "Prior to adopting any rule or regulation to reduce criteria pollutants, a district shall determine that there is a problem that the proposed rule or regulation will alleviate and that the rule or regulation will promote the attainment or maintenance of state or federal ambient air quality standards." Although Section 40001(c) is not necessarily applicable to GHGs, a necessity finding for Proposed Rule 12-16 should be analogous.

In broad terms, Proposed Rule 12-16 addresses climate change, the long-term change in Earth's climate largely attributed to the increase in anthropogenic GHG concentrations in the atmosphere. Climate change undoubtedly poses one of the most serious threats to the well-being, public health, natural resources, economy, and the environment of our planet. It is already affecting California and the Bay Area, and is predicted to result in the worsening of heat waves, drought, loss of snowpack, sea level rise, more frequent and intense wildfires, more severe smog, and harm to natural and working lands already occurring.¹⁹

The Intergovernmental Panel on Climate Change (IPCC), the international authority on the issue, concluded in its Fifth Assessment Report²⁰, issued in 2014, that "warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia" and that "continued emission of greenhouse gases will cause further warming and long-lasting changes in all components of the climate system, increasing the likelihood of severe, pervasive and irreversible impacts for people and ecosystems." Furthermore, the IPCC states that *aggressive and immediate GHG emissions reductions* are needed to limit the average global warming to under 2 degrees C by 2050 and avoid potentially catastrophic climate change impacts.

Though GHG have global effects, these pollutants are emitted locally from various sources, including the mobile, stationary source, energy, agricultural, water, waste management, and natural lands sectors. Refineries are the largest emitters of GHG emissions from the stationary source sector, both in the State of California and in the Bay Area. Historically, stationary sources of air pollutants are controlled most effectively at the local level. Local air districts, such as the Bay Area Air District, have the most expertise and familiarity with these sources and have a long history regulating their emissions. As discussed in the previous section, air districts have the primary regulatory authority for stationary sources of GHG emissions.

As explained below, Proposed Rule 12-16 is necessary and effective in avoiding increases in GHG emissions from Bay Area refineries that potentially could occur due to changes in processed crudes and that would prevent the State of California and the Air District from meeting their interim and long-term climate goals.

1. Bay Area refinery GHG emissions may increase with no Air District action

The refining sector is unique among all the source categories of GHG in the Bay Area. First, this sector includes the largest stationary sources of GHG emissions in the Air District. The top four sources of GHG emissions in the Air District are all refineries, with the fifth refinery ranking among the top ten GHG sources. While refineries represent around 18 percent of all Bay Area GHG emissions, they account for approximately 70 percent of GHG emissions from stationary sources, where the Air District's primary

¹⁹ OEHHA (2013) Indicators of climate change in California. Available at:

<https://oehha.ca.gov/media/downloads/risk-assessment/document/climatechangeindicatorsreport2013.pdf>

²⁰ IPCC (2014) Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the IPCC. Available at: <https://www.ipcc.ch/report/ar5/syr/>

regulatory authority resides.²¹ Second, the refining sector is also subject to a unique set of circumstances that could lead to emissions increases. This distinguishes refineries from other sectors of significant GHG-emitting stationary sources, and is the primary reason why adoption of a rule preventing increases in GHG emissions from refineries is a necessary and appropriate first step in the Air District's efforts to achieve GHG emissions reduction goals.

After refineries, the next largest stationary sources of GHG emissions are power generating facilities. These facilities are already subject to multiple requirements that can prevent increases in their GHG emissions, including the following:

- California's Renewable Portfolio Standard (RPS), which requires that 50 percent of the State's electricity be generated from renewable energy by 2030.
- SB 1368 (Perata, Chapter 598, Statutes of 2006) requires that baseload electricity generation owned by, or under long-term contract to, publicly owned utilities, meet a 1,100 pounds of carbon dioxide per megawatt-hour (lbs CO₂ / MWh) limit. This bill was passed to encourage reliance on power plants that minimize their emissions of GHG, and it prohibits facilities from switching to fossil fuels that generate higher GHG emissions.
- Recently constructed electricity generating facilities have operational limits such as startup and shutdown limits, co-pollutant caps, and one facility, Russell City Energy Center, already has a GHG limit. These startup and shutdown limits and co-pollutant and GHG emissions caps help act as a backstop limiting operations to a certain level.

It is also important to note that the power generating sector is not facing a situation analogous to refineries in which a change in the method of operations (in the case of refineries, possible changes to crude slate characteristics) could lead to systemic increases in emissions. The relatively advanced state of GHG regulation and the absence of factors indicating possible increases in emissions put the power generating sector in a lower priority position for GHG regulation by the Air District.

Currently, there are no regulations in place that would prevent GHG emission increases at refineries. There are several Air District rules targeting criteria air pollutant emissions from refineries, including recently adopted rules to reduce PM from FCCUs (Rule 2-5), VOC from equipment leaks (Rule 8-18) and SO₂ from coke calcining operations (Rule 9-14). While refinery criteria pollutant emissions have declined over time, refinery GHG emissions have been relatively constant over the last few years.²²

²¹ BAAQMD (2017) 2017 Clean Air Plan: Spare the Air, Cool the Climate. Chapter 3. Available at: http://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-_proposed-final-cap-vol-1-pdf.pdf?la=en

²² According to CARB's GHG mandatory reporting data from 2008 through 2015.

Changes in crude slate or facility operations

Oil refineries use large quantities of energy to convert crude oil into transportation fuels, mainly supplied from the combustion of crude oil and natural gas, and from grid electricity. Carbon intensity is the amount of CO₂ emitted for each unit of product generated or input processed (e.g., pounds of CO₂ emitted per kW of electricity generated for a power plant). The carbon intensity of a refinery is directly related to its energy consumption. The most thorough methodology to calculate the carbon intensity for the refining sector needs to account for the CO₂ emissions from all energy inputs.

In its proposed workshop report for Proposed Rule 13-1,²³ Air District staff calculated preliminary baseline carbon intensities for each refinery, using CARB GHG emissions for refineries and support facilities, and reasonable estimates of crude and non-crude oil throughput. These carbon intensities were calculated using the baseline period years of 2013 – 2015, though years representing abnormal operation for a refinery were substituted with an alternate year representing normal operation. No adjustments were made for net import of power, hydrogen or steam from external entities since that information was unavailable at the time of the workshop report. Crude throughput estimates are based on 90 percent utilization of each refinery's nameplate crude capacity found on the US EIA website.²⁴ No non-crude oil feedstocks are included for typical refinery operations, except one refinery that receives pipeline shipments of gas oil regularly. The carbon intensity calculations include adjustments for expected GHG emissions reductions from feasible and cost-savings energy improvement projects that were not implemented during the baseline period. The proposed workshop report describes the methodology for these calculations in more detail.

These preliminary baseline carbon intensity calculations showed that carbon intensity varies greatly among Bay Area refineries, ranging from 49 – 84 metric tons of CO₂ equivalent per thousand barrels feedstock (MT CO_{2e} / thousand bbls feedstock). This variation could be explained by the difference in the crude slate processed at each refinery and the variation in facility operations, such as in process and equipment efficiency. For illustrative purposes, Air District staff estimated an extreme scenario for GHG emissions increases from the refining sector. If all refineries were to modify their operations in a way that increases their carbon intensity to the upper range value, then total Bay Area refinery GHG emissions could increase by as much as 33 percent. This scenario does not consider how refinery nameplate capacity or permit limits on criteria air pollutants may curtail GHG emissions. While these factors would likely have a tempering

²³ BAAQMD (2017) Draft Workshop Report on Draft Regulation 13: Climate Change Pollutants, Rule 1: Petroleum Refinery Carbon Intensity Limits or Facility-Wide GHG Emissions Limits. Available at: <http://www.baaqmd.gov/~media/files/planning-and-research/rules-and-regs/workshops/2017/reg-13-rule-1/draft-rg1301-workshop-report.pdf?la=en>

²⁴ <https://www.eia.gov/petroleum/refinerycapacity/table5.pdf>

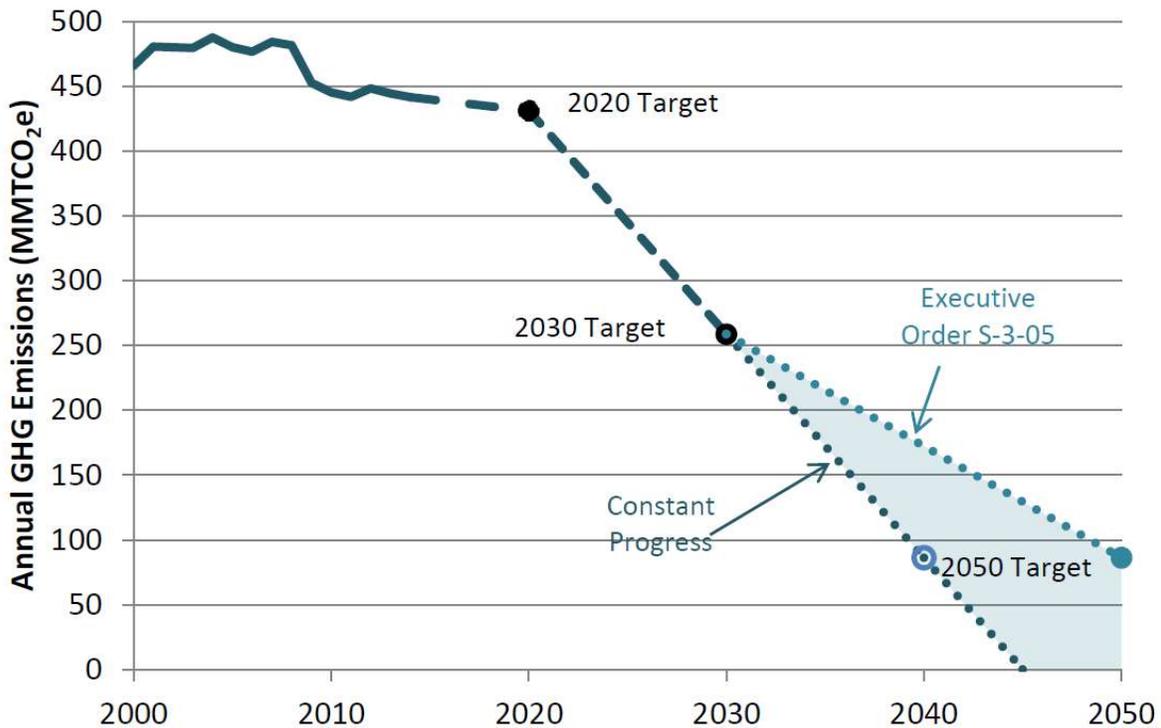
effect on GHG emissions increases, quantifying that effect would require further investigation.

The Air District is in the process of investigating and, if possible, quantifying the relationship between crude slate properties and GHG emitted during the processing of such crude slates. Air District Regulation 12, Rule 15 (Rule 12-15) requires monthly reporting of crude slate properties relevant to air pollutants such as API gravity (crude oil density), sulfur content, vapor pressure (crude oil volatility), BTEX (benzene, toluene, ethylbenzene and xylene) and metals (iron, nickel, and vanadium) content. The purpose of the crude slate reporting in Rule 12-15 is to establish a baseline crude slate for each of the refineries and then to track changes in that crude slate which, along with improved emissions data will help establish and monitor the relationship between crude slate and emissions from the refineries. This investigation may form the basis for future regulation focusing on crude slate characteristics. In the meantime, proposed Rule 12-16 is intended to act as a backstop to prevent GHG increases.

2. The State cannot meet its regulatory GHG emission reduction goals if Bay Area refinery emissions increase

The State's long-term climate goal of reducing 80 percent of its GHG emissions by 2050 is ambitious. It is based on the scientific consensus around the need for *aggressive and immediate GHG emissions reductions* to limit the average global warming to under 2 degrees C by 2050 and avoid potentially catastrophic climate change impacts. The 2030 limit was established to put the State on the path to meet its long-term goal by requiring constant progress toward 2050, and by encouraging the early development and implementation of policies that will need to be in place by then. To meet such challenging climate goals, all California economic sectors must not only stabilize their GHG emissions but dramatically decrease them. Moreover, these GHG emissions reductions must happen at a much faster pace than that required to meet the 2020 goal (see Figure A1).

**Figure A1
Plotting California's Path Forward**



Source: CARB 2017 Climate Change Scoping Plan Update: Figure I-5.

Of the three largest GHG emitting sectors, the industrial sector is the only one that does not have regulations in place to prevent GHG emission increases. The transportation sector is the largest contributor to the State's GHG emissions; it was responsible for 37 percent of these emissions during the year 2014. Currently, there are several state programs in place to reduce GHG emissions from mobile sources including the Low Carbon Fuel Standard (LCFS), the Mobile Source Strategy²⁵, and the Sustainable Freight Action Plan²⁶. The energy sector, which includes in state electricity generation and electricity imports, accounted for 20 percent of California's 2014 GHG emissions. Emissions from this sector are expected to be reduced by the RPS, SB 350, SB 1368 and operational limits on recently constructed electricity generating facilities. Proposed Rule 12-16 is a preliminary step towards a regulatory program that actually reduces GHG emissions from the refinery sector.

Refineries represent about one third of the GHG emissions from the State's industrial sector, the second largest GHG source in California. Proposed Rule 12-16 focuses on the refining sector given that it is the largest California GHG sector without any backstop

²⁵ The Mobile Source Strategy is an integrated approach that addresses transportation emissions to simultaneously meet air quality standards, achieve GHG emission reduction targets, decrease health risk, and reduce petroleum consumption over the next fifteen years.

²⁶

measures to prevent facility GHG emission increases. As other sectors' GHG emissions continue to decline due to measures in place, refineries could emit an increasingly larger portion of the State's GHG emissions. Thus, controlling their GHG emission will become even more critical. In its most recent Scoping Plan, CARB has placed particular importance on obtaining emission reductions from the refining sector, as discussed below.

CARB Scoping Plan and the State's refining sector

AB 32 tasked the California Air Resources Board with developing a Scoping Plan describing the State's approach to achieve the climate goals it established, and to update it every five years. The Scoping Plan, first approved by CARB in 2008, relied on an economic sector framework to identify a range of GHG reduction actions. The Scoping Plan identified a cap-and-trade program as one of the strategies that could be employed to meet the State's 2020 GHG reduction goals, alongside direct regulations, voluntary actions and alternative compliance mechanisms. The First Update to the Climate Change Scoping Plan was approved by CARB in 2014. This plan built upon the initial Scoping Plan with new strategies and recommendations, and with the development of focus areas that spanned more than one economic sector (e.g., short-lived climate pollutants).

Recently, CARB released the proposed 2017 Climate Change Scoping Plan Update (2017 Scoping Plan) to reflect the 2030 target and priorities set by SB 32 and AB 197. CARB is planning to present this plan to its Board for adoption on June 23, 2017. The proposed plan includes a few initiatives that affect the refining sector directly, including a Refinery GHG Reduction Measure. This measure would require a 20 percent reduction in GHG emissions from the refinery sector by 2030, and would require all refineries to become as efficient as California's most efficient existing refinery on a simple-barrel basis.²⁷ The regulation would not limit total GHG emissions, but rather require a decrease in carbon intensity through actions such as increasing energy efficiency, switching to lighter crude slates, and boiler electrification.

The inclusion of a measure directly targeting the refinery sector in CARB's proposed plan, in addition to a post-2020 Cap-and-Trade Program and other known commitments, denotes that emission reductions from this sector are critical to meet the State's climate goals. The 2017 Scoping Plan states three main reasons for the regulatory emphasis on the refinery sector:

- The refinery sector "includes some of the largest stationary sources of GHG emissions and is part of the largest economic sector of GHG emissions – transportation."
- The refinery measure "prioritizes direct GHG reductions at large stationary sources pursuant to AB 197."
- Studies show that many of the largest sources of emissions, such as refineries, are in disadvantaged communities. Thus, reducing GHG emissions from these

²⁷ CARB will also evaluate the complexity-weighted barrel as a metric for the Refinery Measure.

sources may provide co-benefits of reducing criteria and toxic air contaminants in these communities.

CARB calls for partnering with the State's local air districts as an initial implementation step for the refinery measure. CARB recognizes that air districts could help identify efficiency improvement opportunities for stationary source combustion equipment, given their traditional role in permitting these facilities. In addition, the local air districts' existing permitting process could facilitate the implementation of Best Available Retrofit Control Technology (BARCT)/All Feasible Measures,²⁸ which would also help "promote consistency of controls for similar emissions sources among districts with the same air quality attainment designations."

Bay Area petroleum refineries

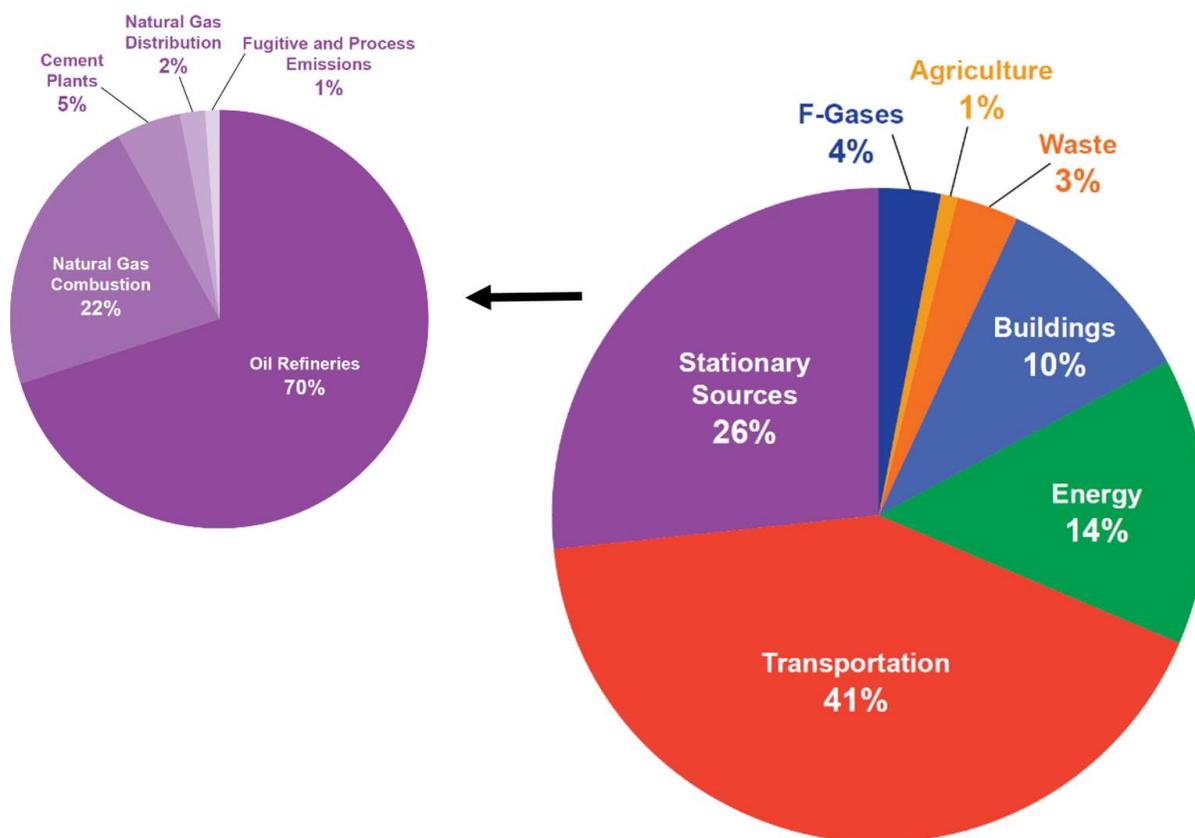
The Air District has five refineries and associated facilities within its jurisdiction. Bay Area refining facilities comprise about 55 percent of GHG emissions from the refinery sector in California. Below, there is a discussion indicating that the State cannot meet its aggressive mid-term and long-term climate goals if its refining industry (and every other large GHG sector) does not decrease its GHG emissions rapidly. Since Bay Area refineries emit over half of all GHG emissions from California's refining industry, it follows that these Bay Area facilities need to reduce their emissions as well, and cannot be allowed to increase their GHG emissions. Any GHG emission increases at refineries could jeopardize the progress toward the State's 2030 and 2050 reduction goals.

3. The Air District cannot meet its climate goals if Bay Area refinery emissions increase

Refineries represent approximately 18 percent of all Bay Area GHG emissions, but account for about 70 percent of stationary source GHG emissions (see Figure A2). Given that the Air District's primary regulatory authority applies to stationary sources, and that the refinery sector is, by far, the largest stationary GHG source in the Bay Area, the Air District must act to ensure GHG emissions from refineries do not increase, and are eventually reduced to meet its interim and long-term climate goals.

²⁸ Examples of possible BARCT/All Feasible Measure for combustion controls include energy efficiency standards for larger combustion equipment, mandatory equipment replacement requirements, heat rate improvement projects, installation of electronic controls and waste heat recovery systems and optimization.

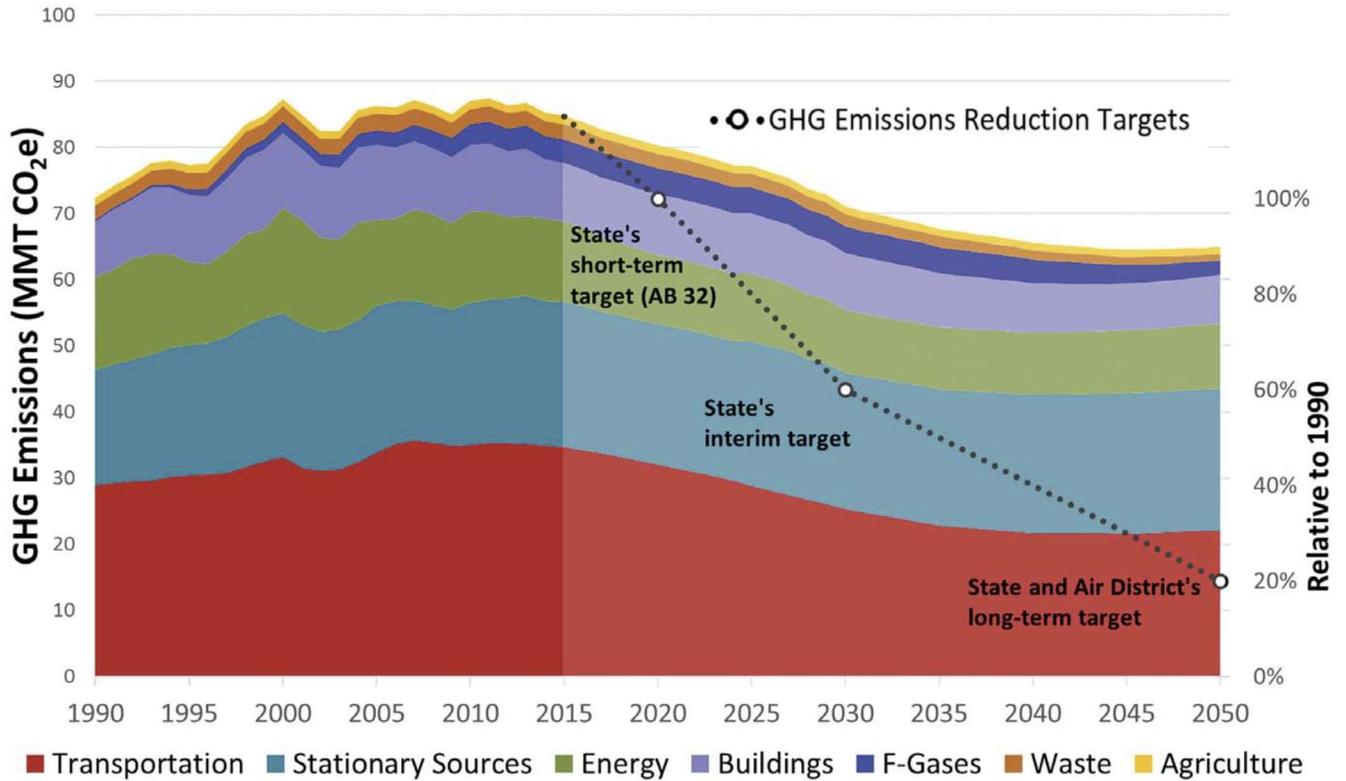
Figure A2
2015 Bay Area GHG Emissions by Source Category (Right) and Stationary Sources (Left)
(Total million MT CO₂e)



Source: Air District Clean Air Plan: Figures 3-6, 3-8.

Figure A3 shows estimated changes in Bay Area GHG emissions since 1990 and projected emissions through 2050. This figure highlights that existing commitments from CARB and other state agencies (as well as those likely to be adopted and implemented over the next 10 to 15 years) are insufficient to meet the Air District’s climate goals.

Figure A3
Projected Bay Area GHG Emissions by Sector Based on State Policies, (100-year GWP)



Source: Air District Clean Air Plan: Figure 3-9.

Proposed Rule 12-16 would provide a backstop to prevent potential GHG emissions increases from changes in refinery operations. This rule constitutes a necessary and appropriate first step on the path to the GHG emission reductions needed to meet the State's and the Air District's climate goals. The Air District has the regulatory authority, expertise and resources to regulate GHG emissions at Bay Area refineries. CARB has expressly stated in its 2017 Scoping Plan that is planning to partner with local air districts to seek reductions from this sector.

Consistency and non-duplication

International

The Kyoto Protocol is an international treaty which extends the 1992 United Nations Framework Convention on Climate Change (UNFCCC). The treaty was adopted in Kyoto, Japan, on December 1997 and became effective in February 2005. It commits countries to reduce GHG emissions in recognition that climate change is caused by anthropogenic

GHG emissions, and based on the principle of common but differentiated responsibilities (i.e., historical emitters are responsible for the largest share of GHG reductions). Although the United States was a signatory to the Protocol, it never ratified it and withdrew from it in 2001. In 2015, all UNFCCC participants sign the Paris climate accord at the COP21 sustainable development summit, held in Paris, effectively replacing the Kyoto Protocol. As part of this non-binding agreement, the parties agreed to take voluntary action to limit warming to well below 2 degrees C, and below 1.5 degrees C above pre-industrial levels if feasible. All countries, including the U.S. signed the Paris agreement, except for Nicaragua and Syria.

However, on June 1st, 2017, President Trump announced that the United States would withdraw from the Paris climate accord. Given the legal framework of the accord, the withdrawal process would take four years. Though the U.S. remains part of the UNFCCC, it is not bounded by any international treaties to address climate change and decrease its GHG emissions.

National

At the national level, there are no requirements for refineries to limit GHG emissions from existing facilities.

State

Since the passing of AB 32, in 2006, CARB has not adopted any regulation that directly limits or reduces the GHG emissions from refineries. Up to this point, the State has solely relied on market forces via the Cap-and-Trade program to address GHG emissions from this sector. This strategy has not resulted in a statistically significant reduction in GHG emissions from Bay Area refineries. Although CARB has proposed in its 2017 Scoping Plan a refinery measure that would require a 20 percent reduction from the refinery sector by 2030, the Scoping Plan has not yet been adopted by its Board of Directors. CARB staff is bringing the proposed plan for adoption by its Board on June 23, 2017. Even if the 2017 Scoping Plan is adopted, the refinery measure would be implemented through new regulations for refineries developed through the rulemaking process which can take years.

June 5, 2016

Socioeconomic Impact Analysis of Draft Rule 12-16 Regulation 12, Miscellaneous Standards of Performance; Rule 16, Petroleum Refining Greenhouse Gas Emissions Limits

Prepared for:

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TABLE OF CONTENTS

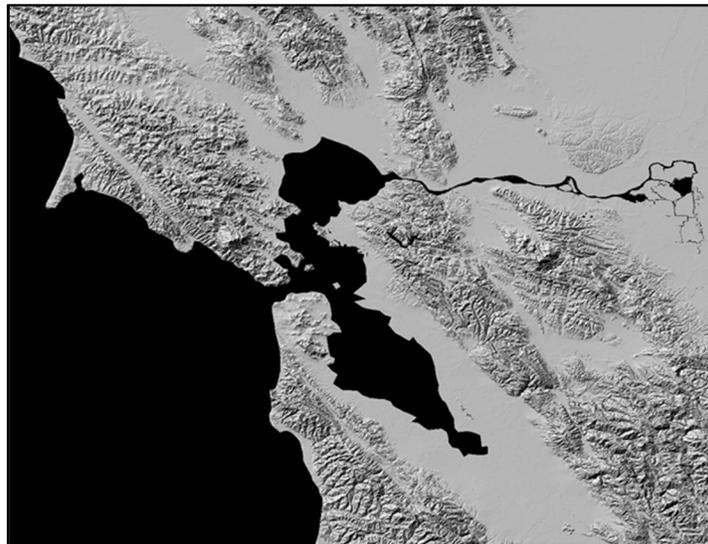
- 1. Introduction2
- 2. Background and Overview of Draft Rule 12-16.....3
- 3. Methodology.....4
- 4. Economic and Demographic Trends5
 - Regional Population Trends..... 5
 - Regional Economic Trends 5
 - Trends for Industries Subject to Proposed Draft Rule 12-16 7
- 5. Socioeconomic Impact Analysis of Draft Rule 12-16.....9
 - Limiting Refinery Production 9

1. INTRODUCTION

In response to concerns of harmful pollutants emanating from petroleum refineries operating in the nine-county San Francisco Bay Area region, particularly with respect to greenhouse gases and toxic air contaminants and criteria pollutants, the Board of Directors of the Bay Area Air Quality Management District (District) directed staff to bring forward two draft rules for their consideration. At the request of the board, District staff has prepared one draft rule that reflect policies recommended by environmental advocacy organizations, and a second that follows an approach recommended by District staff. Air District staff has developed draft "Regulation 12, Miscellaneous Standards of Performance; Rule 16, Petroleum Refining Greenhouse Gas Emissions Limits (Rule 12-16)" based on input by a consortium of environmental groups in the region (CBE). A key provision sought by CBE is a cap on refinery combustion emissions at levels consistent with refineries' recent operations. In addition, draft Rule 12-16 establishes emissions limits for greenhouse gases (GHG's), nitrogen oxides (NOx), sulfur dioxide (SO2), and particulate matter 10 microns and smaller (PM10) and particulate matter 2.5 microns and smaller (PM2.5). After reviewing and responding to comments on draft Rule 12-16, Air District staff recommended revising the rule to focus on GHG emissions.

After this introduction, this report discusses in greater detail proposed draft Rule 12-16 (Section Two). After that discussion, the report describes the socioeconomic impact analysis methodology and data sources (Section Three). The report describes population and economic trends in the nine-county San Francisco Bay Area (Section Four), which serves as a backdrop against which the Air District is contemplating the rule. Finally, the socioeconomic impacts stemming from the proposed rule changes are discussed in Section Five. The report is prepared pursuant to Section 40728.5 of the California Health and Safety Code, which requires an assessment of socioeconomic impacts of proposed air quality rules. The findings in this report can assist Air District staff in understanding the socioeconomic impacts of the proposed requirements, and can assist staff in preparing a refined version of the rule. Figure 1 is a map of the nine-county region that comprises the San Francisco Bay Area Air Basin.

Figure 1 – Map of San Francisco Bay Area Region



2. BACKGROUND AND OVERVIEW OF DRAFT RULE 12-16

Draft Rule 12-16 applies to the five large refineries operating in the Bay Area. These are Chevron Products Company (BAAQMD Plant #10 in Richmond), Phillips 66 Company Refinery (BAAQMD Plant #21359 I Rodeo), Shell Martinez Refinery (BAAQMD Plant #11 in Martinez), Tesoro Refining and Marketing Company (BAAQMD Plant #14628 in Martinez), and Valero Refining Company (BAAQMD Plant #12626 in Benicia). Three facilities that support a number of these facilities might be affected. These are Air Products and Chemicals hydrogen plant (BAAQMD Plant #10295), Air Liquide hydrogen plant (BAAQMD Plant #17419), and Martinez Cogen, L.P. (BAAQMD Plant #1820). Draft Rule 12-16 sets the emission limits for each affected facility. The emissions limits in the revised rule cover greenhouse gases (GHG).

Each refinery and support facility will report emissions based on the requirements in Rule 12-15, Section 401. The APCO will review and approve the annual emissions inventory per Rule 12-15, Section 402. Determination of compliance is described in the staff report prepared for Rule 12-16.

Particular types of emissions covered by the initially proposed cap included greenhouse gases (GHG), nitrogen oxides (NO_x), sulfur dioxide (SO₂), and particulate matter 10 microns and smaller (PM₁₀) and particulate matter 2.5 microns and smaller (PM_{2.5}). Initially, the District contemplated including criteria pollutant requirements as part of Rule 12-16 but subsequently decided to not do so at this time. Had criteria pollutant requirements been in place, affected sources may have elected to put in a wet scrubber to reduce PM and SO₂ emissions.

In the case of draft Rule 12-16, District staff report that there are two general scenarios to consider when evaluating the impact of fixed capping refining emissions. In one general scenario, the refineries decide to make physical improvements in order to reduce GHG emissions to allow for increases in refining capacity while staying below the cap. However, at this time, it is not clear what technologies affected sources would deploy to this end. In the other general scenario, refineries elect to limit production to a level consistent with the cap. The potential for any constraint on production due to the emissions limit is discussed in Section Five below, which follows a discussion on refinery trends in the San Francisco Bay Area.

3. METHODOLOGY

Applied Development Economics (ADE) began this analysis by preparing a statistical description of the industry groups of which the affected sources are a part, analyzing data on the number of establishments, jobs, and payroll. We also estimated sales generated by impacted industries, as well as net profits for each affected industry.

This report relies heavily on the most current data available from a variety of sources, particularly InfoUSA. In addition, this report relies on data from the US Census County Business Patterns, as well as from the US Internal Revenue Service. ADE also utilized employment data from the California Employment Development Department – Labor Market Information Division (EDD LMID).

With the above information, ADE was able to estimate net after tax profit ratios for sources affected by the proposed rule. ADE calculated ratios of profit per dollar of revenue for affected industries. The result of the socioeconomic analysis shows what proportion of profits the compliance costs represent. Based on assumed thresholds of significance, ADE discusses in the report whether the affected sources are likely to reduce jobs as a means of recouping the cost of rule compliance or as a result of reducing business operations. To the extent that such job losses appear likely, the indirect multiplier effects of the jobs losses are estimated using a regional IMPLAN input-output model. In some instances, particularly where consumers are the ultimately end-users of goods and services provided by the affected sources, we also analyzed whether costs could be passed to households in the region.

When analyzing the socioeconomic impacts of proposed new rules and amendments, ADE attempts to work closely within the parameters of accepted methodologies discussed in a 1995 California Air Resources Board (ARB) report called "Development of a Methodology to Assess the Economic Impact Required by SB513/AB969" (by Peter Berck, PhD, UC Berkeley Department of Agricultural and Resources Economics, Contract No. 93-314, August, 1995). The author of this report reviewed a methodology to assess the impact that California Environmental Protection Agency proposed regulations would have on the ability of California businesses to compete. The ARB has incorporated the methodologies described in this report in its own assessment of socioeconomic impacts of rules generated by the ARB. One methodology relates to determining a level above or below which a rule and its associated costs is deemed to have significant impacts. When analyzing the degree to which its rules are significant or insignificant, the ARB employs a threshold of significance that ADE follows. Berck reviewed the threshold in his analysis and wrote, "The Air Resources Board's (ARB) use of a 10 percent change in [Return on Equity] ROE (i.e. a change in ROE from 10 percent to a ROE of 9 percent) as a threshold for a finding of no significant, adverse impact on either competitiveness or jobs seems reasonable or even conservative."

4. ECONOMIC AND DEMOGRAPHIC TRENDS

This section of the report discusses the larger context within which the Air District is contemplating the draft Rule 12-16. This section begins with a broad overview of demographic and economic trends, with discussion then narrowing to industries and sources affected by the proposed rule changes.

REGIONAL POPULATION TRENDS

Table 1 tracks population growth in the nine-county San Francisco Bay Area between 2006 and 2016, including data for the year 2011. Between 2006 and 2017, the region grew by approximately 1.0 percent a year. Between 2011 and 2016, the region grew annually at a somewhat faster rate of 1.2 percent per year. Overall, there are 7,649,565 people in the region. At 1,927,888 Santa Clara County has the most people, while Napa has the least, at 142,028. Santa Clara grew the fastest between 2011 and 2016, at 1.3 percent a year, while Marin grew by the slowest rate (0.6 percent a year) over the same period.

Table 1: Population Trends: Bay Area Counties, Region, and California

JURISDICTION	2006	2011	2016	06-11 CAGR	11-16 CAGR	06-16 CAGR
California	36,116,202	37,536,835	39,255,883	0.8%	0.9%	0.8%
SF Bay Area	6,915,872	7,220,443	7,649,565	0.9%	1.2%	1.0%
Alameda	1,462,371	1,525,695	1,627,865	0.9%	1.3%	1.1%
Contra Costa	1,007,169	1,059,495	1,123,429	1.0%	1.2%	1.1%
Marin	246,969	253,964	262,274	0.6%	0.6%	0.6%
Napa	131,330	136,913	142,028	0.8%	0.7%	0.8%
San Francisco	781,295	815,854	866,583	0.9%	1.2%	1.0%
San Mateo	699,347	726,305	766,041	0.8%	1.1%	0.9%
Santa Clara	1,706,676	1,803,362	1,927,888	1.1%	1.3%	1.2%
Solano	410,964	413,438	431,498	0.1%	0.9%	0.5%
Sonoma	469,751	485,417	501,959	0.7%	0.7%	0.7%

Source: ADE, Inc., based on California Dept. of Finance E-5 Reports (note: CAGR = compound annual growth rate)

REGIONAL ECONOMIC TRENDS

Data in Table 2 describe the larger economic context within which officials are contemplating the draft Rule 12-16. Businesses in the region employ almost three and a half million workers, or 3,431,643. The number of private and public sector jobs in the region grew annually by 3.0 percent between 2010 and 2015, after having declined slightly between 2005 and 2010 by 0.6 percent a year. Of the 3,431,643 workers, 168,837, or 4.9 percent, are civil servants in the public sector. This figure does not include public sector education, which was combined with private sector education and placed in the private sector portion of the table, in an effort to present a picture as to the total number of

persons in the education profession in the Bay Area. The most current annual employment data is for the year 2015 as California EDD has not yet posted detailed all-year 2016 employment data.

Table 2 — San Francisco Bay Area Employment Trends By Sector: 2005 - 2015

INDUSTRY SECTOR		2005	2010	2015	2015	2015 CA	SFBA CAGR* 05-10	SFBA CAGR 10-15	CA CAGR 05-10	CA CAGR 10-15
Total		3,049,802	2,963,021	3,431,643	100.0%	100.0%	-0.6%	3.0%	-1.1%	2.3%
Private Sector		2,869,200	2,774,555	3,262,806			-0.7%	-0.7%	3.3%	2.6%
62	Health	300,775	340,492	453,880	13.2%	13.9%	2.5%	5.9%	2.5%	6.5%
54	Prof., Scientific	293,262	322,617	417,902	12.2%	7.4%	1.9%	5.3%	1.2%	3.2%
44-45	Retail	335,744	306,798	340,197	9.9%	10.2%	-1.8%	2.1%	-1.8%	1.8%
31-33	Manufacturing	350,962	305,378	326,362	9.5%	7.9%	-2.7%	1.3%	-3.8%	0.7%
722	Food Srv, Drnkng	214,142	227,750	288,896	8.4%	8.0%	1.2%	4.9%	0.6%	4.2%
561	Admin. Support	170,727	157,319	192,097	5.6%	6.2%	-1.6%	4.1%	-2.4%	4.2%
61	Education	185,310	192,195	180,382	5.3%	8.5%	0.7%	-1.3%	0.1%	0.8%
23	Construction	188,473	129,820	171,403	5.0%	4.4%	-7.2%	5.7%	-9.2%	4.9%
51	Information	112,690	110,725	158,943	4.6%	2.9%	-0.4%	7.5%	-2.1%	2.2%
42	Wholesale	124,390	113,072	125,215	3.6%	4.4%	-1.9%	2.1%	-0.9%	2.1%
81	Other Services	140,159	155,133	121,676	3.5%	3.2%	2.1%	-4.7%	0.9%	-6.6%
52	Finance, Insrnce	151,375	118,163	120,272	3.5%	3.2%	-4.8%	0.4%	-4.4%	0.4%
55	Mgt. of Comp.	54,856	55,605	75,726	2.2%	1.4%	0.3%	6.4%	-2.9%	3.6%
48-49	Trnsprt-Warehsng	51,880	46,721	72,947	2.1%	2.9%	-2.1%	9.3%	-1.0%	3.6%
71	Culture	49,572	52,315	58,669	1.7%	1.8%	1.1%	2.3%	0.6%	3.0%
53	Real Estate	61,402	52,676	57,463	1.7%	1.7%	-3.0%	1.8%	-2.7%	1.6%
721	Accommodation	46,156	44,734	49,490	1.4%	1.3%	-0.6%	2.0%	-0.5%	1.9%
99	Unclassified	338	6,846	18,517	0.5%	0.6%	82.5%	22.0%	-5.5%	12.2%
11	Agriculture	20,082	18,009	14,069	0.4%	2.6%	-2.2%	-4.8%	0.1%	1.9%
562	Waste Mgt.	10,333	11,018	11,866	0.3%	0.3%	1.3%	1.5%	0.7%	3.1%
22	Utilities	4,603	6,367	5,254	0.2%	0.4%	6.7%	-3.8%	0.4%	0.1%
21	Mining	1,969	802	1,584	0.0%	0.2%	-16.4%	14.6%	2.1%	2.1%
Public Sector**		180,602	188,466	168,837	5.0%	6.8%	0.9%	-2.2%	0.4%	-0.8%

Source: Applied Development Economics, based on State of California, Employment Development Department Labor Market Information Division, "Quarterly Census of Employment and Wages" (*Note: CAGR = compound annual growth rate \ **Note: Public sector education placed in Private Sector NAICS 61 -- similarly Public sector health placed into NAICS 62).

Economic sectors in the table above are sorted by the share of total employment. The top-five sectors in the Bay Area in terms of total number of workers are Health and Social Assistance (NAICS 62) (453,880 workers), Professional/Technical Services (NAICS 54) (417,902 workers), Retail (NAICS 44-45) (340,197), Manufacturing (NAICS 31-33) (326,362) and Food Services (288,896). Of the top-ten leading sectors in terms of employment, six exhibited high rates of annual growth from 2010 to 2015, growing annually by more than four percent. These sectors are Health and Social Assistance (5.9 percent per year), Professional/Technical Services (5.3 percent), Food Services (4.9 percent), Administrative Support (NAICS 561) (4.1 percent), Construction (NAICS 23) (5.7 percent per year) and Information (NAICS 51), which grew at a phenomenal annual rate of 7.5 percent. Combined, these five sectors employ 49 percent of total employment, or 1,683,121 out of 3,374,902. Moreover,

of the top-ten leading sectors in the Bay Area, only one (Public Sector) had less workers in 2015 than in 2010, underscoring the resilience of the regional economy in the aftermath of the Great Recession. The table also demonstrates the advanced nature of the regional economy, as 12.2 percent of all workers are in the Professional, Scientific and Technical (NAICs 54), whereas in the state as a whole, 7.4 percent of all workers are in this sector. Interestingly, at 1.3 percent per year, manufacturing employment growth in the Bay Area almost doubled statewide manufacturing growth rates (0.7 percent), underscoring the diversity of the regional economy.

TRENDS FOR INDUSTRIES SUBJECT TO PROPOSED DRAFT RULE 12-16

Proposed draft Rule 12-16 primarily affects refineries (NAICS 324110). However, two support industries (containing three non-refinery firms) will be affected as well. Two of the three non-refineries (Air Liquide and Air Products and Chemicals) operate hydrogen plants, and these are within the industry known as industrial gas manufacturing (NAICS 325120). A third firm is a co-generation plant (Martinez Cogen, L.P), which is classified as “other electric power” (NAICS 221118). The economic data in the table below comes from the US Census County Business Patterns.¹ As indicated in the table below, all industries subject to the draft rule have yet to recover the Great Recession, the lowest national point of which occurred in the years 2009 and 2010. In 2009, large refineries employed an estimated 3,976 workers in the Bay Area, which is almost 700 more workers than today, or 3,269. Similarly, industrial gas manufacturing (NAICS 325120) has yet to recover from the Great Recession, at 252 workers today versus 413 in 2009.

Table 3: Trends for Industries Subject to Draft rule 12-16: SF Bay Area: 2009-2014

ESTABLISHMENTS	NAICS	2009	2010	2011	2012	2013	2014	09-14 CHG	09-14 CAGR**
Refineries*	324110	7	8	7	5	17	12	5	11.4%
<i>Large refineries</i>		5	5	5	5	5	5	0	0.0%
Industrial Gas Manuf.	325120	16	14	14	15	13	12	-4	-5.6%
Other Electric Power	221118	18	23	29	11	7	8	-10	-15.0%
EMPLOYMENT									
Refineries	324110	4,051	3,706	3,704	3,622	3,726	3,574	-477	-2.5%
<i>Large refineries</i>		3,976	3,622	3,622	3,622	3,622	3,269	-708	-3.8%
Industrial Gas Manuf.	325120	413	295	396	397	210	252	-161	-9.4%
Other Electric Power	221118	146	218	358	139	104	130	-17	-2.4%

Source: Applied Development Economics, based on US Census County Business Patterns 2009-2014. *Note: The proposed rule changes affect five refineries. Both County Business Patterns and the EDD LMID report more than five refineries in the nine-county region, which is because both apply a broader definition for refinery operations. **CAGR= compound annual growth rate.

¹When analyzing industry employment trends, we typically use California EDD LMID data. However, while the EDD LMID indicate the presence of a number of establishments in any of the three industries above in Bay Area counties, for a number of Bay Area counties, the EDD LMID data set did not precisely identify the number of establishments or number of workers, replacing numbers with an asterisk mark, thus making difficult any analysis of EDD LMID data. As a result, we used US Census County Business Patterns, which provides enough county-level data to allow us to track trends. However, the most current County Business Pattern data is for the year 2014.

Table 4 below identifies the businesses in the Bay Area that are full-scale refineries. The list comes from the CEC, which also included each refinery’s throughput capacity. Of the five operating refineries in the region, Chevron is the largest, with the capacity to refine 245,271 42-gallon barrels of crude oil per day. At 78,400, ConocoPhillips has the lowest throughput capacity. The five affected sources employ an estimated 3,269 workers, who make, on average, \$173,700.

Table 4 – Bay Area Refineries (California Energy Commission) and Crude Oil Capacity

Refinery	Barrels Per Day
Chevron U.S.A. Inc., Richmond Refinery	245,271
Tesoro Refining & Marketing Company, Golden Eagle (Avon/Rodeo) Refinery	166,000
Shell Oil Products US, Martinez Refinery	156,400
Valero Benicia Refinery	132,000
ConocoPhillips, Rodeo San Francisco Refinery	78,400

Source: Applied Development Economics, Inc., based on California Energy Commission

The five affected sources’ combined throughput capacity is approximately 674,582 42-gallon barrels per day, which takes into consideration periods when refineries may be off-line. While the affected sources refine 674,582 barrels of crude oil per day, they generate an estimated 693,044 gallons of refined products a day. Assuming a 87 percent utilization rate, and further estimating the price of refined product at \$104 per barrel, we estimate the affected refineries in total generate \$26.3 billion in revenues a year, from which is generated \$1.1 billion in after-tax net profits (Table 5).

Table 5 – Estimated Revenues and Net Profits Generated By San Francisco Bay Area Refineries

	ALL SOURCES	CHEVRON	TESORO	SHELL	VALERO	CONOCO PHILLIPS
Effective Barrels Per Day	674,582	212,648	143,921	135,598	114,443	67,972
Est. Revenues	\$26.3 billion	\$8.3 billion	\$5.6 billion	\$5.3 billion	\$4.7 billion	\$2.6 billion
Est. Net Profits	\$1.1 billion	\$332.6 million	\$225.1 million	\$212.1 million	\$178.9 million	\$106.3 million

Source: Applied Development Economics, based on California Energy Commission (2015-2017), EIA, and US IRS SOI

5. SOCIOECONOMIC IMPACT ANALYSIS OF DRAFT RULE 12-16

This section of the report analyzes socioeconomic impacts stemming from proposed Draft Rule 12-16. Below we present our determination of possible impacts resulting from a production limit.

LIMITING REFINERY PRODUCTION

In this part of the socioeconomic analysis, we present our determination of possible impacts resulting from a limit on production at refineries. In its staff report for the draft measure, District staff analyzed a variety of data sources on refinery capacity and utilization, and observed that emissions limits contemplated in Draft Rule 12-16 do not appear to inhibit refining capacity, as the caps in the draft rule appear to be consistent with the current maximum production capability of area refineries.

Based on an analysis of US Energy Information Administration's (EIA) and the California Air Resources Board's year 2050 projections of demand in California for a variety of types of delivered energy (i.e. motor gasoline, jet fuel, liquid petroleum gases, kerosene, distillate fuel oils, etc), BAAQMD projected the amount of fuel that the five Bay Area refineries would need to generate each year beyond 2015, to fulfill either EIA's or CARB's demand projections. BAAQMD then determined that GHG emissions generated by refineries' activity associated with either EIA's or CARB's projections would not exceed the proposed annual limit of 19 million metric tons contemplated in Rule 12-16. Thus, the proposed GHG limits should not inhibit the refining system as a whole in meeting future transportation fuel demand.

BAAQMD staff also reviewed whether the imposition of a GHG emissions limit would render the region at greater risk to supply disruptions that could result upward spikes in the price of fuel in the short-term or long-terms. In other words, staff sought to determine whether there is enough slack in the refining system to be able to weather an unplanned outage of a limited duration. BAAQMD determined that any lack of supply due to an unplanned outage of no more than two weeks at one refinery for could be made up from other refineries in PADD 5, as well as the four remaining refineries operating in the Bay Area.² One caveat BAAQMD staff noted was that incidents on the order of the Chevron fire of 2012 or the Exxon-Mobil FCC explosion in Southern California in 2015 could result in significant disruptions to supply.

Another caveat expressed by District staff is that they do not expect the cap in Rule 12-16 to have significant impacts on the market for refined fuels so long as fuel consumption does not significantly increase above level projected by either EIA and CARB. Consumption for fuel can increase in absolute and relative terms for a variety of reasons, with a corresponding increase in price of fuel at the retail level. For example, population growth and an increase in the number of persons commuting into the

² PADD5 = "PADD 5" refers to a US EIA acronym for "Petroleum Administration for Defense Districts 5", which consists of the states of Alaska, Washington, Oregon, California, Nevada, and Arizona.

area would result in greater demand for fuel whose supply could be limited by Draft Rule 12-16, resulting in a bidding-up of the price of fuel.

While the impact of a limited supply of refined product relative to demand on the retail price of fuel is observable in that prices tend to go up, how much prices increase can vary widely. Price spikes tend to be an inherent, if latent, feature of the oil refining-gasoline consuming activity, due to the combined facts that people tend to keep buying gas to drive their cars to work and other places even as the price of gas rises, and that California refineries tend to operate very close to capacity, meaning that refineries are unable to boost supply significantly when they need to. As Mr. Severin Borenstein notes, "The market can easily become out of balance if there is an unexpected jump in demand, or more commonly, if a refinery experiences a supply disruption or outage and output is reduced."³ Thus, in the case of the temporary shut-down of the southern Californian refinery in Torrance in 2015, BAAQMD staff quoted a California Energy Commission report that found that the 10 percent reduction in supply led to 27.6 cents increase in the cost of gasoline.⁴ ADE estimates that between February 12, 2015 and March 13, 2015 the average price of gasoline in the City of Los Angeles increased by 32 percent as a result of the Torrance shutdown, which occurred on February 18, going from \$2.65 a gallon to \$3.51 a gallon.⁵ The peculiarities of the California market also explain the magnitude of price increases in California when supply shocks occur. By way of example, Phoenix, Arizona in 2003 experienced a 30 percent drop in volume resulting from a pipeline failure, which then led to a 37 percent increase in price of gas in Phoenix.⁶ The FTC observed that prices in Phoenix in 2003 did not rise even faster largely because West Coast refineries were able to ship more gasoline into Arizona to hold down prices. The unique blend required in California makes it difficult (but not impossible) to ameliorate the effects of supply shocks along the lines of Phoenix in 2003, which perhaps explains why in one instance a ten percent drop in supply in southern California leads to almost 32 percent increase in price while a steeper 30 percent supply drop in Phoenix at another instance led to 37 percent price increase there.⁷

While the Torrance and the Phoenix examples demonstrate prices could rise by 32 to 37 percent in a short-time due to supply cuts, projecting changes to price following supply shocks is still not an exact science. One could apply the Torrance and Phoenix examples to roughly estimate price impacts. Thus, if production at refineries is capped per the limits contemplated in draft Rule 12-16, then a percentage increase in population over some time period would be equivalent to a reduction in supply of gasoline

³ Borenstein, Bushnell, and Lewis, "Market Power in California's Gasoline Market" (May 2004), page 8

⁴ Bay Area Air Quality Management District, Draft 12-16 and Draft 11-18 (Draft Staff Report: October 2016) page 23 (citing California Energy Commission)

⁵ GasBuddy California <http://archive.is/tIKBy>

⁶ Federal Trade Commission, Gasoline Price Changes: The Dynamic of Supply, Demand, and Competition (2005), page 29

⁷ While it is true that California's market for refined product is almost a closed market due to the special blends generated only for Californians, there are some refiners outside of California who produce to California's standard, although delivery of their products takes 2 to 5 weeks and entails prohibitive transport costs. See Borenstein, Bushnell, and Lewis, "Market Power in California's Gasoline Market" (May 2004), page 20 ; see also US EIA, "California's gasoline imports increase 10-fold after major refinery outage" (October 2015) <http://archive.is/oRGoi>

by a similar percentage over the same period. Since ABAG projects the nine-county San Francisco Bay Area region to grow by 9.2 percent over the ten-year 2015-2025 period, when we apply the Torrance example, we arrive at an estimated 29.4 percent increase in price over the same ten-year period.⁸ This price increase would average less than three percent a year, which would have a cumulative effect but would be much less than a short-term price shock such as occurred in the Torrance incident, or other price fluctuations that occur due to market conditions. For example, in January 2015, regular gasoline in California cost \$2.68 per gallon, of which \$1.29 was attributable to the price of crude oil purchased by the refinery. Six months later, a gallon of regular gas was \$3.45, of which \$1.45 was attributable to crude oil, for a 12 percent increase over a six-month period in the cost of a gallon of gas attributable to crude oil.⁹ The overall price of gas in this six month-period increased by 29 percent, from \$2.68 to \$3.45 a gallon. In short, draft Rule 12-16 would introduce a regime to limit the production of refined petroleum products, but for various reasons, the price of these refined products can go up and down, consequently lessening the effect in modelling the socioeconomic impacts of a limit on the production of refined petroleum products supply on the wider economy.

Small Business Disproportionate Impacts

According to the State of California, among other things, small businesses generate annual sales of less than \$10 million.¹⁰ Of the eight sources affected by the proposed draft rule, none are small businesses. As a result, small businesses are not disproportionately impacted by proposed Draft Rule 12-16.

⁸ See <http://archive.is/qGomH>: The nine-county San Francisco Bay Area region is projected to grow over the ten-year 2015-2025 period by 672,600 persons, from 7,461,400 to 8,134,000. Including estimated number of non-residents commuting daily into the Bay Area for jobs, the total number of persons in the Bay Area will go from 7,938,800 in 2015 to 8,668,700 in 2025, for a 9.2 percent increase over the ten-year 2015-2025 period.

⁹ See <http://bit.ly/2mkDgLW>

¹⁰ <http://www.leginfo.ca.gov/cgi-bin/displaycode?section=gov&group=14001-15000&file=14835-14843>